Institut de recherche et documentation en économie de la santé

Les politiques de lutte contre la désertification médicale

Les enseignements français et étrangers

Bibliographie thématique

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Sommaire

En guise d'introduction : la raréfaction des professions médicales, un enjeu crucial dans les pays de l'OCDE

Le terme de « *désertication médicale* » (medically underserved area, shortage area) apparaît dans la littérature scientifique et spécialisée française (Credes, CNOM…) à partir des années 2000. Il est ensuite repris par la presse pour désigner le phénomène de démédicalisation dans certaines banlieues sensibles, par exemple en Ile-de-France. Enfin, différents rapports officiels actent ce terme, notamment le rapport Lucas, en 2002, sur « *l'execice médical face à la permanence de soins* » et, en 2004, le raport Berland : « *le désert médical français : mythes ou réalité ?* ». Le concept relève avant tout d'une notion géographique et cache ainsi un phénomène d'une tout autre ampleur : le passage de relais entre deux générations d'exercice médical.

Depuis de nombreuses années, la plupart des pays de l'OCDE sont confrontés, en effet, à des problèmes de raréfaction (shortage) et de répartitions inégales (imbalance) des professions de santé. En France, si la densité médicale est actuellement équivalente à celle des pays de l'OCDE (3,3 médecins pour 1 000 habitants)[1], la situation est néanmoins inquiétante pour deux raisons : les projections démographiques prévoient une baisse significative des médecins actifs à l'horizon 2025 du fait que 45 % des médecins ont plus de 55 ans ; l'implantation géographique des médecins est très déséquilibrée. Selon les différentes études disponibles, il est établi que 11,6 % de la population française vit dans une zone sous-dotée en médecins généralistes[2]. Certaines analyses considèrent que dix millions de Français vivent à l'heure actuelle dans une zone dans laquelle l'accès aux soins est de qualité inféieure à la moyenne nationale[3]. Un même nombre de Français vit à plus de 30 minutes d'un service d'urgence. Le désert médical ne concerne donc plus seulement des zones rurales isolées et dépeuplées mais aussi des métropoles[4].

Parmi les leviers utilisés dans les pays de l'OCDE pour résoudre ces problèmes, la France s'est tout d'abord appuyée sur l'augmentation de médecins en formation –la France est parmi les pays qui forment le moins de nouveaux médecins (6 pour 100 000) en 2011[5]. Elle a ensuite mis en œuvre d'autres politiques autour des incitations financières à l'installation (pas toujours efficaces[6]) dans certaines zones et sur le maintien d'une proportion élevée d'étudiants en médecine générale avec une réussite relative en matière d'équilibre médecins généralistes/médecins spécialistes. Enfin, plus récemment, elle a pris d'autres mesures comme la régionalisation du numerus clausus (sans impact notoire à ce jour), l'encouragement à des départs à la retraite plus tardifs et la mise en place d'autres modes de pratiques professionnelles comme la délégation de soins, le travail pluriprofessionnel et le recours à de nouvelles technologies comme la télémédecine. Le travail en équipe ainsi que les transferts de compétence semblent porter leuts fruits[7]. Le recours aux médecins étrangers semble aussi s'imposer avec l'ouverture de la libre circulation dans l'Union européenne. Une récente étude de la Drees réalisée à partir d'une revue de la littérature décrit l'ensemble de ces politiques, rassemble des éléments d'évaluation de leurs impacts et dégage quelques réflexions pour alimenter le débat sur la situation française. Ce dossier comporte également un état des lieux des préférences des médecins dans leur choix d'installation et des principaux déterminants de leur installation et de leur maintien sur leur lieu d'exercice, autant de leviers potentiels pour l'action publique[8].

L'objectif de cette bibliographie est de recenser des sources d'information (articles, ouvrages, rapports, littérature grise) sur les mesures mises en œuvre pour lutter contre la désertification médicale dans les pays de l'OCDE.

[1] OCDE (2017)
[2] D'après l'indicateur d'accessibilité potentielle localisée : Observatoire des territoires - ANCT - Indicateurs : cartes, données et graphiques (observatoire-des-territoires.gouv.fr)
[3] AMRF (2021). Accès aux soins en milieu rural : la bombe à retardement ?
[4] Verger, N. (2017). Déserts médicaux : comment les définir ? Commen les mesurer ? Les Dossiers de la Drees, n° 17.
[5] OCDE (2013)
[6] Cardoux et al. (2017)
[7] Chevillard et al. (2016)
[8] Polton, D., Chaput, H. et Portela, M. (2021). Remédier aux pénuries de médecins dans certaines zones géographiques - Les leçons de la littérature internationale.

Les recherches bibliographiques ont été réalisées sur les bases et les portails bibliographiques suivants : Base documentaire de l'Irdes, Banque de données en santé publique (BDSP), Medline, Econlit, Science direct, Googlescholar, HAL et Cairn. La période d'étude retenue s'éténd principalement sur la période allant des années 2000 à jmai 2022. Les références sont classées par ordre alphabétique d'auteurs et/ou de titres.

Cette bibliographie ne prétend pas à l'exhaustivité.

Vue d'ensemble sur la démographie médicale : de grandes disparités régionales

Quelques enseignements tirés des Atlas du CNOM sur la démographie médicale en France : Période 2007-2021

L'atlas des profils comparés : 2007-2017 souligent les éléments suivants :

- une stagnation des médecins en activité régulière (+ 0,9%) ;
- une multiplication par 6 du nombre de médecins en cumul emploi-retraite ;
- une féminisation accrue de la profession, avec une parité pour les médecins en activité attendue pour 2020 ;
- un renouvellement générationnel (âges <=40ans), encore partiel, mais encourageant ;
- un transfert du mode d'activité libérale à l'activité salariée (+ 10 points), ayant dépassé ainsi l'activité libérale ;
- un creusement des inégalités territoriales au détriment des régions et des départements déjà en difficultés ;
- la nécessité d'étudier la démographie médicale aussi à une échelle infra-départementale (communautés de communes, bassins de vie), tant les réalités territoriales peuvent être contrastées en quelques kilomètres.

L'atlas 2021 montre que l'état de la démographie médicale est sur un relatif plateau. La baisse du nombre de médecins est plus modérée qu'elle n'a pu l'être. Malheureusement cette baisse va se poursuivre, sans doute au moins jusqu'en 2025, mais ensuite la situation devrait s'améliorer avec l'augmentation progressive des médecins reçus aux examens. Mais dans les territoires les plus défavorisés, le besoin se fera encore ressentir fortement.

Un aperçu sur l'accessibilité aux soins ambulatoires

D'après une étude de l'Irdes publiée en 2011 sur l'accès aux soins ambulatoires, 15 minutes est le temps que mettent les Français en moyenne pour se rendre chez leurs médecins généralistes. Chez les médecins spécialistes et les chirurgiens-dentistes, c'est entre 18 et 20 minutes[9]. Une étude de la Drees parue en juillet 2016 note que l'accessibilité à des spécialistes est d'autant plus faible que l'on s'éloigne des pôles et que les pôles sont de moindre importance : pour l'accès aux gynécoloques ou omphtalmologues, l'offre disponible dans les grands pôles urbains est de 7 à 9 fois supétieure à celle dans les communes isolées, dans lesquelless on ne dénombre, dans chacune de ces spécialités, qu'un équivalent temps plein pour 100 000 habitants. Pour les infirmiers, malgré des installations régulées de manière coercitive, on observe des écarts de densités départementales de 1 à 7. Et de 1 à 4 pour les masseurs-kinésithérapeutes[10]. Une autre étude de la Drees parue en 2020 montre que la situation s'est encore dégradée en 2018[11]. En raison d'un décalage croissant entre l'offre et la demande de soins, l'accessibilité géographique aux médecins généralistes a baissé de 3,3 % entre 2015 et 2018. En 2018, les Français ont accès en moyenne à 3,93 consultations par an et par habitant, contre 4,06 consultations en 2015. Les inégalités s'accentuent entre les communes les moins bien dotées et celles qui le sont le plus. Cette moindre accessibilité s'explique principalement par la baisse du temps médical disponible, du fait de la diminution globale du nombre de médecins en activité sous l'effet de nombreux départs à la retraite, que les nouvelles installations ne compensent pas quantitativement, en raison de l'effet prolongé des numerus clausus appliqués au cours de ces dernières décennies. Les stratégies visant la libération de temps médical utile (nouvelles organisations territoriales, protocoles de coopérations interprofessionnelles, assistants médicaux, recours au numérique, etc.) peuvent constituer un levier pour freiner cette tendance structurelle. Mesurée à l'échelle du territoire de vie-santé, la part de la population française vivant en zone sous-dotée en médecins généralistes (ou « sous-dense ») est faible, mais elle passe, en quatre ans, de 3,8 % à 5,7 %. La baisse de l'accessibilité est plus marquée dans le centre de la France. De nouveaux territoires sont concernés par la sous-densité, notamment du centre de la France vers le nord-ouest. Les territoires les mieux dotés en médecins généralistes sont aussi les plus attractifs, tant du point de vue de la croissance démographique que des équipements (sportifs, culturels, commerciaux et scolaires). L'accessibilité aux médecins généralistes s'inscrit ainsi dans une problématique plus globale d'aménagement du territoire.

[9] Coldefy et al. (2011). Distances et temps d'accès aux soins en France métropolitaine. Questions d'économie de la santé (Irdes)(164)
[10] Vergier, N. (2016). Accessibilité aux professionnels de santé libéraux : des disparités géographiques variables selon les conditions tarifaires », Études et Résultats (Drees) (970)
[11] Legendre, B. (2020). "En 2018, les territoires sous-dotés en médecins généralistes concernent près de 6 % de la population." Etudes Et Resultats (Drees)(1144).

EN FRANCE

Ambroise-Thomas, P. (2009). La démographie médicale : prévoir et maîtriser son évolution et assurer une meilleure répartition de l'offre de soins sur l'ensemble du territoire national. Paris Académie Nationale de Médecine**:** 6 , tabl., fig.

Aucune politique de santé ne peut se concevoir sans une connaissance précise et surtout sans des prévisions à long terme des besoins médicaux et des moyens de les satisfaire. La démographie médicale est l'un des éléments-clés de cette prospective. Elle recouvre un ensemble complexe de données qui concernent aussi bien les besoins à l'échelon national, que la nécessité d'assurer une offre de soins aussi homogène que possible sur l'ensemble de notre territoire. Tout le corps médical, quelles que soient les spécialités considérées, est évidemment concerné, mais cette étude se limite à la médecine générale, car elle est la base essentielle du système sanitaire français. Elle envisage d'abord, à l'échelon national, la démographie actuelle des médecins généralistes puis, surtout, la nécessité de réaliser des études prospectives et d'en tirer les conséquences. Puis en s'appuyant sur un rapport de l'Académie nationale de Médecine de Mars 2007, et sur des données plus récentes, elle rappelle ensuite les diverses mesures envisagées pour corriger l'inégale répartition de l'offre de soins, en soulignant dans chaque cas les avantages mais aussi les difficultés et les inconvénients prévisibles.

Andarelli, J. M. (2019). "La démographie médicale en France." Journal De Droit De La Sante Et De L' Assurance Maladie(23): 88-96.

Cet article aborde la problématique de la démographie médicale sous deux angles spécifiques : la perception globale de la démographie médicale actuelle (globalement) et la démographie médicale dans le secteur hospitalier public.

Anguis, M., Bergeat, M., Pisarik, J., et al. (2021). "Quelle démographie récente et à venir pour les professions médicales et pharmaceutique ? - Constat et projections démographiques." Dossiers De La Drees (Les)(76): 74. https://drees.solidarites-sante.gouv.fr/publications/les-dossiers-de-la-drees/synthese-quelle-demographie-recente-et-venir-pour-les

À l'occasion de la première édition de la Conférence nationale, la Direction de la recherche, des études, de l'évaluation et des statistiques (DREES) publie un état des lieux, présent et à venir, de la démographie des professions médicales et pharmaceutique (chirurgiens-dentistes, médecins, pharmaciens, sages-femmes).

Anguis, M., Chaput, H. et Marbot, C. (2019). "10 000 médecins de plus depuis 2012." Etudes Et Resultats (Drees)(1061): 4.
http://drees.solidarites-sante.gouv.fr/IMG/pdf/er_1061.pdf

En France, au 1er janvier 2018, 226 000 médecins sont en activité. Parmi eux, 45 % sont des médecins généralistes et 44 % exercent à l'hôpital au moins une partie de leur temps. Depuis six ans, l'effectif de médecins a progressé de 4,5 %, sous l'effet de la hausse du nombre de médecins hospitaliers.

Attal-Toubert, K. et Vanderschelden, M. (2009). "La démographie médicale à l'horizon 2030 : de nouvelles projections nationales et régionales détaillées." Dossiers Solidarite Et Sante (Drees)(12): 66 , graph., annexes.

[BDSP. Notice produite par MIN-SANTE rR0xsGFr. Diffusion soumise à autorisation]. Anticiper longtemps à l'avance les évolutions de la démographie médicale et les mettre en regard des évolutions prévisibles de la population est nécessaire pour favoriser une gestion sans à-coups de l'adaptation des effectifs de médecins aux besoins. Les projections des effectifs de médecins à l'horizon de 2030 permettent de dessiner les évolutions futures de la population médicale. A comportements constants, le nombre de médecins actifs se réduirait jusque vers 2020 et la densité médicale serait durablement inférieure à son niveau actuel. La profession rajeunirait et se féminiserait progressivement. Les évolutions des effectifs des différentes spécialités et de médecins dans les régions seraient très contrastées. Selon les différentes variantes simulées, une unique mesure de

régulation ne suffirait pas à répondre aux enjeux à venir. Une augmentation du numerus clausus par exemple, ou un report de deux ans de l'âge de départ à la retraite, permettrait certes de limiter la baisse des effectifs, voire d'accroître transitoirement le nombre de médecins actifs, mais n'aurait pas d'impact sur les déséquilibres entre spécialités ou sur les inégalités régionales.

Attal-Toubert, K. et Vanderschelden, M. (2009). "Méthodologie des projections d'effectifs de médecins." Serie Sources Et Methodes - Document De Travail - Drees(7): 73 , tabl., fig., ann.

En 1999, la Drees a mis au point, en collaboration avec l'Ined, un modèle de projection d'effectifs de médecins utilisant à la fois une méthode de projection classique, basée sur le calcul d'agrégats, et la micro simulation. En 2007, une opération de refonte de ce modèle a été entreprise, en vue de réaliser un nouvel exercice de projections en 2008. La refonte du modèle avait pour objectifs d'actualiser les données utilisées comme entrées par le modèle, en tenant compte du fait que certaines sources n'étaient plus disponibles, de prendre en compte au mieux les évolutions qui ont touché la profession au cours des dernières années (notamment les changements ayant modifié le déroulement des études médicales), d'améliorer la précision du modèle et de le rendre plus lisible. Une nouvelle version du modèle a permis d'établir les résultats du scénario tendanciel à l'été 2008, et a été utilisée pour réaliser un nouvel exercice de projections en 2008-2009. Les premiers résultats de cet exercice de projections ont été publiés dans le n 679 d'études et Résultats (février 2009) et une présentation de résultats plus détaillés figure dans le n° 12 des Dossiers Solidarité Santé (novembre 2009). Nous présentons dans ce document de travail la version 2008 du modèle de projections d'effectifs de médecins, c'est-à-dire les méthodes et les sources de données utilisées, la structure du modèle, les choix effectués, les hypothèses faites et les résultats produits.

Aulagnier, M., et al. (2007). "L'exercice de la médecine générale libérale : premiers résultats d'un panel dans cinq régions françaises." Etudes Et Resultats (Drees)(610): 8 , graph., tabl.

[BDSP. Notice produite par MIN-SANTE R0xVfJZ4. Diffusion soumise à autorisation]. Les médecins généralistes libéraux déclarent des durées de travail hebdomadaires comprises entre 55 et 59 heures, gardes et astreintes comprises, selon les régions du panel. Les activités en dehors du cabinet médical sont plus fréquentes dans les régions les plus rurales. Pour ceux qui exercent en groupe, pratique rencontrée plutôt chez les jeunes médecins, cette durée moyenne est inférieure de deux à quatre heures. Au total, un praticien sur deux se déclare désireux de réduire sa durée de travail hebdomadaire, d'un volume de 12 heures environ. Globalement, trois médecins sur quatre déclarent être satisfaits de leur activité professionnelle. Cette satisfaction décroît notamment avec l'âge et la durée de travail, elle augmente avec le volume d'activité et l'exercice en secteur 2.

Barlet, M., et al. (2016). "Portrait des professionnels de santé." Serie Etudes Et Recherches - Document De Travail - Drees(134): 123.

[BDSP. Notice produite par MIN-SANTE R0xknpr8. Diffusion soumise à autorisation]. Au travers de fiches pédagogiques et synthétiques, cet ouvrage fournit un état des lieux inédit sur les 1,9 millions de professionnels de santé qui exercent en France. Il livre les chiffres clés sur les différents aspects des métiers et des parcours des professionnels de santé. Les deux premières parties dressent un panorama de la profession, ses évolutions et les spécificités des différents exercices puis ses rémunérations selon le mode d'exercice, le métier ou la spécialité exercés. La formation fait l'objet d'une troisième partie. Une dernière partie esquisse les tendances des futures évolutions démographiques et examine la répartition des professionnels telle qu'elle pourrait se dessiner sur le territoire.

Berland, Y. (2005). Rapport de la Commission démographie médicale. Paris MSSPS**:** 61 , tabl., graph., carte. http://www.ladocumentationfrancaise.fr/rapports-publics/054000315/index.shtml

Ce rapport sur la démographie médicale en France rend compte des résultats de la Commission démographie médicale. Il est articulé autour d'une première partie, qui dessine un état des lieux de la répartition de l'offre de soins médicaux sur le territoire national ; d'une deuxième partie, qui résume

les mesures prises au cours des dernières années, d'une part pour se doter d'outils de pilotage de la démographie médicale, d'autre part pour inciter à un exercice dans les territoires déficitaires. La troisième partie énonce les propositions d'amélioration de la Commission.

Berland, Y. (2006). Rapport de la Mission "Démographie médicale hospitalière". Paris La documentation française**:** 201 , tabl.
http://www.ladocumentationfrancaise.fr/rapports-publics/064000845/index.shtml

Par lettre en date du 6 mars 2006, le Ministre de la santé et des solidarités, Xavier Bertrand, a confié au Professeur Yvon Berland, Président de l'Observatoire national de la démographie des professions de santé, une mission d'études et de propositions sur la démographie médicale hospitalière. Le présent rapport est articulé autour de cinq parties. La première s'est attachée à faire l'état des lieux de la démographie médicale des établissements de santé. La deuxième est consacrée aux évolutions annoncées pouvant impacter dans les prochaines années l'offre de soins des établissements de santé. La troisième apporte quelques éléments de comparaisons des établissements de santé et de la démographie hospitalière des pays européens. La quatrième est une analyse de la situation actuelle de la démographie hospitalière basée sur l'état des lieux, les commentaires de rapports récents, l'avis des professionnels de santé et l'expertise apportée par les membres de la mission. La cinquième rend compte de propositions faites par la mission pour améliorer les dispositifs existants afin de mieux répondre aux besoins de la population.

Bernier, M. et Paul, C. (2008). Rapport d'information de la Mission d'Information sur l'offre de soins sur l'ensemble du territoire. Paris Assemblée nationale**:** 206.
http://www.assemblee-nationale.fr/13/rap-info/i1132.asp

Ce rapport, dont l'objet est de préparer l'examen du projet de loi «Hôpital, patients, santé et territoires», formule trente propositions d'action visant à donner aux pouvoirs publics les moyens de piloter efficacement le niveau et la répartition de l'offre de soins, afin de garantir aux Français un égal accès aux soins de premier recours ; à structurer l'offre de « soins de premier recours » de façon efficace, efficiente et attractive pour les professionnels de santé ; et à adapter les formations médicales et paramédicales aux besoins de santé des territoires.

Bessiere, S., et al. (2006). Les effectifs, l'activité et la répartition des professionnels de santé : tome 1 : rapport 2005. Rapport Irdes. Paris La documentation française**:** 171 , tabl., graph., carte.

Ce deuxième rapport de l'Observatoire National de la Démographie des Professions de Santé (ONDPS) rassemble les données qui caractérisent la situation démographique, la répartition et l'évolution de l'activité des professions de santé. La croissance globale des effectifs de professionnels de santé est plus ou moins marquée selon les métiers. Elle s'accompagne de fortes disparités de répartition entre les territoires, les spécialités et les secteurs libéral et hospitalier. Ce rapport comporte une synthèse générale et trois tomes thématiques. Le tome I intitulé : Les effectifs et la répartition des professionnels de santé, met en regard les données quantitatives disponibles sur les effectifs et les données sur le renouvellement des différents métiers et leur attractivité. La situation de l'offre de soins de premier recours fait, dans cette première partie, l'objet d'un examen particulier.

Bouet, P. et Gerard-Varet, J. F. (2021). L'atlas de la démographie médicale 2021. 2 tomes : Situation au 1er janvier 2021. Approche territoriale des spécialités médicales et chirurgicales. Paris Conseil National de l'Ordre des médecins**:** 141p.+247p.
www.conseil-national.medecin.fr/lordre-medecins/conseil-national-lordre/demographie-medicale

La tendance de l’état de la démographie médicale en France montre que nous sommes sur un relatif plateau. La baisse du nombre de médecins est plus modérée qu’elle n’a pu l’être. Malheureusement cette baisse va se poursuivre, sans doute au moins jusqu’en 2025, mais ensuite la situation devrait s’améliorer avec l’augmentation progressive des reçus. Mais dans les territoires les plus défavorisés, le besoin se fait ressentir fortement.

Bouet, D. et Le Breton Levillerois, G. (2017). Atlas de la démographie médicale en France. Profils comparés 2007/2017 - Les territoires au cœur de la réflexion. Situation au 1er janvier 2017. Paris Conseil National de l'Ordre des médecin s**:** 323 , tabl., graph., cartes.

> 10 ans après le 1er Atlas, publié en 2007, l'Atlas 2017 offre une première vision décennale de l'évolution démographique des médecins dans chacun de nos territoires. Les enseignements issus de cette comparaison sont nombreux : baisse du nombre de médecins en activité régulière, féminisation de la profession, renouvellement générationnel… L'Atlas 2017 a également été l'occasion de croiser des données publiques. Alors que la santé reste l'un des premiers symptômes des fragilités territoriales, cette étude comparée démontre que les territoires souffrant de difficultés d'accès aux soins sont aussi touchées par d'autres fragilités (contexte socio-économique, aménagement du territoire et couverture numérique, déterminants de santé des populations…).
>
> - *Voir aussi les éditions antérieures sur le site du CNOM*

Bourgueil, Y., et al. (2016). Démographie et ressources humaines en santé. Traité de santé publique., Paris : Lavoisier Médecine Sciences**:** 381-387.

> Cet article vise à présenter dans un premier temps, l'éventail des métiers de la santé, les principes de régulation et leurs évolutions récentes. Dans un deuxième temps, nous exposerons la situation de la ressource humaine en santé en France en 2015 en termes démographiques quantitatifs et les perspectives que dessinent les choix de régulation quantitative adoptés, mais également les questions posées par les évolutions très récentes, aussi bien à l'échelle de l'Europe qu'à l'échelle des individus dont les comportements changent en début comme en fin de carrière. Enfin, nous proposerons plusieurs pistes d'actions publiques actuellement débattues sur la ressource humaine en santé pour faciliter la transformation des organisations de soins et des pratiques au service de la santé publique (résumé d'auteur).

Chaput, H., Monziols, M., Fressard, L., et al. (2019). "Plus de 80 % des médecins généralistes libéraux de moins de 50 ans exercent en groupe." Etudes Et Resultats(1114): 2.
https://drees.solidarites-sante.gouv.fr/IMG/pdf/er1114.pdf

> Début 2019, 61 % des médecins généralistes libéraux exercent en groupe, avec d'autres médecins ou des paramédicaux, selon le quatrième Panel des médecins généralistes réalisé auprès de 3 300 praticiens. Cette proportion a augmenté de 7 points depuis 2010. Plus de neuf médecins généralistes en groupe sur dix s'associent à au moins un autre médecin généraliste. C'est ensuite avec les infirmiers que les regroupements sont les plus fréquents. L'exercice en groupe est surtout choisi par les médecins les plus jeunes (81 % des moins de 50 ans) et, dans une moindre mesure, par les femmes. La fréquence de cet exercice varie aussi d'une région à l'autre.

Drees (2019). La démographie des professionnels de santé : les données au 1er janvier 2019. Paris : Drees.
http://dataviz.drees.solidarites-sante.gouv.fr/demographie-professionnels-sante/

> Chaque année, la DREES publie des données actualisées sur la démographie des professionnels de santé (effectifs, âge, densité, spécialité, zone d'inscription et mode d'exercice) à partir du Répertoire partagé des professionnels de santé (RPPS) et du répertoire Adeli. Ces statistiques annuelles permettent de disposer de séries d'effectifs de professionnels de santé. Les données au 1er janvier 2019, ainsi que les données antérieures, sont disponibles sur un nouvel outil de datavisualisation conçu par la Drees pour une meilleure accessibilité : Dataviz.

Insee (2020). Professionnels de santé au 1er janvier 2018. Comparaisons régionales et départementales, Paris : INSEE
https://www.insee.fr/fr/statistiques/2012677

Insee (2021). Personnels et équipements de santé. In : TEF 2020. TEF 2020. Paris : Insee.
https://www.insee.fr/fr/statistiques/4277748?sommaire=4318291&q=professions+de+sant%C3%A9

Au 1er janvier 2019, le répertoire partagé des professionnels de santé (RPPS) dénombre 226 900 médecins en activité en France, qu'ils exercent une activité régulière, en cumulant emploi et retraite, ou qu'ils effectuent des remplacements. Parmi eux, on compte 102 200 médecins généralistes (45 % de l'ensemble) et 124 700 spécialistes hors médecine générale (55 %). La psychiatrie, l'anesthésie-réanimation et le radiodiagnostic et l'imagerie médicale regroupent les effectifs les plus importants (29 % des spécialistes hors médecine générale). Plus de la moitié des médecins (57 %) sont des libéraux (50 % des spécialistes et 66 % des généralistes) : 45 % travaillent exclusivement en libéral et 12 % ont fait le choix d'un exercice « mixte » (ils cumulent des activités salariée et libérale). Les autres, c'est-à-dire 43 % des médecins, exercent tout ou partie de leur activité à l'hôpital.

Juilhard, J. M. (2007). Rapport d'information sur la démographie médicale : offre de soins - comment réduire la fracture territoriale ? Rapport d'information du Sénat ; 14. Paris Sénat**:** 86.
http://www.senat.fr/rap/r07-014/r07-0141.pdf

Le nombre de médecins en exercice n'a jamais été aussi élevé et pourtant, les disparités entre régions deviennent trop importantes pour assurer un accès à des soins de qualité sur l'ensemble du territoire. Cette situation s'aggravera dans les années à venir. On prévoit une réduction du nombre de médecins en activité causée, d'une part, par une baisse de l'offre en raison du nombre insuffisant d'étudiants en formation et de nombreux départs en retraite, d'autre part, par le vieillissement de la population. Conscient de ce risque de pénurie, le gouvernement a concentré ses efforts sur les médecins dont la situation démographique est la plus critique au sein des professionnels de santé, et même plus particulièrement sur les médecins généralistes, les plus impliqués dans la prise en charge de premier recours. Depuis trois ans, des mesures ont été prises pour agir aux différentes étapes qui vont de la formation à l'installation des médecins. Elles visent à augmenter le nombre d'étudiants en formation et à inciter les médecins à s'installer dans les zones sous-médicalisées. Quelles améliorations faut-il en attendre? Comment apporter à cette démographie médicale en crise les solutions qui permettent d'offrir un égal accès aux soins sur l'ensemble du territoire ? Tel est l'objet du présent rapport.

Le Fur, P., et al. (2006). Etude des délais d'attente dans différentes spécialités : une approche originale des relations entre demande et offre de soins locale. Santé, soins et protection sociale en 2004 : Enquête Santé et Protection Sociale (ESPS). Paris : IRDES**:** 35-40, 33 tabl., 31 graph.
http://www.irdes.fr/Publications/Qes/Qes106.pdf

Cette analyse est issue d'un nouveau module de questionnement introduit en 2004 dans l'Enquête Santé et Protection Sociale (ESPS). Elle vise à étudier les liens entre offre de spécialistes et demande de soins en utilisant le délai d'attente comme outil d'analyse.

Le Fur, P. et Lucas-Gabrielli, V. (2004). L'offre de soins dans les communes périurbaines de France métropolitaine (hors Ile-de-France). Rapport Irdes **:** 90 , 23 tabl., 92 fig., 92 carte.

À la demande de l'URCAM Île-de-France, une réflexion sur l'espace périurbain et sa caractérisation en termes de pratiques sanitaires libérales a été menée. Cette étude est réalisée sur l'ensemble des communes périurbaines de France métropolitaine en excluant l'Île-de-France, analysée selon une méthodologie comparable par l'Observatoire régional de la santé d'Île-de-France. L'espace périurbain français est relativement hétérogène. À l'aide d'indicateurs démographiques et socio-économiques, sept types de communes périurbaines ont été identifiés. On peut les regrouper en trois grandes catégories qui établissent un continuum de l'urbain vers le rural : le type urbain qui constitue la première couronne, le type industriel qui forme une deuxième couronne, puis le type rural et âgé qui côtoie l'espace rural. L'offre de soins de premier recours est analysée sur la base de cette typologie. Quatre classes de communes semblent poser problème. Les difficultés proviennent de la faiblesse de l'offre de soins ou bien de la conjonction d'indicateurs : forte densité de professionnels de santé associée à une forte activité et à des indicateurs sociaux défavorables.

Legendre, B. (2020). "En 2018, les territoires sous-dotés en médecins généralistes concernent près de 6 % de la population." Etudes Et Resultats (Drees)(1144): 6.

https://drees.solidarites-sante.gouv.fr/IMG/pdf/er1144.pdf

> En raison d'un décalage croissant entre l'offre et la demande de soins, l'accessibilité géographique aux médecins généralistes a baissé de 3,3 % entre 2015 et 2018. En 2018, les Français ont accès en moyenne à 3,93 consultations par an et par habitant, contre 4,06 consultations en 2015. Les inégalités s'accentuent entre les communes les moins bien dotées et celles qui le sont le plus. Cette moindre accessibilité s'explique principalement par la baisse du temps médical disponible, du fait de la diminution globale du nombre de médecins en activité sous l'effet de nombreux départs à la retraite, que les nouvelles installations ne compensent pas quantitativement, en raison de l'effet prolongé des numerus clausus appliqués au cours de ces dernières décennies. Les stratégies visant la libération de temps médical utile (nouvelles organisations territoriales, protocoles de coopérations interprofessionnelles, recours au numérique, etc.) peuvent constituer un levier pour freiner cette tendance structurelle. Mesurée à l'échelle du territoire de vie-santé, la part de la population française vivant en zone sous-dotée en médecins généralistes (ou « sous-dense ») est faible, mais elle passe, en quatre ans, de 3,8 % à 5,7 %. La baisse de l'accessibilité est plus marquée dans le centre de la France. De nouveaux territoires sont concernés par la sous-densité, notamment du centre de la France vers le nord-ouest. Les territoires les mieux dotés en médecins généralistes sont aussi les plus attractifs, tant du point de vue de la croissance démographique que des équipements (sportifs, culturels, commerciaux et scolaires). L'accessibilité aux médecins généralistes s'inscrit ainsi dans une problématique plus globale d'aménagement du territoire.

Levy, D. et Bui, D.-H.-d. (2004). "Quarante ans de quête de futur (1964-2004) : les projections démographiques des corps de santé du C.S.D.M." Cahiers De Sociologie Et De Demographie Medicales **44**(1): 71-100, tabl., stat., rés.

> [BDSP. Notice produite par ORSMIP R0xOpFD6. Diffusion soumise à autorisation]. Fin 2004, le Centre de Sociologie et de Démographie Médicales a entrepris 16 opérations de projection démographique portant sur les professions de santé, en particulier les médecins. Dans aucun pays, on ne s'est attaché à la prospective des ressources humaines avec une telle constance. Mais, par delà la régularité, qu'explique en partie le contexte du système de santé en France, ce sont la méthode et les techniques qu'il est intéressant de mettre en relief et qui sont développés dans cet article.

Mace, J. M. (2006). "La menace des déséquilibres régionaux." Seve : Les Tribunes De La Sante(12): 45-55, cartes.

> Non seulement l'offre de soins est aujourd'hui mal répartie sur le territoire national, mais elle souffre également du manque de renouvellement des forces vives dans certaines disciplines. A partir de la situation de 2006, à quelles répercussions doit-elle se préparer pour les vingt ans à venir ? Différents scénarios sont explorés à travers une vision prospective (résumé d'auteur).

Nicolas, G. (2007). Le corps médical à l'horizon 2015. Paris Académie Nationale de Médecine**:** 413-425.

> La médecine française est entrée dans une période de mutation dont les effets devraient être au maximum en 2015, notamment par l'effet de la croissance de la démographie médicale alors que la technicité et les coûts ne cessent de progresser. Cette situation doit être saisie comme une opportunité pour refondre en profondeur l'ensemble du système à partir d'objectifs prioritaires tenant compte des besoins de la population sur l'ensemble du territoire. L'organisation des soins primaires est la priorité à court terme en regroupant les professionnels de santé afin de faciliter l'accès aux malades et d'établir une permanence des soins. De la même façon, il faut établir un maillage hospitalier de premier niveau permettant d'assurer les urgences dans un délai de 3 heures. Cette mutation passe également par une profonde réforme des études médicales. Le mode de sélection actuel est inadapté. La formation des généralistes ne correspond pas a métier exercé, et celle des spécialistes manque de souplesse. Enfin, il faut engager une réflexion sur les revenus des médecins afin de réduire les inégalités.

ONDPS (2009). Le renouvellement des effectifs médicaux. Rapport 2008-2009 de l'ONDPS. Tome 3. Paris Ondps**:** 153.

Le tome 3, du rapport annuel de l'Ondps, consacré au renouvellement des effectifs médicaux, rassemble trois contributions. Tout d?abord, un état des lieux dresse un panorama de la démographie des internes en formation en 2008-2009. Puis, un rapprochement de la démographie des médecins et des internes en formation s'inscrit dans une démarche prospective réalisée par région et par spécialité à l?horizon de cinq à dix ans. Enfin, des projections des effectifs de médecins, réalisées selon plusieurs scénarios, éclairent les perspectives d'ici 2030. Une attention particulière est portée aux situations régionales.

URPS (2019). Pénurie de médecins spécialistes en Île-de-France : L'URPS médecins lance l'alerte, Paris : URPS https://www.urps-med-idf.org/penurie-de-medecins-specialistes-liberaux-en-ile-de-france/

L'Union régionale des médecins libéraux Île-de-France publie une série de données inédites pour quantifier la pénurie de médecins libéraux spécialistes, à l'échelle de la région et des départements. Les données de l'URPS médecins montrent que la baisse du nombre de médecins libéraux est généralisée, celle-ci n'épargne aucune spécialité et aucun département.

Sihol, J., Legendre, B. et Monziols, M. (2020). Pratiques des médecins généralistes dans les territoires devenus zones d'intervention prioritaires. Paris Drees **:** 5 , Tab., Carte. https://drees.solidarites-sante.gouv.fr/IMG/pdf/er1147.pdf

Entre 2014 et 2017, les médecins généralistes exerçant dans des territoires actuellement classés en zones d'intervention prioritaire (ZIP), caractérisées par une offre de soins insuffisante ou des difficultés dans l'accès aux soins, ont des pratiques d'exercice spécifiques. Ils ont une patientèle plus importante et déclarent réaliser davantage de consultations. Mais leur temps de travail hebdomadaire reste comparable à celui des médecins généralistes exerçant hors ZIP. Leur durée moyenne de consultation est donc plus courte que celle de ces derniers. Ils ont légèrement moins de liens avec les autres professionnels de santé et consacrent moins de temps à la formation continue. Ils ont également tendance à prescrire davantage d'antidouleurs opioïdes, mais moins de soins paramédicaux, et effectuent moins d'actes de prévention. Ces résultats tiennent compte des caractéristiques individuelles observées des médecins, ainsi que de certaines caractéristiques de leur patientèle et de leur commune d'installation. Malgré des différences de pratiques d'exercice au quotidien, les médecins généralistes installés dans une zone devenue ZIP ne se distinguent pas de leurs confrères au regard de la conception qu'ils se font de leur travail (suivi médical, soutien psychologique et social, coordination des soins, etc.)

Silhol, J. et Ventelou, B. (2020). Les zones d'intervention prioritaire reflètent-elles des écarts de pratiques des médecins généralistes ? Documents de travail ; G2020/01. Paris Insee**:** 47 , tabl. https://insee.fr/fr/statistiques/4303437

Actuellement, on observe en France l'apparition de zones dans lesquelles le nombre de généralistes en regard des besoins de la population est très inférieur à la moyenne nationale. L'étude s'attache d'abord à mesurer des corrélations entre la densité médicale et certaines variables d'activité et de pratiques de prescription des médecins généralistes. Pour mesurer la densité médicale, nous nous appuyons sur l'indicateur d'Accessibilité Potentielle Localisé (APL) ainsi que sur le zonage de 2018 qui définit le périmètre des Zones d'Interventions Prioritaires (ZIP) vers lesquelles sont fléchées les aides au maintien des généralistes. Les données utilisées sont celles du troisième panel d'observation des généralistes libéraux, enrichies d'indicateurs fournis par la CNAMTS. Nous observons que la sous-densité médicale va de pair avec des temps de consultation plus courts sans que le temps de travail du médecin ne soit affecté. Nous documentons également l'existence de corrélations entre la densité médicale et certains volumes de prescriptions. En particulier, les médecins des zones les moins denses prescrivent davantage d'antidouleurs (opioïdes) et moins de soins paramédicaux. Enfin, il semble que les actes de prévention soient moins fréquents dans les ZIP. L'étude s'intéresse encore aux modalités de sélection des ZIP. Cette sélection s'effectue en partie à l'aide d'un seuil sur l'indicateur d'APL, mais

les Autorités Régionales de Santé (ARS) ont également la possibilité de sélectionner des communes. En utilisant des variables dont la première partie de l'étude a montré la corrélation avec la densité médicale, nous comparons cette sélection effectuée avec une sélection contrefactuelle qui aurait été entièrement centralisée et fondée uniquement sur l'indicateur d'APL. La sélection effectuée semble davantage refléter l'hétérogénéité des pratiques des médecins.

Vergier, N. (2016). "Accessibilité aux professionnels de santé libéraux : des disparités géographiques variables selon les conditions tarifaires." Etudes Et Resultats (Drees)(970): 6.

[BDSP. Notice produite par MIN-SANTE rr8mGR0x. Diffusion soumise à autorisation]. Entre 2010 et 2013, les inégalités d'accessibilité géographique aux médecins généralistes, chirurgiens dentistes et psychiatres libéraux se maintiennent. Elles augmentent légèrement pour les gynécologues, les pédiatres et les ophtalmologues. Plus qu'entre régions, les disparités sont fortes entre types de communes : les habitants des grands pôles urbains ont une meilleure accessibilité que ceux des communes des périphéries.

- *Voir aussi la bibliographie thématique sur les soins primaires en ligne sur le site de l'Irdes (Partie : Démographie)*

DANS LES PAYS DE L'OCDE

Benahmed, N., et al. (2018). "[Medical human resources planning in Europe: A literature review of the forecasting models]." Rev Epidemiol Sante Publique **66**(1): 63-73.

BACKGROUND: Healthcare is a labor-intensive sector in which half of the expenses are dedicated to human resources. Therefore, policy makers, at national and internal levels, attend to the number of practicing professionals and the skill mix. This paper aims to analyze the European forecasting model for supply and demand of physicians. METHODS: To describe the forecasting tools used for physician planning in Europe, a grey literature search was done in the OECD, WHO, and European Union libraries. Electronic databases such as Pubmed, Medine, Embase and Econlit were also searched. RESULTS: Quantitative methods for forecasting medical supply rely mainly on stock-and-flow simulations and less often on systemic dynamics. Parameters included in forecasting models exhibit wide variability for data availability and quality. The forecasting of physician needs is limited to healthcare consumption and rarely considers overall needs and service targets. Besides quantitative methods, horizon scanning enables an evaluation of the changes in supply and demand in an uncertain future based on qualitative techniques such as semi-structured interviews, Delphi Panels, or focus groups. Finally, supply and demand forecasting models should be regularly updated. Moreover, post-hoc analyze is also needed but too rarely implemented. CONCLUSION: Medical human resource planning in Europe is inconsistent. Political implementation of the results of forecasting projections is essential to insure efficient planning. However, crucial elements such as mobility data between Member States are poorly understood, impairing medical supply regulation policies. These policies are commonly limited to training regulations, while horizontal and vertical substitution is less frequently taken into consideration.

Dall, T., West, T., Chakrabarti, R., et al. (2018). The Complexities of Physician Supply and Demand: Projections from 2016 to 2030. Washington DC Association of American Medical Colleges**:** 54.

The United States could see a shortage of up to 120,000 physicians by 2030, impacting patient care across the nation. The study modeled a wide range of health care and policy scenarios, such as payment and delivery reform, increased use of advanced practice nurses and physician assistants, and delays in physician retirements. The report aggregates the shortages in four broad categories: primary care, medical specialties, surgical specialties, and other specialties. By 2030, the study estimates a shortfall of between 14,800 and 49,300 primary care physicians. At the same time, there will be a shortage in non-primary care specialties of between 33,800 and 72,700 physicians. These findings are

consistent with previous reports and persist despite modeling that takes into account the use of other health professions and changes in care delivery.

Doan, B.-D.-h. (2002). "Les ressources humaines du système de santé : situation et évolution dans les pays industrialisés." Cahiers De Sociologie Et De Demographie Medicales **42**(2-3): 283-323, tabl., stat., fig.

[BDSP. Notice produite par ORSMIP 4xR0xxCP. Diffusion soumise à autorisation]. L'objectif de cette étude est de présenter un clair panorama de la situation et des tendances évolutives du potentiel humain du système de santé dans le monde industriel. Il n'échappe à personne qu'aujourd'hui, les professions de santé offrent le spectacle d'une extrême diversité, même si l'on se cantonne aux seuls pays industrialisés. Le panorama que présente ce rapport va donc à l'essentiel, met en relief ce qui est important et ne s'encombre pas de détails importants. L'objectif ultime est d'aider à comprendre le phénomène et à élaborer des mesures d'action qui soient pertinentes, c'est à dire bénéfique pour l'efficacité de toute l'organisation des soins. L'axe principal est la comparaison de la situation de l'Espagne à celle des autres pays industrialisés. Les données proviennent des publications de l'OCDE, complétées par d'autres sources. (Extrait du texte).

Dubois, C. A., et al. (2006). "Human resources for health in Europe." Cahiers De Sociologie Et De Demographie Medicales **45**(3-4): 276.

[BDSP. Notice produite par ENSP zR0x2MGX. Diffusion soumise à autorisation]. Health service human resources are key determinants of health service performance. The human resource is the largest and most expensive input into health care, yet it can be the most challenging to develop. This book examines some of the major challenges facing health care professions in Europe and the potential responses to these challenges. The book analyses how the current regulatory processes and practices related to key aspects of the management of the health professions may facilitate or inhibit the development of effective responses to challenges facing health care systems in Europe. The authors document how health care systems in Europe are confronting existing challenges in relation to the health workforce and identify the strategies that are likely to be most effective in optimizing the management of health professionals in the future.

OCDE (2016). Health Workforce Policies in OECD Countries : Right Jobs, Right Skills, Right Places, Paris : OCDE
http://www.oecd.org/fr/publications/health-workforce-policies-in-oecd-countries-9789264239517-en.htm

Health workers are the cornerstone of health systems, playing a central role in providing health services to the population and improving health outcomes. The demand and supply of health workers have increased over time in all OECD countries, with jobs in the health and social sector accounting for more than 10% of total employment now in several OECD countries. This publication reviews key trends and policy priorities on health workforce across OECD countries, with a particular focus on doctors and nurses given the preeminent role that they have traditionally played in health service delivery.

OCDE (2021). Health at a glance 2021. Paris OCDE**:** 274.
https://www.oecd.org/health/health-at-a-glance/

Le Panorama de la santé fournit « un ensemble complet d'indicateurs sur la santé de la population et la performance des systèmes de santé dans les pays membres de l'OCDE et les principales économies émergentes ». Ils portent notamment sur l'état de santé, les facteurs de risque pour la santé, l'accès et la qualité des soins de santé, ainsi que les ressources disponibles pour la santé. En sus d'une analyse par indicateur, l'OCDE propose également un chapitre de synthèse comparatif, qui fait le point sur les performances et les grandes tendances des pays membres. Cette nouvelle édition se focalise principalement sur les conséquences de la crise sanitaire dans les pays de l'OCDE et notamment sur ses effets négatifs sur l'accès et la qualité des soins, et les difficultés grandissantes liées aux troubles mentaux. Au-delà de l'augmentation des coûts des dépenses de santé, couplé à la contraction de l'économie, le Panorama montre que la Covid-19 est responsable, directement ou indirectement, d'une forte augmentation du nombre attendu de décès en 2020 (+16%) et au premier semestre 2021.

Par ailleurs, l'OCDE souligne que dans 24 des 30 pays étudiés, l'espérance de vie a reculé, sous l'effet des 1,7 millions de décès supplémentaires en 2020 – principalement aux âges élevés – en comparaison de la moyenne des décès annuels entre 2015 et 2019. C'est le cas notamment aux Etats-Unis où la baisse atteint 1,5 an et en Espagne 1,6 an. Le même constat peut être fait pour la France avec néanmoins un recul moins marqué, de l'ordre de 6 mois. Ce rapport présente également des données tendant à montrer que la pandémie a davantage touché les personnes les plus vulnérables en raison de l'âge. L'Organisation alerte sur la nécessité de prendre des mesures pour résoudre les situations de manque de personnels de santé et de soins aux personnes âgées, d'autant plus que le vieillissement de la population va accroitre ce type de demandes dans un avenir proche. Au-delà des personnes âgées, les personnes socialement défavorisées ont été particulièrement touchées par les effets de la crise, du fait d'une exposition plus importante au virus et par la concentration de ces publics dans ce que l'OCDE qualifie de « zones déshéritées » (économiquement, en termes d'accès aux soins, etc.). Parmi les autres effets néfastes de la pandémie, l'OCDE insiste sur la forte augmentation de la proportion de personnes qui présentent des syndromes dépressifs, passant de 10% au début de 2019 à 28% à la même période en 2020. Sans atteindre les niveaux du Mexique, des Etats-Unis et du Royaume-Uni, la France est également concernée par cette situation avec un doublement de la prévalence de l'anxiété et de la dépression, en 2020, par rapport aux niveaux d'avant crise. Il aborde aborde également d'autres thématiques qui ne sont pas directement en lien avec la pandémie. Il fournit notamment une analyse de l'influence des « modes de vie néfastes pour la santé (tabagisme, obésité, consommation nocive d'alcool) et des mauvaises conditions environnementales (pollution de l'air extérieur) » sur l'état de santé des populations des pays membres. L'OCDE souligne que ces pratiques réduisent à la fois « la durée de vie mais contribuent également à fragiliser les populations face aux chocs sanitaires ». Elle montre aussi que les dépenses de santé consacrées à la prévention de ces comportements demeurent "relativement faibles" et ne représentent que 2,7 % de l'ensemble des dépenses de santé.

OCDE (2020). Health at a glance : Europe 2020, state of health in the EU cycle. Paris OCDE.
https://www.keepeek.com//Digital-Asset-Management/oecd/social-issues-migration-health/health-at-a-glance-europe-2020_82129230-en#page1

The 2020 edition of Health at a Glance: Europe focuses on the impact of the COVID-19 crisis. Chapter 1 provides an initial assessment of the resilience of European health systems to the COVID-19 pandemic and their ability to contain and respond to the worst pandemic in the past century. Chapter 2 reviews the huge health and welfare burden of air pollution as another major public health issue in European countries, and highlights the need for sustained efforts to reduce air pollution to mitigate its impact on health and mortality. The five other chapters provide an overview of key indicators of health and health systems across the 27 EU member states, 5 EU candidate countries, 3 European Free Trade Association countries and the United Kingdom. Health at a Glance: Europe is the first step in the State of Health in the EU cycle.

OMS (2015). "Core Health Indicators in the WHO European Region. Special focus :human resources for health." 10 , tabl.

This annual publication provides a basic overview of the health situation in the 53 Member States of the WHO European Region. The key health statistics broadly cover the main health domains: health status of the population, main determinants of health and risk factors and health system resources and utilization. The publication also includes background demographic and socioeconomic indicators. The 2015 edition has a special focus on human resources for health and gives statistics such as the nurse to physician ratio by country and the gender and age distribution of healthcare workers. The information is compiled from data generated nationally by health and statistical authorities and regionally by WHO and other international agencies. The data are presented in simple tables for quick reference.

Ono, T., et al. (2013). Health Workforce Planning in OECD Countries. A review of 26 projections Models from 18 Countries. OECD Health Working Paper; 62. Paris OCDE**:** 127 , tabl., fig.
http://dx.doi.org/10.1787/5k44t787zcwb-en

La planification de la main-d'oeuvre dans le domaine de la santé vise à atteindre un juste équilibre entre l'offre et la demande pour les différentes catégories de professionnels de santé, à court et à long terme. La planification de la main-d'oeuvre dans le secteur de la santé s'avère particulièrement importante compte tenu du temps et des coûts investis dans la formation de nouveaux médecins et autres professionnels. Dans un contexte de fortes contraintes budgétaires, une planification appropriée du personnel de santé est nécessaire non seulement pour guider les décisions en matière d'admission aux études de formation médicale et infirmière, mais aussi pour évaluer l'impact d'éventuelles réorganisations dans la prestation des services de santé afin de mieux répondre aux nouveaux besoins. Ce document passe en revue les principales caractéristiques et les résultats de 26 modèles de projection de la main-d'oeuvre dans le domaine de la santé dans 18 pays de l'OCDE. Il se concentre principalement sur des modèles s'intéressant aux médecins, mais comprend également certains modèles pour les infirmiers (extrait du résumé d'auteur).

Pineau, C. (2011). "Spécificités de la médecine rurale : l'expérience australienne." Seve : Les Tribunes De La Sante(33): 91-97.

La santé en milieu rural est un enjeu pour de nombreux pays, notamment en ce qui concerne l'accès aux soins. L'Australie est exemplaire à de nombreux points de vue sur ce sujet, tout d'abord parce que le problème y est particulièrement prégnant compte tenu de l'immensité du territoire et de la répartition très inégale de la population, mais surtout parce que des solutions ont été pensées pour résoudre ces problèmes depuis les années 1990. Des programmes attractifs ont été crées (par exemple les Rural Clinical School) afin de former les professionnels de la santé à l'exercice en zone rurale et les encourager à rester dans ces zones en leur offrant des perspectives de carrière.

Simoens, S. et Hurst, J. (2006). The supply of physician services in OECD countries. OECD Health Working Papers ; 21. Paris OCDE**:** 61 , 13 graph., 65 tabl.
https://www.oecd.org/dataoecd/27/22/35987490.pdf

Les pays membres de l'OCDE sont confrontés à plusieurs défis dans leur volonté de faire coïncider l'offre avec la demande de services médicaux. Cela implique de prendre les bonnes décisions concernant les effectifs et la formation des nouveaux entrants, la politique de rétention ou de mise à la retraite des stocks existants de médecins, et les politiques migratoires des médecins. Cela exige également des politiques qui assurent une bonne répartition des spécialités et de la distribution géographique des médecins. Cela demande des décisions appropriés sur les termes et conditions d'exercice, et sur les modes de rémunération - non seulement pour attirer un nombre suffisant d'individus aux professions médicales, mais aussi pour s'assurer que ces personnes sont motivées pour être les plus productives possible. Ce document explore toutes ces questions à partir d'une mise en perspective internationale. La deuxième partie propose un cadre d'analyse de l'emploi des médecins dans les pays de l'OCDE en distinguant la demande et l'offre de médecins, et en identifiant deux différents concepts de pénurie et de surplus. La troisième section analyse les effectifs de médecins et leur impact en termes de coûts, de productivité et de résultats en santé. Les évidences actuelles de pénuries et de surplus de médecins, ainsi qu'un certain nombre de facteurs d'offre affectant les pénuries et surplus futurs sont analysés dans la quatrième partie. Il s'en suit une discussion sur les diverses politiques mises en ?uvre pour assurer une offre adéquate de médecins, en distinguant l'effectif global de médecins au niveau national, la distribution géographique au sein d'un pays, et la composition des spécialités dans la population médicale. La huitième partie passe en revue les politiques qui affectent la productivité des médecins. Enfin, les remarques conclusive termine cette étude.

La définition de zones déficitaires : les États-Unis, l'Angleterre et l'Allemagne en précurseurs

FOCUS SUR LES INDICATEURS ET CONCEPTS

De nombreux pays se sont engagés depuis plus ou moins longtemps dans la mise en place de dispositifs permettant d'améliorer la répartition des professionnels de santé sur le territoire. Certaines de ces mesures nécessitent au prélable une définition des zones géographiques concernées par le manque d'offre de soins disponibles. En France, ces zones déficitaires ont été définies pour la première fois en 2004 pour les médecins par l'Observatoire national des professions de santé (ONDPS). Mais dans d'autres pays comme l'Angleterre et les États-Unis, l'identification des zones déficitaires remonte respectivement à 1948 et 1970. La définition du zonage déficitaire diffère d'un pays à l'autre. En Angleterre, les spécialistes exerçant à l'hôpital, la régulation géographique des effectifs concerne uniquement les soins primaires. En Allemagne, la méthode du zonage déficitaire est identique pour les médecins généralistes et les médecins spécialistes mais varie dans la fixation des seuils de dotation. Aux États-Unis, les critères du zonage déficitaire sont spécifiques à chaque type d'offreurs de soins et les zones déficitaires peuvent être aussi bien des espaces géographiques que des populations spécifiques. La réflexion menée en France sur les zonages déficitaires est plus récente. Comme aux États-Unis, deux zonages parallèles coexistent : celui des Agences régionales de santé (ARS) et ceux de l'Assurance maladie dans le cadre des avenants conventionnels conclus avec les différents professionnels de santé. En 2012, la Drees et l'Irdes ont mis au point l'indicateur d'accessibilité potentielle localisée (APL)[12].Les quelques études d'évaluation menées dans ces pays démontrent que ces mesures ont des résultats mitigés et que les inégalités de l'offre de soins persistent. Enfin, leur implementation a connu de nombreuses vicissitudes et devrait encore évoluer à la faveur des réformes menées actuellement dans chacun des pays.

QUELQUES ETUDES INTERNATIONALES : ALLEMAGNE, ÉTATS-UNIS, ROYAUME-UNI…

(2017). "Criteria for Designation of Areas Having Shortages of Primary Medical Care Professional(s). CFR Title 42, Chapter I, Subchapter A, Part 5.".
https://www.law.cornell.edu/cfr/text/42/appendix-A_to_part_5.

(1987). "List of designated primary care health manpower shortage areas (HMSAs); list of withdrawals from primary care HMSA designation--HRA." Fed Regist **52**(221): 43992-44052.

> This notice provides two lists. The first is a list of all areas, population groups or facilities designated as primary care health manpower shortage areas (HMSAs) as of August 31, 1987. Second is a list of previously-designated primary care HMSAs that have been found to no longer meet the HMSA criteria and are therefore being withdrawn from the HMSA list. HMSAs are designated or withdrawn by the Secretary of HHS under the authority of section 332 of the Public Health Service Act.

(1990). "List of designated primary medical care health manpower shortage areas (HMSAs); list of withdrawals from primary medical care HMSA designation--PHS. Notice." Fed Regist **55**(126): 27010-27085.

> This notice provides two lists. The first is a list of all areas, population groups, or facilities designated as primary medical care health manpower shortage areas (HMSAs) as of December 31, 1989. Second is a list of previously-designated primary medical care HMSAs that have been found to no longer meet the HMSA criteria and are therefore being withdrawn from the HMSA list. HMSAs are designated or withdrawn by the Secretary of Health and Human Services (HHS) under the authority of section 332 of the Public Health Service Act.

Allan, D. (2014). "Catchments of general practice in different countries- a literature review." International Journal of Health Geographics **13**(1): 32.

[12] Barlet et al. (2012). L'accessibilité potentielle localisé (APL). Questions d'économie de la santé (174).
Voir aussi la synthèse documentaire : la géographie de la santé

http://www.ij-healthgeographics.com/content/13/1/32

> The purpose of this paper is to review the current research on catchment areas of private general practices in different developed countries because healthcare reform, including primary health care, has featured prominently as an important political issue in a number of developed countries. The debates around health reform have had a significant health geographic focus.Conceptually, GP catchments describe the distribution, composition and profile of patients who access a general practitioner or a general practice (i.e. a site or facility comprising one or more general practitioners). Therefore, GP catchments provide important information into the geographic variation of access rates, utilisation of services and health outcomes by all of the population or different population groups in a defined area or aggregated area.This review highlights a wide range of diversity in the literature as to how GP catchments can be described, the indicators and measures used to frame the scale of catchments. Patient access to general practice health care services should be considered from a range of locational concepts, and not necessarily constrained by their place of residence. An analysis of catchment patterns of general practitioners should be considered as dynamic and multi-perspective. Geographic information systems provide opportunities to contribute valuable methodologies to study these relationships. However, researchers acknowledge that a conceptual framework for the analysis of GP catchments requires access to real world data. Recent studies have shown promising developments in the use of real world data, especially from studies in the UK.Understanding the catchment profiles of individual GP surgeries is important if governments are serious about patient choice being a key part of proposed primary health reforms. Future health planning should incorporate models of GP catchments as planning tools, at the micro level as well as the macro level, to assist policies on the allocation of resources so that opportunities for good health outcomes for all groups within society, especially those who have been systematically denied equitable access, are maximised

Benahmed, N., Deliege, D., De Wever, A., et al. (2018). "La planification des médecins en Europe : une revue de la littérature des modèles de projection." Rev Epidemiol Sante Publique **66**(1): 63-73.

> [BDSP. Notice produite par ORSRA R0x98mAE. Diffusion soumise à autorisation]. Position du problème : Les soins de santé représentent un secteur à forte intensité en capital humain dans lequel les ressources humaines constituent la moitié des dépenses totales. Le nombre de professionnels, ainsi que la répartition de leurs compétences, font donc l'objet d'une attention soutenue de la part des décideurs tant au niveau national qu'au niveau international. L'objectif de cet article est d'analyser les différents modèles européens de projection de l'offre médicale et de la demande en médecins. Méthodes : Afin de décrire les outils de projection utilisés pour la planification médicale en Europe, une revue de la littérature grise a été menée via la consultation de rapports techniques de l'OCDE, de l'OMS et de l'Union européenne, et a été complétée par la consultation des bases de données bibliographiques Pubmed, Medine, Embase et Econlit. Résultats : Les méthodes quantitatives d'évaluation de l'offre médicale reposent généralement sur une modélisation de type "stock and flow" et plus rarement sur une dynamique systémique. Les paramètres inclus dépendent largement de la disponibilité et de la qualité de ces données. Les modélisations des besoins en médecins se limitent à la consommation de soins et n'envisagent que rarement les besoins dans leur globalité ou des objectifs de santé. Outre les méthodes quantitatives, l' "Horizon scanning" est une technique permettant d'apprécier l'évolution de l'offre et de la demande dans un futur incertain à l'aide de techniques qualitatives telles que celles des enquêtes semi-structurées, des panels Delphi ou des "focus group". Enfin, les modèles de projection de l'offre et de la demande doivent être régulièrement mis à jour pour vérifier la réalisation des hypothèses de travail. De plus, une analyse post-hoc est également nécessaire mais trop rarement réalisée. Conclusion : La planification des ressources humaines médicales est très inégalement implantée en Europe. L'implémentation politique des résultats des exercices de projection est cruciale pour une planification efficace. Cependant des données importantes comme celles relatives à la mobilité entre les États membres sont mal connues, compliquant les politiques de régulation de l'offre médicale. Ces politiques se limitent généralement à la régulation de la formation et n'envisagent que trop rarement la délégation et la substitution.

Bernstein, D. (2008). "Les réformes dans l'organisation des soins primaires en Angleterre." Points De Repere(17): 12.

[BDSP. Notice produite par CNAMTS mR0xJmBI. Diffusion soumise à autorisation]. Les soins primaires ont fait l'objet, en Angleterre, de nombreuses réformes depuis les années 1990, avec la constitution des Primary Care Trusts, organismes responsables au niveau local du financement et de l'organisation des soins. La convention avec les généralistes, signée en 2004, comporte des incitations nouvelles au regroupement entre praticiens et à la délégation des tâches, et modifie la structure de rémunération, puisqu'une part significative y est désormais conditionnée à l'atteinte d'objectifs. Afin de développer l'offre de soins, de multiples canaux se mettent en place : médecin gestionnaire, services médicaux des Primary Care Trusts, émergence de grandes entreprises recrutées sur appels d'offres. Si des éléments tangibles permettant de peser clairement les avantages et les coûts des nouvelles formes d'organisation manquent, les réformes visent à agir à la fois sur la qualité des soins, la régulation des dépenses et la satisfaction des patients.

Birch, S. (2019). "Demand-based models and market failure in health care: projecting shortages and surpluses in doctors and nurses." Health Econ Policy Law **14**(2): 291-294.

Models for projecting the demand for and supply of health care workers are generally based on objectives of meeting demands for health care and assumptions of status quo in all but the demographic characteristics of populations. These models fail to recognise that public intervention in health care systems arises from market failure in health care and the absence of an independent demand for health care. Hence projections of demand perpetuate inefficiencies in the form of overutilisation of services on the one hand and unmet needs for care on the other. In this paper the problems with basing workforce policy on projected demand are identified and the consequences for health care system sustainability explored. Integrated needs-based models are offered as alternative approaches that relate directly to the goals of publicly funded health care systems and represent an important element of promoting sustainability in those systems.

Bissonnette, L., Wilson, K., Bell, S., et al. (2012). "Neighbourhoods and potential access to health care: The role of spatial and aspatial factors." Health & Place **18**(4): 841-853. http://www.sciencedirect.com/science/article/pii/S135382921200055X

The availability of, and access to, primary health care is one neighbourhood characteristic that has the potential to impact health thus representing an important area of focus for neighbourhood-health research. This research examines neighbourhood access to primary health care in the city of Mississauga, Ontario, Canada. A modification of the Two Step Floating Catchment Area method is used to measure multiple spatial and aspatial (social) dimensions of potential access to primary health care in natural neighbourhoods of Mississauga. The analysis reveals that neighbourhood-level potential access to primary care is dependant on spatial and aspatial dimensions of access selected for examination. The results also show that potential accessibility is reduced for linguistic minorities as well as for recent immigrant populations who appear, on the surface, to have better access to walk-in clinics than dedicated physicians. The research results reinforce the importance of focusing on intra-urban variations in access to care and demonstrate the utility of a new approach for studying neighbourhood impacts that better represents spatial variations in health care access and demand.

Bourgueil, Y., et al. (2002). "La régulation des professions de santé - études monographiques. Allemagne, Royaume - Uni, Québec, Belgique, Etats-Unis. Rapport final." Serie Etudes - Document De Travail - Drees(22): 242 , tabl., graph.

[BDSP. Notice produite par ORSRA 1YR0xVe1. Diffusion soumise à autorisation]. Ce rapport met en parallèle les dispositifs de régulation de la démographie médicale mis en oeuvre dans cinq pays. Chaque pays est présenté selon un plan type comprenant une synthèse du système de santé, la situation démographique des professions de santé actuelle de chaque pays, les outils de projection démographiques utilisés et les différents mécanismes de régulation qui jouent aux différents temps de la vie professionnelle (à l'entrée dans la profession, à l'entrée sur le marché du travail, en cours et en

fin d'exercice professionnel). En conclusion, les cinq pays sont ordonnés selon l'importance de leurs dispositifs de régulation : Royaume-Uni (le maximum de régulation), Québec, Allemagne, Belgique, Etats-Unis (minimum de régulation).

Bourgueil, Y., et al. (2001). "La régulation démographique de la profession médicale dans cinq pays : étude monographique." Cahiers De Sociologie Et De Demographie Medicales: 195-220, tabl.

[BDSP. Notice produite par ORSMIP 0R0xsrB6. Diffusion soumise à autorisation]. Tableau des modes de régulation de la densité médicale en Allemagne, en Belgique, au Royaume-Uni, au Québec, aux Etats-Unis. Il oppose les pays à régulation administrée complète (Royaume-Uni et Québec) qui mettent en oeuvre une gestion rigoureuse et des incitations nombreuses (économiques, financières, pédagogiques ...), les pays à régulation administrée (Allemagne et Belgique) qui contrôlent principalement l'installation des médecins et enfin les USA dont la régulation est faible.

Bourgueil, Y., et al. (2001). "La régulation démographique de la profession médicale en Allemagne, en Belgique, aux Etats-Unis, au Québec et au Royaume-Uni (étude monographique)." Etudes Et Resultats(120): 12 , 12 tabl., 11 enc.

Sur cinq pays étudiés, la régulation démographique des professions médicales peut se décrire selon trois modes : une « régulation administrée complète » (au Royaume-Uni et au Québec), une « régulation administrée incomplète » (en Allemagne et en Belgique), une « régulation faiblement administrée » (aux États-Unis). Ces modes de régulation reflètent la façon dont s'exerce l'intervention publique dans le système de soins (État ou caisses de Sécurité sociale) et la répartition géographique des compétences en matière de formation des étudiants. Les États-Unis régulent peu les formations et font jouer un rôle important aux Managed Care Organizations dans la gestion des professionnels de santé. En Allemagne et en Belgique, la régulation des professionnels se fait à l'installation par le biais du conventionnement avec les caisses d'assurance maladie, sachant que l'organisation fédérale ou communautaire laisse aux Länder ou aux communautés linguistiques une grande latitude dans l'aménagement des études médicales. Au Royaume-Uni et au Québec, l'intervention centrale de l'État est plus directe, tout en s'appuyant sur les avis d'instances d'ailleurs plutôt professionnelles qu'universitaires (résumé d'auteurs).

Bourgueil, Y., et al. (2006). "Améliorer la répartition géographique des professionnels de santé : les enseignements de la littérature." Questions D'economie De La Sante (Irdes)(116): 6.
http://www.irdes.fr/Publications/Bulletins/QuestEco/pdf/qesnum116.pdf

Cette recherche s'inscrit dans le cadre d'une étude réalisée pour le compte de l'Observatoire national des professions de santé (ONDPS) et a bénéficié d'un financement de la Direction de la recherche, des études, de l'évaluation et des statistiques (DREES). Elle a donné lieu à la publication d'une synthèse dans le rapport annuel 2005 de l'ONDPS et à un rapport IRDES en juin 2006. Ce " Questions d'économie de la santé " présente la première partie des résultats relatifs aux principaux enseignements de la revue de la littérature internationale consacrée aux politiques visant à combattre les inégalités de répartition géographique des professionnels de santé. Une prochaine édition présentera les résultats d'une enquête recensant en France les mesures nationales, régionales et locales qui visent à améliorer la répartition géographique des professionnels de santé. Ces résultats seront analysés en regard des conclusions de la revue de la littérature.

Bourgueil, Y., et al. (2006). Comment améliorer la répartition géographique des professionnels de santé ? Les enseignements de la littérature internationale et des mesures adoptées en France. Les rapports de l'Irdes ; 1635. Paris IRDES**:** 69.
http://www.irdes.fr/Publications/Rapports2006/rap1635.pdf

Les objectifs de cette étude sont de recenser les mesures publiques visant à améliorer la régulation de la répartition géographique des professionnels de santé en France ; d'analyser leurs caractéristiques (nature, évaluation, efficacité) et de les mettre en perspective, notamment au regard de la littérature internationale. Ce rapport en présente les principaux enseignements au travers des trois parties

suivantes : une revue de la littérature internationale consacrée à l'évaluation des politiques visant une meilleure répartition géographique des professionnels de santé ; un recensement et une analyse des mesures nationales visant à améliorer la régulation de la répartition géographique des professionnels de santé mises en œuvre en France ; l'identification et l'analyse des mesures régionales et locales au moyen d'une enquête par questionnaire menée en 2005 auprès des comités régionaux de l'Observatoire national de la démographie des professions de santé et d'entretiens ciblés dans trois régions.

Burke, A. et Jones, A. (2019). "The development of an index of rural deprivation: A case study of Norfolk, England." Social Science & Medicine **227**: 93-103.
http://www.sciencedirect.com/science/article/pii/S0277953618305094

Geographical deprivation indices such as the English Index of Multiple Deprivation (IMD) have been widely used in healthcare research and planning since the mid-1980s. However, such indices normally provide a measure of disadvantage for the whole population and can be inflexible to adaptation for specific geographies or purposes. This can be an issue, as the measurement of deprivation is subjective and situationally relative, and the type of deprivation experienced within rural areas may differ from that experienced by urban residents. The objective of this study was to develop a Rural Deprivation Index (RDI) using the English county of Norfolk as a case study, but with a view to adopting a flexible approach that could be used elsewhere. It is argued that the model developed in this research gives clarity to the process of populating an index and weighting it for a specific purpose such as rural deprivation. This is achieved by 'bundling' highly correlated indicators that are applicable to both urban and rural deprivation into one domain, and creating a separate domain for indicators relevant to the setting of interest, in this case rural areas. A further domain is proposed to account for population differences in rural areas. Finally, a method was developed to measure variability in deprivation within small areas. The RDI results in more rural areas in Norfolk falling in the most deprived quintile, particularly those classified as 'Rural town and fringe in sparse settings'; these areas also have high levels of heterogeneity of deprivation when using the variability measure created. This model proposed has the potential to provide a starting point for those who wish to create a summary deprivation measure taking into account rurality, or other local geographic factors, and as part of a range of approaches that can be used to allocate, or apply for, resources.

Burrows, M. (2010). "Financement et organisation des soins primaires au Royaume-Uni, l'exemple du Primary Care Trust de Salford." Revue Francaise Des Affaires Sociales(3): 23-33, graph.

Directeur d'un Primary Care Trust (PCT), organisme responsable au niveau local du financement et de l'organisation des soins dans la ville de Salford (Angleterre), Mike Burrows présente le cadre général de délivrance des soins primaires au Royaume-Uni. Il propose une description de l'organisation et du fonctionnement des Primary Care Trusts et des trois contrats actuellement en vigueur entre le National Health Service (NHS) et les médecins généralistes au Royaume-Uni, en illustrant son propos à travers l'exemple du PCT de Salford.

Butler, D. C., Petterson, S., Phillips, R. L., et al. (2013). "Measures of social deprivation that predict health care access and need within a rational area of primary care service delivery." Health Serv Res **48**(2 Pt 1): 539-559.

OBJECTIVE: To develop a measure of social deprivation that is associated with health care access and health outcomes at a novel geographic level, primary care service area. DATA SOURCES/STUDY SETTING: Secondary analysis of data from the Dartmouth Atlas, AMA Masterfile, National Provider Identifier data, Small Area Health Insurance Estimates, American Community Survey, Area Resource File, and Behavioural Risk Factor Surveillance System. Data were aggregated to primary care service areas (PCSAs). STUDY DESIGN: Social deprivation variables were selected from literature review and international examples. Factor analysis was used. Correlation and multivariate analyses were conducted between index, health outcomes, and measures of health care access. The derived index was compared with poverty as a predictor of health outcomes. DATA COLLECTION/EXTRACTION METHODS: Variables not available at the PCSA level were estimated at block level, then aggregated to PCSA level. PRINCIPAL FINDINGS: Our social deprivation index is positively associated with poor access

and poor health outcomes. This pattern holds in multivariate analyses controlling for other measures of access. A multidimensional measure of deprivation is more strongly associated with health outcomes than a measure of poverty alone. CONCLUSIONS: This geographic index has utility for identifying areas in need of assistance and is timely for revision of 35-year-old provider shortage and geographic underservice designation criteria used to allocate federal resources.

Callison, K., Kaestner, R. et Ward, J. (2018). A Test of Supply-side Explanations of Geographic Variation in Health Care Use. NBER Working Paper Series ; 25037. Cambridge NBER**:** 49 ,tabl., fig., annexes. http://www.nber.org/papers/w25037

Evidence of regional variation in health care utilization has been well-documented over the past 40 years. Yet uncertainty persists about whether this variation is primarily the result of supply-side or demand-side forces, and the difference matters for both theory and policy. In this article, we provide new evidence as to the cause of geographic variation in health care utilization. We do so by examining changes in health care use by the near-elderly as they transition from being uninsured into Medicare. Results provide support for a causal supply-side explanation of regional variation. Estimates indicate that gaining Medicare coverage in above-median spending regions increases the probability of at least one hospital visit by 36% and the probability of having more than five doctor visits by 25% relative to similar individuals in below-median spending regions.

Christiaanse, S. (2020). "Rural facility decline: A longitudinal accessibility analysis questioning the focus of Dutch depopulation-policy." Applied Geography **121**: 102251. https://doi.org/10.1016/j.apgeog.2020.102251

In the debate about rural depopulation it is frequently assumed that population decline goes hand-in-hand with the decline of facilities and services. Hence, spatial policy for rural areas often focuses on the provision of key services of general interest in areas experiencing population decline. However, the actual changes in distribution and accessibility of several services are almost never evaluated longitudinally, and most recent studies focus on measuring access in terms of supply and demand using aggregated data. This paper offers an alternative method, from an equality standpoint, and investigates changes in access and distribution of local facilities for basic needs (food, education and health care) in Fryslân (Netherlands). By doing so, it questions the focus of Dutch spatial policy on depopulating areas. Changes in access to primary schools, general practitioners and supermarkets between 2000 and 2012 are visualised by overlapping network analyses in GIS. The results are discussed in the context of depopulation and the decline of local facilities from smaller towns and villages. This paper concludes that due to the initial high density of basic facilities the accessibility remained quite good. Moreover, major changes in access do not coincide with the areas targeted by the government to deal with effects of population decline. This suggests that spatial policy for facility-decline should focus on people with low mobility in small villages throughout Fryslân, rather than depopulating areas. This research shows the importance of questioning the assumptions behind spatial policy for service-provision, and offers a simple method to do so.

Corso, K. A., Dorrance, K. A. et LaRochelle, J. U. (2018). "The Physician Shortage: A Red Herring in American Health Care Reform." Mil Med **183**(suppl_3): 220-224.

Although the USA spends more on health care than any other comparable nation, Americans are less healthy than citizens of high-income countries that spend far less. Over the past 12 years, the number of physicians per capita in the USA has been a concerning problem that may contribute to the disparity between health care costs and health status. Some have argued that remediating the shortage of primary care physicians will improve patient health. Others assert that the relationship between health care costs and health outcomes is more complex, influenced by a broad range of variables intrinsic to health care (i.e., provider availability, continuity, coordination); patient factors (ethnicity, socioeconomic status, health behaviors, health literacy, and other social factors); and systems factors (health information management, health information technology and health care measurement itself). This article contends that increasing the physician supply will not improve the health of Americans. Rather, solutions which lower health care costs while concomitantly improving

health status will. Aside from community-level actions, health can improve at lower costs by increasing the prevalence of and proficiency in team-based care models, that address individual patient determinants of health, and poorly coordinated care. Future directions for this research and policy development are discussed.

Crooks, V. A. et Schuurman, N. (2012). "Interpreting the results of a modified gravity model: examining access to primary health care physicians in five Canadian provinces and territories." BMC Health Serv Res **12**: 230.

BACKGROUND: Primary health care (PHC) encompasses an array of health and social services that focus on preventative, diagnostic, and basic care measures to maintain wellbeing and address illnesses. In Canada, PHC involves the provision of first-contact health care services by providers such as family physicians and general practitioners - collectively referred as PHC physicians here. Ensuring access is a key requirement of effective PHC delivery. This is because having access to PHC has been shown to positively impact a number of health outcomes. METHODS: We build on recent innovations in measuring potential spatial access to PHC physicians using geographic information systems (GIS) by running and then interpreting the findings of a modified gravity model. Elsewhere we have introduced the protocol for this model. In this article we run it for five selected Canadian provinces and territories. Our objectives are to present the results of the modified gravity model in order to: (1) understand how potential spatial access to PHC physicians can be interpreted in these Canadian jurisdictions, and (2) provide guidance regarding how findings of the modified gravity model should be interpreted in other analyses. RESULTS: Regarding the first objective, two distinct spatial patterns emerge regarding potential spatial access to PHC physicians in the five selected Canadian provinces: (1) a clear north-south pattern, where southern areas have greater potential spatial access than northern areas; and (2) while gradients of potential spatial access exist in and around urban areas, access outside of densely-to-moderately populated areas is fairly binary. Regarding the second objective, we identify three principles that others can use to interpret the findings of the modified gravity model when used in other research contexts. CONCLUSIONS: Future applications of the modified gravity model are needed in order to refine the recommendations we provide on interpreting its results. It is important that studies are undertaken that can help administrators, policy-makers, researchers, and others with characterizing the state of access to PHC, including potential spatial access. We encourage further research to be done using GIS in order to offer new, spatial perspectives on issues of access to health services given the increased recognition that the place-based nature of health services can benefit from the use of the capabilities of GIS to enhance the role that visualization plays in decision-making.

Daly, M. R., Mellor, J. M. et Millones, M. (2019). "Defining Primary Care Shortage Areas: Do GIS-based Measures Yield Different Results?" Journal of Rural Health **35**(1): 22-34.

Purpose To examine whether geographic information systems (GIS)-based physician-to-population ratios (PPRs) yield determinations of geographic primary care shortage areas that differ from those based on bounded-area PPRs like those used in the Health Professional Shortage Area (HPSA) designation process. Methods We used geocoded data on primary care physician (PCP) locations and census block population counts from 1 US state to construct 2 shortage area indicators. The first is a bounded-area shortage indicator defined without GIS methods; the second is a GIS-based measure that measures the populations' spatial proximity to PCP locations. We examined agreement and disagreement between bounded shortage areas and GIS-based shortage areas. Findings Bounded shortage area indicators and GIS-based shortage area indicators agree for the census blocks where the vast majority of our study populations reside. Specifically, 95% and 98% of the populations in our full and urban samples, respectively, reside in census blocks where the 2 indicators agree. Although agreement is generally high in rural areas (ie, 87% of the rural population reside in census blocks where the 2 indicators agree), agreement is significantly lower compared to urban areas. One source of disagreement suggests that bounded-area measures may "overlook" some shortages in rural areas; however, other aspects of the HPSA designation process likely mitigate this concern. Another source of disagreement arises from the border-crossing problem, and it is more prevalent. Conclusions The GIS-based PPRs we employed would yield shortage area determinations that are similar to those based on bounded-area PPRs defined for Primary Care Service Areas. Disagreement rates were lower than previous studies have found.

Drake, C., Nagy, D., Nguyen, T., et al. (2021). "A comparison of methods for measuring spatial access to health care." Health Services Research **56**(5): 777-787.
https://onlinelibrary.wiley.com/doi/abs/10.1111/1475-6773.13700

Abstract Objective To compare measures of spatial access to care commonly used by policy makers and researchers with the more comprehensive enhanced two-step floating catchment area (E2SFCA) method. Study Setting Fourteen southwestern Pennsylvania counties. Study Design We estimated spatial access to buprenorphine-waivered prescribers using three commonly used measures—Euclidean travel distance to the closest prescriber, travel time to the closest provider, and provider-to-population ratios—and the E2SFCA. Unlike other measures, the E2SFCA captures provider capacity, potential patient volume, and travel time to prescribers. Data Collection/Extraction Methods We measured provider capacity as the number of buprenorphine prescribers listed at a given address in the Drug Enforcement Agency's 2020 Controlled Substances Act Registrants Database, and we measured potential patient volume as the number of nonelderly adults in a given census tract as reported by the 2018 American Community Survey. We estimated travel times between potential patients and prescribers with Bing Maps and Mapbox application programming interfaces. We then calculated each spatial access measure using the R programming language. We used each measure of spatial access to identify census tracts in the lowest quintile of spatial access to prescribers. Principal Findings The Euclidean distance, travel time, and provider-to-population ratio measures identified 48.3%, 47.2%, and 69.9% of the census tracts that the E2SFCA measure identified as being in the lowest quintile of spatial access to care, meaning that these measures misclassify 30%–52% of study area census tracts as having sufficient spatial access to buprenorphine prescribers. Conclusions Measures of spatial access commonly used by policy makers do not sufficiently accurately identify geographic areas with relatively low access to prescribers of buprenorphine. Using the E2SFCA in addition to the commonly used measures would allow policy makers to precisely target interventions to increase spatial access to opioid use disorder treatment and other types of health care services.

Dudko, Y., Robey, D. E., Kruger, E., et al. (2018). "Selecting a location for a primary healthcare facility: combining a mathematical approach with a Geographic Information System to rank areas of relative need." Aust J Prim Health **24**(2): 130-134.

Geographic Information Systems have become an invaluable tool in many industries as it can help to conceptualise available data and answer questions visually. The software allows for integration of key statistics and geographic data for a more detailed analysis. The objective of this study was to show how mathematically weighted, publicly available, relevant demographics data can be integrated with Geographic Information Systems to identify and rank potential locations for new primary healthcare facilities. Index of Relative Socio-economic Advantage and Disadvantage was mathematically weighted with respect to the usual resident population and the number of people not in the labour force data, at Statistical Area level 1 (SA1). Smoothing was applied by repeating the process at Statistical Area level 2, 3 and 4 to produce a quasi-index of priority. A total of 229 SA1 areas were identified and preselected as potential primary healthcare facility infrastructure sites across Australia. The quasi-index was incorporated into a Geographic Information System to produce a map identifying and ranking areas of relative need. Combining a mathematical approach with Geographic Information Systems can yield significant qualitative and quantitative advantages over conventional methods of site selection.

Dussault, G., Buchan, J. et Sermeus, W. (2010). Assessing future health workforce needs. Copenhague : OMS.

Dyson, S. L., Greene, S. B. et Fraher, E. P. (2004). "A shortage of health information management professionals: how would we know?" J Allied Health **33**(3): 167-173.

Field, K. (2000). "Measuring the need for primary health care: an index of relative disadvantage." Applied Geography **20**(4): 305-332.
http://www.sciencedirect.com/science/article/pii/S0143622800000151

The prime objective of primary health care provision is the maintenance or improvement of the population's health. The equitable distribution of resources is paramount to this and measures of disadvantage are implemented to assess differential levels of need as a basis for calculating deprivation payments according to general practitioner workload. Despite research that highlights the benefits of measures of social disadvantage, indices have not been used to fundamentally shape resource allocation for health authorities. This paper uses the results from a patient survey into utilization behaviour to define and model the determinants of the need for health care based on components of relative need and accessibility. Proxy indicators are derived from routine sources of data to create an Index of Relative Disadvantage (IRD). A sensitivity analysis confirms the robustness of the index and shows that—although the index employs a wider range of variables than most previous deprivation indices—there is no gross data redundancy. Simplified versions of the index are also explored and evaluated. The IRD developed here is closely correlated with other indices of disadvantage, but its greater breadth and more logical construction mean that it may be more likely to be a more widely applicable instrument for health care planning of resource allocation.

Fields, B. E., Bigbee, J. L. et Bell, J. F. (2016). "Associations of Provider-to-Population Ratios and Population Health by County-Level Rurality." The Journal of Rural Health **32**(3): 235-244. https://onlinelibrary.wiley.com/doi/abs/10.1111/jrh.12143

Abstract Purpose To explore the relationship between provider-to-population ratios, rurality and population health in the United States using counties as the unit of analysis. Method Population ratios for registered nurses (RNs), primary care physicians, and dentists were included in multivariable regression analyses. Population health indices assessed were premature death rate, self-rated health, teen birth rate, and mammography screening rate. Findings County levels of health and health care providers per capita declined as rurality increased. In adjusted regression models, the highest RN-to-population ratio was associated with significantly better health measures in most urban/rural categories, with the magnitude of these associations generally increasing as rurality increased. In the smallest rural counties, the highest RN-to-population quartile was associated with 1,655 fewer years of potential life lost (YPLL), 2% lower rates of poor or fair health, 11/1,000 fewer teen births, and 6% more mammography screening relative to the lowest quartile. For primary care physicians, more significant associations were found in medium and small rural counties where the highest quartile was associated with 1,482 fewer YPLL, 3% lower rates of poor or fair health, 7/1,000 fewer teen births, and 4% more mammography screening. The highest quartile of dentist-to-population ratio was generally associated with lower rates of premature death and poor or fair health in urban, large-, and medium-sized rural counties, but not in small rural counties. Conclusions The consistency of the results by provider type suggests that the supply of health care professionals, particularly in rural areas, positively impacts the health of the population.

Fletcher, E., Aylward, A., Dean, S., et al. (2019). "Predicted shortages of physicians might even disappear if we fully account for PAs and NPs." BMC Fam Pract **32**(10): 51-53.

Healthcare workforce projections have important policy implications. Provider shortages can shortchange patients, and overproduction of providers imposes costs on society. The most publicized physician supply and demand projections, commissioned annually by the Association of American Medical Colleges, regularly predict dire physician shortages. These projections are based on unrealistically low estimates of the amount of physician work that can be replaced by physician assistants (PAs) and NPs. For example, the projections factor in the contribution of one primary care PA or NP as one-fourth that of a physician. If workforce projections used evidence-based productivity estimates, the predicted physician shortfalls would be much smaller and perhaps even disappear.

Fox, D. M. (1996). "From piety to platitudes to pork: the changing politics of health workforce policy." J Health Polit Policy Law **21**(4): 825-844.

Policy to subsidize the education of health professionals in the United States has become contentious and uncertain. This article examines the politics of workforce policy in the twentieth century, emphasizing the years since World War II. From early in the century until the 1970s, most decision

makers viewed policy to subsidize the education of health professionals as self-evidently correct. As consensus eroded, proponents insisted to increasingly skeptical audiences that these subsidies created benefits for the public. Recently, decision makers outside health care institutions have come to regard workforce policy as serving particular rather than general interests. Thus health workforce policy, like other policies outside of health affairs, may be said, perhaps oversimply but not inaccurately, to have gone through three stages: from piety to platitudes to pork.

Fraher, E. P. (2007). "Location, location, location: North Carolina faces a shortage of primary care and specialty practitioners in rural and underserved counties." N C Med J **68**(3): 194-197.

Fraher, E. P. et Jones, C. B. (2011). "North Carolina's nursing workforce: planning today for a reformed tomorrow." N C Med J **72**(4): 320-323.

Nurses are the single largest component of North Carolina's health workforce, and nursing jobs are an essential driver of the state's economic recovery. We propose 5 recommendations for creating a nursing workforce system that, if implemented, would position the state to meet the future health care needs of North Carolinians.

Fraher, E. P., Knapton, A. et Holmes, G. M. (2017). "A Methodology for Using Workforce Data to Decide Which Specialties and States to Target for Graduate Medical Education Expansion." Health Serv Res **52 Suppl 1**: 508-528.

OBJECTIVE: To outline a methodology for allocating graduate medical education (GME) training positions based on data from a workforce projection model. DATA SOURCES: Demand for visits is derived from the Medical Expenditure Panel Survey and Census data. Physician supply, retirements, and geographic mobility are estimated using concatenated AMA Masterfiles and ABMS certification data. The number and specialization behaviors of residents are derived from the AAMC's GMETrack survey. DESIGN: We show how the methodology could be used to allocate 3,000 new GME slots over 5 years-15,000 total positions-by state and specialty to address workforce shortages in 2026. EXTRACTION METHODS: We use the model to identify shortages for 19 types of health care services provided by 35 specialties in 50 states. PRINCIPAL FINDINGS: The new GME slots are allocated to nearly all specialties, but nine states and the District of Columbia do not receive any new positions. CONCLUSIONS: This analysis illustrates an objective, evidence-based methodology for allocating GME positions that could be used as the starting point for discussions about GME expansion or redistribution.

Fraher, E. P., Knapton, A., Sheldon, G. F., et al. (2013). "Projecting surgeon supply using a dynamic model." Ann Surg **257**(5): 867-872.

OBJECTIVE: To develop a projection model to forecast the head count and full-time equivalent supply of surgeons by age, sex, and specialty in the United States from 2009 to 2028. SUMMARY BACKGROUND DATA: The search for the optimal number and specialty mix of surgeons to care for the United States population has taken on increased urgency under health care reform. Expanded insurance coverage and an aging population will increase demand for surgical and other medical services. Accurate forecasts of surgical service capacity are crucial to inform the federal government, training institutions, professional associations, and others charged with improving access to health care. METHODS: The study uses a dynamic stock and flow model that simulates future changes in numbers and specialty type by factoring in changes in surgeon demographics and policy factors. RESULTS: : Forecasts show that overall surgeon supply will decrease 18% during the period form 2009 to 2028 with declines in all specialties except colorectal, pediatric, neurological surgery, and vascular surgery. Model simulations suggest that none of the proposed changes to increase graduate medical education currently under consideration will be sufficient to offset declines. CONCLUSIONS: The length of time it takes to train surgeons, the anticipated decrease in hours worked by surgeons in younger generations, and the potential decreases in graduate medical education funding suggest that there may be an insufficient surgeon workforce to meet population needs. Existing maldistribution patterns

are likely to be exacerbated, leading to delayed or lost access to time-sensitive surgical procedures, particularly in rural areas.

Fraher, E. P. et Ricketts, T. C., 3rd (2016). "Building a Value-Based Workforce in North Carolina." N C Med J **77**(2): 94-98.

Health care in the United States is likely to change more in the next 10 years than in any previous decade. However, changes in the workforce needed to support new care delivery and payment models will likely be slower and less dramatic. In this issue of the NCMJ, experts from education, practice, and policy reflect on the "state of the state" and what the future holds for multiple health professional groups. They write from a broad range of perspectives and disciplines, but all point toward the need for change-change in the way we educate, deploy, and recruit health professionals. The rapid pace of health system change in North Carolina means that the road map is being redrawn as we drive, but some general routes are evident. In this issue brief we suggest that, to make the workforce more effective, we need to broaden our definition of who is in the health workforce; focus on retooling and retraining the existing workforce; shift from training workers in acute settings to training them in community-based settings; and increase accountability in the system so that public funds spent on the health professions produce the workforce needed to meet the state's health care needs. North Carolina has arguably the best health workforce data system in the country; it has historically provided the data needed to inform policy change, but adequate and ongoing financial support for that system needs to be assured.

Fraher, E. P. et Stitzenberg, K. B. (2013). "Building better oncology data systems and workforce models in a rapidly changing health care system." J Oncol Pract **9**(1): 1-2.

Fülöp, G., et al. (2008). "Regional distribution effects of 'needs planning' for office-based physicians in Germany and Austria-methods and empirical findings." Journal of Public Health **16**(6): 447-455.

To identify effects of 'needs planning' for doctors under contract with statutory health insurance in Austria and in Germany on the evenness of doctors' geographical distribution.

Fulop, G., Kopetsch, T., Hofstatter, G., et al. (2008). "Regional distribution effects of ?needs planning? for office-based physicians in Germany and Austria-methods and empirical findings." Journal of Public Health **16**: 447-455, tabl., graph., fig.

Fülöp, G., et al. (2010). "Planning medical care for actual need." Journal of Public Health **18**(2): 97-104.

When it came into force on 1 January 1993, the Health Structure Act brought about far-reaching changes in the German health system by completely reorganising needs-related planning for office-based medical care. The experience to date suggests that needs-related planning is having an effect. Since the law came into effect, the increase in the number of doctors has clearly levelled off, and in certain fields the trend can even be said to have been reversed. Indeed, needs-related planning will in future have to address a completely new issue, one that only a few years ago was considered inconceivable: a looming lack of doctors. It is precisely in this context that needs-related planning, an arrangement conceived when the number of doctors was rising, can be seen to have strategic flaws. It has now become clear that the data (population, number of doctors) and information on structures (geographical planning units) drawn on in needs-related planning to indicate the degree of provision are unsuitable for ascertaining the need for, and controlling the supply of, office-based medical care. Indeed, the current needs-related planning hardly justifies its name.

General Accounting Office (1995). Health Care Shortage Areas: Designations Not a Useful Tool for Directing Resources to the Underserved. Washington : GAO**:** 61p.

GAO reviewed the Department of Health and Human Services' (HHS) systems for identifying geographical areas where access to medical care is limited, focusing on: (1) how well the systems identify areas with primary care shortages; (2) how well the systems target federal funding to the

underserved; and (3) whether the HHS proposal to combine the systems would lead to improvements. GAO found that: (1) the two HHS systems do not reliably identify areas with primary care shortages or help target federal resources to the underserved; (2) the systems have widespread data and methodology problems which severely limit their ability to pinpoint needy areas; (3) both systems tend to overstate the need for additional primary care providers because they do not consider all of the categories of providers already in place; (4) the Health Professional Shortage Area System (HPSA) does not consider the extent to which available resources are being used; (5) the Medically Underserved Area System (MUA) is limited in its ability to identify underserved areas and populations; (6) neither system identifies the specific subpopulations that have difficulty obtaining medical care; (7) while the systems can sometimes accurately identify needy areas, they do not provide the necessary data to determine which programs are best suited to those areas; (8) the proposed consolidation and streamlining of the systems is not likely to solve system problems, since the underlying causes of the problems have not been addressed; (9) it may be more cost-effective to modify individual programs and application processes to identify where needs exist and the appropriate program to meet those needs and to target resources better; and (10) HHS officials believe that they need to maintain a national shortage designation system to monitor primary care access, but HHS has another initiative under way that could serve those purposes.

GAO (2006). Problems Remain with Primary Care Shortage Area Designation System. Washington : General Accounting Office.

Gautam, S., Li, Y. et Johnson, T. G. (2014). "Do alternative spatial healthcare access measures tell the same story?" GeoJournal **79**(2): 223-235.
https://doi.org/10.1007/s10708-013-9483-0

To effectively target area and population with relatively poorer healthcare access requires information on how access to healthcare varies spatially. Considering hospitals as important components of the healthcare system, this case study of Central Missouri presents a comparison of the relatively underserved areas and population based on the results from three alternative indicators of spatial hospital access calculated at three different levels of geography. Results indicate that the alternative spatial healthcare access indicators show considerably different pictures of the relative ranking of census units, and identification of the relatively underserved areas and population. The relative ranking of census units and the identification of relatively underserved area and population are all critical indicators for policy makers when public resources are limited and distributive choices must be made.

Goddard, M., et al. (2010). "Where did all the GPs go? Increasing supply and geographical equity in England and Scotland." J Health Serv.Res.Policy **15**(1): 28-35.

OBJECTIVES: To examine the effect on geographical equity of increases in the total supply of general practitioners (GPs) and the ending of entry restrictions in 2002 and to explore the factors associated with the distribution of GPs across England. METHODS: Calculation of Gini coefficients to measure geographical equity in GPs per 100,000 population in England and Scotland. Multiple regression of GPs per capita and change in GPs per capita on demographics, morbidity, deprivation and measures of amenity in English Primary Care Trusts (PCTs). RESULTS: Equity in England rose between 1974 and 1994 but then decreased, and in 2006 it was below the 1974 level. After 2002, England had a greater percentage increase in GP supply than Scotland and a smaller increase in inequity. The level of GP per capita supply in 2006 was positively correlated with morbidity and PCT amenity, and negatively correlated with unemployment and poor air quality. The increase in per capita supply between 2002 and 2006 was not significantly associated with morbidity, deprivation or amenities. CONCLUSIONS: Reducing geographical inequity in the provision of GPs requires targeted area level policies

Goldsmith, L. J. et Ricketts, T. C. (1999). "Proposed changes to designations of medically underserved populations and health professional shortage areas: effects on rural areas." J Rural Health **15**(1): 44-54.

This paper reports an analysis of the proposed rule to combine medically underserved population (MUP) and health professional shortage area (HPSA) designations, as published by the Bureau of Primary Health Care (BPHC) in the Federal Register on Sept. 1, 1998 (Department of Health and Human Services, 1998). The effects of the proposed rule overall and on rural communities were examined, particularly with respect to current whole county HPSA designations and eligibility for federal assistance programs. National, county-level estimates of primary care provider counts and other measures included in the proposed rule were used. Different primary care provider sources were compared; results were highly dependent on the data source and the inclusions of counts of nurse practitioners and physician assistants. The projections of losses from the proposed rule were higher than those of the BPHC, probably due to the use of different sources for provider counts. Overall, the authors projected that more than 50 percent of current whole-county HPSAs would lose designation using the proposed rule. The proportion of rural counties that lost designation was not significantly greater than the proportion of urban counties, but because there are many more rural counties, more de-designations were projected to occur in rural areas. The researchers also predicted that 58 percent of rural whole-county HPSAs with National Health Service Corps providers would lose their designation, but most rural whole-county HPSAs with Community and Migrant Health Centers or Rural Health Clinics retained their MUP designation using the proposed rule. The proposed rule likely has a larger effect on current designations than originally projected by the BPHC.

Gosden, T., et al. (2002). "Salaried contracts in UK general practice: a study of job satisfaction and stress." J Health Serv Res Policy **7**(1): 26-33.

OBJECTIVES: To compare job satisfaction and stress levels of general practitioners (GPs) employed on salaried contracts with GPs on a 'standard' performance-related contract paid by fee-for-service and capitation. METHODS: Job satisfaction and stress levels were assessed using data from two postal surveys of GPs: a national survey of 'standard' contract GPs carried out in 1998; and a survey of salaried GPs and their non-salaried GP employers in 1999. Differences in satisfaction and stress scores were assessed by t-tests; regression analysis was used to control for confounding factors and possible selection bias. RESULTS: We achieved a response rate of 77% in the 1999 survey of salaried and non-salaried GPs; 48% of 'standard' contract GPs responded in the 1998 survey. We found that salaried GPs were as satisfied overall as both non-salaried GP employers and GPs on the 'standard' contract, even after controlling for confounding factors and selection bias. Salaried GPs were more satisfied with their remuneration, working hours and the recognition they got for their work. They experienced more stress with two factors but less stress with 19 factors compared with the 'standard' contract GPs. CONCLUSIONS: Overall job satisfaction levels among salaried doctors were similar to those of doctors on contracts paid by mixed fee-for-service and capitation. Future studies of job satisfaction levels under different doctor payment systems need to take account of the extent to which doctors have preferences for different types of contract if they are to derive unbiased results.

Graham, B. (2018). "Population characteristics and geographic coverage of primary care facilities." BMC Health Serv Res **18**(1): 398.

BACKGROUND: The location of General Practitioner (GP) facilities is an important aspect in the design of healthcare systems to ensure they are accessible by populations with healthcare needs. A key consideration in the facility location decision involves matching the population need for the services with the supply of healthcare resources. The literature points to several factors which may be important in the decision making process, such as deprivation, transportation, rurality, and population age. METHODS: This study uses two approaches to examine the factors associated with GP accessibility in Northern Ireland. The first uses multinomial regression to examine the factors associated with GP coverage, measured as the proportion of people who live within 1.5 km road network distance from the nearest GP practice. The second focuses on the factors associated with the average travel distance to the nearest GP practice, again measured using network distance. The empirical research is carried out using population and geospatial data from Northern Ireland, across 890 Super Output Areas and 343 GP practices. RESULTS: In 19% of Super Output Areas, all of the population live within 1.5 km of a GP practice, whilst in 24% none of the population live within 1.5 km. The regression results show that there are higher levels of population coverage in more deprived

areas, smaller areas, and areas that have more elderly populations. Similarly, the average travel distance is related to deprivation, population age, and area size. CONCLUSIONS: The results indicate that GP practices are located in areas with higher levels of service need, but also that care needs to be taken to ensure rural populations have sufficient access to services, whether delivered through GP practices or through alternative services where GP practices are less accessible. The methodology and results should be considered by policy makers and healthcare managers when making decisions about GP facility location and service provision.

Gravelle, H. et Sutton, M. (2001). "Inequality in the geographical distribution of general practitioners in England and Wales 1974-1995." J Health Serv.Res.Policy **6**(1): 6-13.

OBJECTIVES: To compare geographical inequality in the distribution of general practitioners (GPs), other resources and mortality around 1995 in England and Wales; to measure trends between 1974 and 1995 in inequality of GP distribution; to examine the implications of different need adjustments and inequality measures on the degree of geographic inequality; and to analyse the impact of policies (increased supply, area inducements and entry regulation) on inequality. METHODS: Measurement of relative inequality (decile ratio, Gini coefficient, Atkinson index) and absolute inequality (standard deviation) in the ratio of GPs to need-adjusted population in former Family Practitioner Committee/Family Health Services Authority areas each year from 1974 to 1995; and relative inequality across areas in the distributions of income, other resources and standardised mortality ratios (SMRs) around 1995. Regression of 1995 GP/population ratios on 1974 ratios. Application of equalising net advantages location model to GP distribution. RESULTS: Inequality in the distribution of GPs in 1995 was less than inequality in other primary care resources, but greater than inequalities in disposable income, SMRs, primary school expenditure, and hospital and community health services expenditure. The decile ratio shows little change between 1974 and 1995. Gini and Atkinson inequality indices indicate some reduction in inequality between 1974 and 1980, but little change thereafter. The standard deviation of need-adjusted provision increased over the period. Areas that had the lowest GP provision in 1974 tended to have the lowest in 1995. CONCLUSIONS: The choice between relative and absolute inequality measures and, to a lesser extent, the method of adjusting for need affect conclusions about the trend in inequality. Both types of measure and most need adjustments suggest that the policies adopted did not lead to a reduction in inequality over the period. Interactions between policies may reduce their overall effectiveness

Grover, A. et Niecko-Najjum, L. M. (2013). "Physician workforce planning in an era of health care reform." Acad Med **88**(12): 1822-1826.

Workforce planning in an era of health care reform is a challenge as both delivery systems and patient demographics change. Current workforce projections are based on a future health care system that is either an identified "ideal" or a modified version of the existing system. The desire to plan for such an "ideal system," however, may threaten access to necessary services if it does not come to fruition or is based on theoretical rather than empirical data.Historically, workforce planning that concentrated only on an "ideal system" has been centered on incorrect assumptions. Two examples of such failures presented in the 1980s when the Graduate Medical Education National Advisory Committee recommended a decrease in the physician workforce on the basis of predetermined "necessary and appropriate" services and in the 1990s, when planners expected managed care and health maintenance organizations to completely overhaul the existing health care system. Neither accounted for human behavior, demographic changes, and actual demand for health care services, leaving the nation ill-prepared to care for an aging population with chronic disease.In this article, the authors argue that workforce planning should begin with the current system and make adjustments based on empirical data that accurately reflect current trends. Actual health care use patterns will become evident as systemic changes are realized-or not-over time. No single approach will solve the looming physician shortage, but the danger of planning only for an ideal system is being unprepared for the actual needs of the population.

Guagliardo, M. F., Ronzio, C. R., Cheung, I., et al. (2004). "Physician accessibility: an urban case study of pediatric providers." Health & Place **10**(3): 273-283.

http://www.sciencedirect.com/science/article/pii/S1353829204000024

> Social disparity in the spatial distribution of healthcare providers in urban areas is a recognized problem. However, efforts to quantify the problem have been hampered by a lack of satisfactory measurements and methods. We revive and enhance a strategy based on provider density, proposed nearly three decades ago. The method avoids the border-crossing problem associated with provider-population ratios, yet reports spatial accessibility in intuitive units that are easily compared across diverse populations and geographies. We find racial and socioeconomic disparities in our case city, Washington, DC, despite a citywide overabundance of primary care providers for children.

Hackey, R. B., Grasso, V., LaRochelle, M., et al. (2018). "Rethinking the shortage of primary care physicians." Jaapa **31**(6): 47-50.

> For decades, public concerns about a shortage of physicians led federal and state policy makers to pursue policies to increase the number of medical graduates. In response, the number of medical schools increased dramatically over the past decade. By 2016, the United States produced more new physicians than ever before. Expanding medical school enrollments, however, were not matched by a corresponding increase in the number of physicians choosing primary care. To date, few policy makers questioned the conventional wisdom that more is better when it comes to the supply of primary care physicians. Instead, policy makers should consider alternative approaches to increase access to patient-centered primary care.

Haggerty, J. L., Roberge, D. et F., L. J. (2014). "An exploration of rural-urban differences in healthcare-seeking trajectories: Implications for measures of accessibility." Health & Place **28**(0): 92-98. http://www.sciencedirect.com/science/article/pii/S1353829214000410

> Abstract Comparing accessibility between urban and rural areas requires measurement instruments that are equally discriminating in each context. Through focus groups we explored and compared care-seeking trajectories to understand context-specific accessibility barriers and facilitators. Rural care-seekers rely more on telephone access and experience more organizational accommodation but have fewer care options. Urban care-seekers invoke the barrier of distance more frequently. Four consequences of accessibility problems emerged across settings which could be used for valid comparisons of access: having to restart the care-seeking process, abandoning it, using emergency services for primary care, and health deterioration due to delay

Hann, M. et Gravelle, H. (2004). "The maldistribution of general practitioners in England and Wales: 1974-2003." Br.J Gen.Pract. **54**(509): 894-898.

> BACKGROUND: The geographical distribution of general practitioners (GPs) is a persistent policy concern within the National Health Service. Maldistribution across family health service authorities in England and Wales fell between 1974 and the mid-1980s but then remained, at best, constant until the mid-1990s. AIM: To estimate levels of maldistribution over the period 1994-2003 and to examine the long-term trend in maldistribution from 1974-2003. DESIGN: Annual snapshots from the GP census. SETTING: One hundred 2001 'frozen' health authorities in England and Wales for 1994-2003 and 98 family health service authorities for 1974-1995. METHOD: Ratios of GPs to raw and need-adjusted populations were calculated for each health authority for each year using four methods of need adjustment: age-related capitation payments, national age- and sex-specific consultation rates, national age- and sex-specific limiting long-term illness rates, and health authority-specific mortality. Three summary measures of maldistribution across health authorities in the GP to population ratio--the decile ratio, the Gini coefficient, and the Atkinson index--were calculated for each year. RESULTS: Maldistribution of GPs as measured by the Gini coefficient and Atkinson index increased from the mid-1980s to 2003, but the decile ratio showed little change over the entire 1974-2003 period. Unrestricted GP principals and equivalents were more equitably distributed than other types of GP. CONCLUSION: The 20% increase in the number of unrestricted GPs between 1985 and 2003 did not lead to a more equal distribution

Hara, K., Kunisawa, S., Sasaki, N., et al. (2018). "Future projection of the physician workforce and its geographical equity in Japan: a cohort-component model." BMJ Open **8**(9): e023696.

INTRODUCTION: The geographical inequity of physicians is a serious problem in Japan. However, there is little evidence of inequity in the future geographical distribution of physicians, even though the future physician supply at the national level has been estimated. In addition, possible changes in the age and sex distribution of future physicians are unclear. Thus, the purpose of this study is to project the future geographical distribution of physicians and their demographics. METHODS: We used a cohort-component model with the following assumptions: basic population, future mortality rate, future new registration rate, and future in-migration and out-migration rates. We examined changes in the number of physicians from 2005 to 2035 in secondary medical areas (SMAs) in Japan. To clarify the trends by regional characteristics, SMAs were divided into four groups based on urban or rural status and initial physician supply (lower/higher). The number of physicians was calculated separately by sex and age strata. RESULTS: From 2005 to 2035, the absolute number of physicians aged 25-64 will decline by 6.1% in rural areas with an initially lower physician supply, but it will increase by 37.0% in urban areas with an initially lower supply. The proportion of aged physicians will increase in all areas, especially in rural ones with an initially lower supply, where it will change from 14.4% to 31.3%. The inequity in the geographical distribution of physicians will expand despite an increase in the number of physicians in rural areas. CONCLUSIONS: We found that the geographical disparity of physicians will worsen from 2005 to 2035. Furthermore, physicians aged 25-64 will be more concentrated in urban areas, and physicians will age more rapidly in rural places than urban ones. The regional disparity in the physician supply will worsen in the future if new and drastic measures are not taken.

Haynes, R., Daras, K., Reading, R., et al. (2007). "Modifiable neighbourhood units, zone design and residents' perceptions." Health & Place **13**(4): 812-825.
http://www.sciencedirect.com/science/article/pii/S1353829207000135

Neighbourhood effects on health are partly determined by the way the neighbourhoods are defined (the modifiable areal unit problem), but few studies of place effects have incorporated alternative sets of areal units. This study compared computer-generated zones with areal units identified subjectively by local government officers as communities in the city of Bristol, UK. Automated zone design came close to replicating the subjective communities when the balance of objectives and boundary constraints was adjusted. The set of subjective community areas was compared with automated zone designs, which maximized the homogeneity of a social factor (deprivation) and an environmental factor (housing type), at three different geographical scales, with average populations of 2500, 3700 and 7500. All sets of areas were then matched against the neighbourhood perceptions and social behaviour reported by residents, measured as part of the Avon Longitudinal Study of Parents and Children (ALSPAC). Neighbourhood perceptions and social behaviour varied mostly between individuals, but there were significant small differences between all sets of areas. The neighbourhood perceptions of residents were found to match the areas identified by automated zone design as well as they matched the subjectively defined communities, suggesting that the neighbourhoods identified by experts were not more real to residents than synthetic areas. Differences in perceptions could be explained by variations in social and housing conditions at the very local scale of enumeration districts, with populations of about 500. The neighbourhoods with meaning for residents therefore appeared to be much smaller areas than those typically investigated in geographical studies of health.

Health, H. (2006). Changes to primary care truts: Second Report of Session 2005–06. London : HMSO.
http://www.publications.parliament.uk/pa/cm200506/cmselect/cmhealth/646/646.pdf

Hole, A., et al. (2008). Fairness in Primary Care Procurement Measures of Under-Doctoredness: Sensitivity Analysis and Trends, Centre for Health Economics, University of York.
https://ideas.repec.org/p/chy/respap/35cherp.html

The White Paper Our Health, Our Care, Our Say noted concerns about geographical equity of access to GPs (Department of Health, 2006, page 63), listed the 30 PCTs with the lowest number of GPs per head of need adjusted population, and set out policy initiatives to attract additional providers of

general practice services to these PCTs. We were asked to evaluate the impact of these policies on the bottom 30 PCTs and will report in Autumn 2010. In this report we consider a number of related measurement issues which are relevant for consideration of policy on equality of access to general practice. Our main conclusion is that whilst the set of worst provided PCTs varies, sometimes substantially, with the choice of GP supply measure, need adjustment, and population base, the set of 30 identified by the White Paper contains a core of around 10 PCTs which are amongst the worst provided on most possible alternative definitions. The White Paper set also contains a larger fringe group which are in the bottom 30 on some definitions, particularly when the White Paper definition of GPs is used, but which also often fall outside the worst provided bottom 30. There is no obviously right set of definitions of GPs, need adjustments, and populations which can be implemented with available data. Judgements are required and those underlying the White Paper seem not unreasonable. However, we suggest that consideration be given to broadening the definition of the general practice staff from GPs to include practice nurses and possibly non-clinical staff as well.

Holmes, G. M., Morrison, M., Pathman, D. E., et al. (2013). "The contribution of "plasticity" to modeling how a community's need for health care services can be met by different configurations of physicians." Acad Med **88**(12): 1877-1882.

This article introduces the concept of "plasticity" to health care workforce modeling and policy analysis. The authors define plasticity as the notion that individual physicians within the same specialty each provide a different scope of service, while the scope of service of physicians in different specialties may overlap. This notion represents a departure from the current, silo-based conception of physician supply as physician headcounts by specialty; the implication is that multiple configurations of physicians (and, by further application, other health care professionals) can meet a community's utilization of health care services.Within-specialty plasticity and between-specialty plasticity are two facets of plasticity. Within-specialty plasticity is the idea that individual physicians within the same specialty may each provide a different mix and scope of services, and between-specialty plasticity is the idea that patterns of service provision overlap across specialties. Changes in physician specialty supply in a community affect both the between-specialty and within-specialty plasticity of that community's physicians. Notably, some physician specialties are more "plastic" than others.The authors demonstrate how to implement a plasticity matrix by assessing the sufficiency of physician supply in a specific community (Wayne County, North Carolina). Additional literature and data can provide further insights into the influences on (and of) plasticity, improving this approach and expanding it to include task-shifting across health care professions.

Joseph, A. E. et Bantock, P. R. (1982). "Measuring potential physical accessibility to general practitioners in rural areas: A method and case study." Social Science & Medicine **16**(1): 85-90.
http://www.sciencedirect.com/science/article/pii/0277953682904282

The general practitioner is the key element within most rural health care delivery systems, virtually controlling referal to higher levels of care as well as providing basic care. In consequence of the progressive urban-based centralization of health care facilities and specialized personnel encouraged by the desire to take advantage of economies of scale in supply, the role of the general practitioner within rural health care delivery has become increasingly crucial. However, the supply of general practitioners in rural areas has not kept pace with demands, and accessibility to physicians has become a pressing issue in many rural areas. Although ‘accessibility’ is not taken to be synonymous with physical or geographical accessibility, the dispersed settlement characteristic of most rural areas elevates the latter to a position of primary importance. Following a discussion of the merits of measures of accessibility based upon utilization versus measures based upon the relative location of population and physicians, a measure on potential physical accessibility is presented and applied to a Canadian data set. The results suggest that although considerable differences in potential accessibility exist between rural areas near and far from urban centres, the smaller catchment populations of most rural general practitioners may partly compensate for isolation from major, urban concentrations of physicians.

Khan, A. A. (1992). "An integrated approach to measuring potential spatial access to health care services." Socioecon Plann Sci **26**(4): 275-287.

In recent years there have been several attempts to develop quantitative measures of potential spatial access to health care services which, despite their limitations, offer many positive ideas that can perhaps be integrated into a logically consistent and generally acceptable index. It is in this vein that the current paper presents an integrated approach, drawing partially from past contributions, to measuring potential spatial access to health care services. The final access index is derived as the culmination of a series of individual measures, starting with an initial gravity formulation and progressing through successive stages as new elements, consistent with the definition and conceptualization of potential spatial access, are introduced. Application of the proposed index to the ambulatory medical care system of the Akron, Ohio SMSA, demonstrates the validity of the measure, and its suitability as a potential health care planning tool.

Kehrer, B. H. et Wooldridge, J. (1983). "An Evaluation of Criteria to Designate Urban Health Manpower Shortage Areas." Inquiry **20**(3): 264-275.
http://www.jstor.org/stable/29771577

In the United States, federally designated health manpower shortage areas (HMSAs) have been eligible for a variety of programs intended to improve access to health services. Before 1978, HMSAs were predominantly rural. The Health Professions Educational Assistance Act of 1976 (P.L. 94-484) mandated that the criteria for designating HMSAs be revised to facilitate designation of urban areas. The most recent version of the HMSA criteria was published in 1980. This study applied the 1980 criteria to two Canadian urban areas. In general, the criteria did not succeed in distinguishing areas with relatively poorer access from those with relatively better access.

Khan, A. A. (1992). "An integrated approach to measuring potential spatial access to health care services." Socioecon Plann Sci **26**(4): 275-287.

In recent years there have been several attempts to develop quantitative measures of potential spatial access to health care services which, despite their limitations, offer many positive ideas that can perhaps be integrated into a logically consistent and generally acceptable index. It is in this vein that the current paper presents an integrated approach, drawing partially from past contributions, to measuring potential spatial access to health care services. The final access index is derived as the culmination of a series of individual measures, starting with an initial gravity formulation and progressing through successive stages as new elements, consistent with the definition and conceptualization of potential spatial access, are introduced. Application of the proposed index to the ambulatory medical care system of the Akron, Ohio SMSA, demonstrates the validity of the measure, and its suitability as a potential health care planning tool.

Kleinman, J. C. et Wilson, R. W. (1977). "Are "medically underserved areas" medically underserved?" Health Services Research **12**(2): 147-162.
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1071977/

A comparison of medically underserved areas (MUAs) and adequately served areas (ASAs) is presented. Nonmetropolitan areas represented in the Health Interview Survey (HIS) are classified as MUAs or ASAs by the official criterion of their scores on the Index of Medical Underservice (IMU), and HIS data from the two types of areas are examined for differences. Standard metropolitan statistical areas are also compared with the nonmetropolitan MUAs and ASAs. Results show no difference between MUA and ASA residents in number of physician visits per year or proportion with at least one visit in the past year, although MUA residents reported poorer health status, used some preventive services less, and used nonsurgical hospitalization more than did ASA residents. In gereral, most MUA-ASA differences tend to be similar in size to differences between ASAs and SMSAs. An alternative to the IMU, using HIS data to identify underserved areas, is discussed.

Kong, A. Y. et Zhang, X. (2020). "The Use of Small Area Estimates in Place-Based Health Research." American Journal of Public Health **110**(6): 829-832.
https://doi.org/10.2105/AJPH.2020.305611

> Interest in the impact of the built environment on health behaviors, outcomes, and disparities is increasing, and the growing development of statistical modeling techniques has allowed researchers to better investigate these relationships. However, without enough data that are identifiable at smaller geographic levels (e.g., census tract), place-based health researchers are unable to reliably estimate the prevalence of a health outcome at these more granular and potentially more salient neighborhood levels.When reliable direct survey estimates cannot be produced because of small samples or a lack of samples, estimates based on small area estimation techniques are often used. As place-based health research and the production and secondary use of small area estimates increase, it is critical that researchers understand both the underlying methods used to create these estimates and their limitations. Without this foundation, researchers may fit inappropriate models, or interpret findings inaccurately.As a demonstrative example, we focus this discussion on the small area health indicator estimates recently produced through the 500 Cities Project by the Robert Wood Johnson Foundation, the Centers for Disease Control and Prevention (CDC), and the CDC Foundation.

Kopetsch, T. (2003) L'expérience allemande de planification des installations médicales. Cahiers de Sociologie et de Démographie médicales43(3)

> [BDSP. Notice produite par ORSMIP HBR0xsE0. Diffusion soumise … autorisatio- n]. La planification des besoins médicaux en Allemagne peut être considétée comme réussie dans la mesure où l'augmentation du nombre de médecins a été freiné. Le but de contrôler le déluge de médecins a été atteint. Au prix fort, il est vrai ! L'introduction de la planification en liaison avec le budget de l'assurance-maladie a eu comme effet que l'exercice médical conventionné devient de moins en moins attractif pour le jeune médecin. La pénurie de médecins en Allemagne n'est pas due à la fuite des médecins hors du système, mais à l'envie décroissante des jeunes médecins de travailler dans le domaine des soins. Ceci ménera à court ou moyen terme vers une pénurie de généralistes, en particulier dans les nouveaux Länder, qu'il faudra prévenir par des mesures adéquates. (résumé d'auteur)

Kopetsch, T. (2001). Gehen dem deutschen Gesundheitswesen die Arzte aus ? Studie zur Altersstruktur- und Arztzahlentwicklung. Cologne KBV**:** 97 , tabl., graph.

> En se basant sur des données de démographie médicale pour la période 1990-2000, ce rapport fait une analyse de l'évolution de la profession médicale en Allemagne. Il souligne notamment l'ancienneté des structures et la pénurie dans certaines spécialités médicales.

Kopetsch, T. (2001). Gehen dem deutschen Gesundheitswesen die Arzte aus ? : Anlage zur Studie zur Altersstruktur- und Arztzahlentwicklung. Cologne KBV**:** 90 , tabl., graph.

> Annexe du rapport sur l'évolution de la profession médicale en Allemagne, ce document rassemble les données statistiques sur le corps médical.

Kopetsch, T. (2003). "[German experience of planning medical installations]." Cah.Sociol.Demogr.Med **43**(3): 529-544.

> Since the 19th century, Germany has adopted the Bismarckian model: the medical doctors in private practice provide ambulatory care to the insured people (nearly all the population) and are paid by (public) insurers on a fee-for-service basis. The country introduced in 1993 a large-scale reform composed of several steps: (i) delimitation of geographic areas having similar characteristics; (ii) calculation for each area various physician/population ratios, each related to a specialty; (iii) if the ratio of a specialty in an area exceeds the average national ratio (of the specialty) by 10% or more, the doctors of the specialty are not allowed to set up their office in the area; (iv) if the ratio of a specialty in an area is lower than the average national ratio by 10% the area is "open". After a decade, one can

say that the reform has succeeded in curbing the growth in the numbers of medical doctors. Today, there is nearly no possibility for a medical specialist to set up a private office, unless he/she accepts to practice as GPs or to succeed to an other colleague of his specialty. As a matter of fact, many areas are still open to GPs. The medical profession is aging and the young graduates are not motivated to set up office. The country may possibly go down from oversupply in the 80's to medical manpower shortage in the next decade

Kopetsch, T. (2004). "The medical profession in Germany: past trends, current state and future prospects." Cah.Sociol.Demogr.Med **44**(1): 43-70.

In conclusion, the shortage of doctors can be described as a pincer movement. The German medical profession is both superannuated and faces difficulty recruiting new young doctors. The shortage of doctors in Germany is thus not caused by a mass exodus of those already working in the system but by the reluctance of young doctors to work in curative medicine. This shortage of doctors is already apparent in the statistics. Last year the number of doctors active in ambulatory medicine dropped in the areas of four State Medical Associations (Brandenburg, Mecklenburg-West Pomerania, Saxony and Saxony-Anhalt). Moreover, in Saxony-Anhalt the number of the hospital doctors also declined so that this state was faced with a 1.1% fall in the number of working doctors. The Saarland also recorded a fall in the number of active hospital doctors. The conclusion must be that the standard conditions for doctors must be made more attractive so that young people take more interest in curative medicine. If this does not happen, there will be bottlenecks in the supply of medical care on a broad front in Germany. In the end, the provision of medical care for the population as a whole could be jeopardised

Laurence, C. O., Heywood, T., Bell, J., et al. (2018). "The never ending road: improving, adapting and refining a needs-based model to estimate future general practitioner requirements in two Australian states." Fam Pract **35**(2): 193-198.

Background: Health workforce planning models have been developed to estimate the future health workforce requirements for a population whom they serve and have been used to inform policy decisions. Objectives: To adapt and further develop a need-based GP workforce simulation model to incorporate current and estimated geographic distribution of patients and GPs. Methods: A need-based simulation model that estimates the supply of GPs and levels of services required in South Australia (SA) was adapted and applied to the Western Australian (WA) workforce. The main outcome measure was the differences in the number of full-time equivalent (FTE) GPs supplied and required from 2013 to 2033. Results: The base scenario estimated a shortage of GPs in WA from 2019 onwards with a shortage of 493 FTE GPs in 2033, while for SA, estimates showed an oversupply over the projection period. The WA urban and rural models estimated an urban shortage of GPs over this period. A reduced international medical graduate recruitment scenario resulted in estimated shortfalls of GPs by 2033 for WA and SA. The WA-specific scenarios of lower population projections and registrar work value resulted in a reduced shortage of FTE GPs in 2033, while unfilled training places increased the shortfall of FTE GPs in 2033. Conclusions: The simulation model incorporates contextual differences to its structure that allows within and cross jurisdictional comparisons of workforce estimations. It also provides greater insights into the drivers of supply and demand and the impact of changes in workforce policy, promoting more informed decision-making.

Lee, R. C. (1991). "Current approaches to shortage area designation." J Rural Health **7**(4 Suppl): 437-450.

This paper reviews the various indicators and criteria that are in use to identify rural and urban areas with shortages of primary care physicians, dentists, psychiatrists, or nurses; areas with medically underserved populations; high migrant impact areas; and areas of greatest need/shortage, leading to lists of designated shortage or underserved areas eligible for various federal and state programs; and to lists of areas with priority for resource placement. Presenting these shortage and underservice criteria at a workshop dealing with adequacy was not meant to suggest an equivalency between the concepts of "shortage," "underservice," and "adequacy," but the shortage and underservice criteria can be thought of as a floor on the definition of adequacy, and may contain elements of that definition. Refinements or revisions to the various criteria could probably better identify the needs in

rural areas, or the kind of staffing mix needed in various types of areas, or improve priority setting among designated areas; but the existing criteria remain a good first screen to identify those areas with health services-related needs that require further attention.

Lopes, M. A., Almeida, A. S. et Almada-Lobo, B. (2015). "Handling healthcare workforce planning with care: where do we stand?" Hum Resour Health **13**: 38.

BACKGROUND: Planning the health-care workforce required to meet the health needs of the population, while providing service levels that maximize the outcome and minimize the financial costs, is a complex task. The problem can be described as assessing the right number of people with the right skills in the right place at the right time, to provide the right services to the right people. The literature available on the subject is vast but sparse, with no consensus established on a definite methodology and technique, making it difficult for the analyst or policy maker to adopt the recent developments or for the academic researcher to improve such a critical field. METHODS: We revisited more than 60 years of documented research to better understand the chronological and historical evolution of the area and the methodologies that have stood the test of time. The literature review was conducted in electronic publication databases and focuses on conceptual methodologies rather than techniques. RESULTS: Four different and widely used approaches were found within the scope of supply and three within demand. We elaborated a map systematizing advantages, limitations and assumptions. Moreover, we provide a list of the data requirements necessary to implement each of the methodologies. We have also identified past and current trends in the field and elaborated a proposal on how to integrate the different methodologies. CONCLUSION: Methodologies abound, but there is still no definite approach to address HHR planning. Recent literature suggests that an integrated approach is the way to solve such a complex problem, as it combines elements both from supply and demand, and more effort should be put in improving that proposal.

Luo, W., Wang, P. (2003). Spatial accessibility to primary care and physician shortage area designation: a case study in illinois with gis approaches. In: Skinner, R., Khan, O. (Eds.), Geographic Information Systems & Health Applications. Idea Group Publishing, Hershey, PA, **:** 260–278.
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Luo, W. (2004). "Using a GIS-based floating catchment method to assess areas with shortage of physicians." Health Place **10**(1): 1-11.

This paper presents a geographic information system (GIS) based floating catchment method for identifying physician shortage areas. The traditional designation methods are primarily regional availability measures, which use administrative boundaries such as counties as the basic spatial units for calculating physician to population ratios and designate shortage based on those ratios. Such approaches have been criticized for their inability to account for either the spatial variations of population demand and physician supply within those boundaries or for population-physician interactions across them. The floating catchment method addresses the internal spatial distribution problem by deriving population data from a smaller unit, the census tract. The potential cross border patient-physician interaction is taken into consideration by using circles of reasonable radius around each census tract centroid as the basic spatial units, which can encompass areas on either side of an administrative border. By varying the radius of the catchment circle, this paper demonstrates that the physician to population ratio is scale dependent and that the greatest variability of the ratios and shortages occur at the most local scales (< 20 miles), which argues for using finer spatial resolution data in shortage designation practice.

Lupton, K., et al. (2012). "Specialty choice and practice location of physician alumni of University of California premedical postbaccalaureate programs." Acad.Med **87**(1): 115-120.

PURPOSE: To investigate the longer-term career outcomes, such as specialty choice and practice location, of underrepresented minority and disadvantaged students who finished a University of California postbaccalaureate (UCPB) premedical program. METHOD: The authors compared 303 UCPB alumni from the 1986-1987 to 2001-2002 cohorts who matriculated into medical school and could be matched to the 2008 American Medical Association Physician Masterfile with 586 randomly selected

control physicians who graduated from the same medical schools in the same years as the UCPB alumni. Outcome variables included specialty, practice in a Health Professional Shortage Area (HPSA) or Medically Underserved Area (MUA), and practice in a California community with high concentrations of African American, Latino, or low-income residents. RESULTS: A greater percentage of UCPB alumni (161/303 [53.1%]) than control physicians (235/586 [40.1%]) were in primary care (P < .001). Although there were no differences between the two groups in the percentages of physicians working in HPSAs or MUAs, a greater percentage of UCPB alumni than control physicians working in California practiced in high-poverty communities (31/191 [16.2%] versus 22/252 [8.7%], P < .016), high-Latino communities (35/191 [18.3%] versus 22/252 [8.7%], P <. 01), and high-African American communities (57/191 [29.8%] versus 50/252 [19.8%], P <. 02). CONCLUSIONS: UCPB programs have enhanced the number of physicians entering primary care and working in disadvantaged California communities. However, many UCPB alumni practice in disadvantaged communities in California that are not federally designated as HPSAs or MUAs

Mareck, D. G. (2003). "Minnesota's rural health school: interdisciplinary community education." Fam Med **35**(2): 86-88.

The Minnesota Rural Health School was established in 1996 and is administered by the University of Minnesota School of Medicine, Duluth. The program provides rural interdisciplinary clinical experiences for health professions students in seven community sites. The core disciplines include medicine, physician assistant, pharmacy, nursing, dentistry, and social work. There have been more than 230 participants. Students benefit by learning to work in collaborative teams and by participating in rural health care delivery. The communities benefit from service-learning projects, from the introduction of telecommunication technologies, and from the increased potential for recruiting future rural practitioners.

Mazumdar, S., Butler, D., Bagheri, N., et al. (2016). "How useful are Primary Care Service Areas? Evaluating PCSAs as a tool for measuring Primary Care Practitioner access." Applied Geography **72**: 47-54. http://www.sciencedirect.com/science/article/pii/S0143622816300765

The appropriate delivery of primary care services, an important policy imperative in many developed nations, is contingent on defining appropriate geographies to which these services are delivered. Primary Care Service Area (PCSA) geographies have been created in some countries to facilitate primary care policy making and have been utilized in a large body of research. In spite of their extensive use across rural and urban settings, the usefulness of PCSAs has not been evaluated. In this study, for the first time we put PCSAs to the test by comparing them to another small area geography - Postal Areas, and by exploring their usefulness in measuring relationships between Primary Care Practitioner supply and use. We find while PCSAs are better than Postal Areas in measuring relationships between General Practitioner supply and visits by patients, this relationship shows some heterogeneity across areas.

Mick, S. S., et al. (2000). "Variations in geographical distribution of foreign and domestically trained physicians in the United States: 'safety nets' or 'surplus exacerbation'?" Soc Sci Med **50**(2): 185-202.

In the United States, a debate has existed for decades about whether foreign-trained physicians (known in the US as 'international medical graduates' or 'IMGs') and US medical graduates (USMGs) have been differentially distributed such that IMGs were more likely to be found in locales characterized as high in need or medical underservice. This 'safety net' hypothesis has been countered by the IMG 'surplus exacerbation' argument that IMGs have simply swelled an already abundant supply of physicians without any disproportionate service to areas in need. Through an analysis of the American Medical Association Physician Masterfile and the Area Resource File, we classified post-resident IMGs and USMGs into low and high need counties in each of the US states, compared the percentage distributions, and determined whether IMGs were found disproportionately in high need or underserved counties. Using four measures (infant mortality rate, socio-economic status, proportion non-white population, and rural county designation), we show that there were consistently more states having IMG disproportions than USMG disproportions. The magnitude of the differences

was greater for IMGs than for USMGs, and there was a correlation between IMG disproportions and low doctor/100,000 population ratios. These findings are shown to exist simultaneously with two empirical facts: first, not all IMGs were located in high new or underserved counties; second, IMGs were more likely than USMGs to be located in states with a large number of physicians. The juxtaposition of an IMG presence in 'safety net' locales and of IMGs' contribution to a physician abundance is discussed within the context of the current debate about a US physician 'surplus' and initiatives to reduce the number of IMGs in residency training.

Morelli, V. (2019). "Primary Care in Underserved Populations Definitions, Scope, Challenges and Future Considerations." Physician Assistant Clinics **4**(1): 1-9.
http://www.sciencedirect.com/science/article/pii/S240579911830094X

OMS (2010). "Models and tools for health workforce planning and projections." Human Resources for Health Observer(3).
http://apps.who.int/iris/bitstream/10665/44263/1/9789241599016_eng.pdf

OSHPD (2016). Calculating Population to Provider Ratios: Primary Medical Care. OSHPD.
https://oshpd.ca.gov/HWDD/Shortage-Designation-Resources.html.

Ozegowski, S. et Sundmacher, L. (2012). "[Is the needs-based planning mechanism effectively needs-based? An analysis of the regional distribution of outpatient care providers]." Gesundheitswesen **74**(10): 618-626.

AIMS: Since the 1990s licenses for opening a medical practice in Germany are granted based on a needs-based planning system which regulates the regional allocation of physicians in primary care. This study aims at an analysis of the distribution of physicians (and hence the effects of the planning system) with regard to the overarching objective of primary care supply: the safeguarding of "needs-based and evenly distributed health care provision" (Section 70 para 1 German Social Code V). METHODS: The need for health care provision of each German district (or region) and the actual number of physicians in the respective area are compared using a concentration analysis. For this purpose, the local health-care need was approximated in a model based on the morbidity predictors age and sex and by combining data on the local population structure with the age- and sex-specific frequency of physician consultations (according to data of the GEK sickness fund). The concentration index then measures the degree of regional inequity in the distribution of outpatient care. RESULTS: The results of the analysis demonstrate an inequitable regional distribution between medical needs of the local population and the existing outpatient health care provider capacities. These regional disparities in needs-adjusted supply densities are particularly large for -outpatient secondary care physicians and psychotherapists, even when taking into account the care provision of urban physicians for peri-urban areas as well as the adequacy of longer travel times to specialists. One major reason for these inequities is the design of today's physician planning mechanism which mainly conserves a suboptimal status quo of the past. CONCLUSION: The initiated reforms of the planning mechanism should progress and be further deepened. Especially today's quota-based allocation of practice licenses requires fundamental changes taking into account the relevant factors approximating local health care needs, re-assessing the adequate spatial planning level and expanding opportunities for introducing innovative and more flexible health care services models.

Pampalon, R., Hamel, D., Gamache, P., et al. (2012). "An area-based material and social deprivation index for public health in Quebec and Canada." Can J Public Health **103**(8 Suppl 2): S17-22.

OBJECTIVES: To overcome the absence of socio-economic information in administrative databases and to monitor social inequalities in health, a material and social deprivation index was developed for Quebec and Canada. METHODS: The index is based on the smallest area unit used in Canadian censuses, with 400 to 700 persons on average. It includes six socio-economic indicators grouped along two dimensions - material and social - produced from principal component analyses. The index exists for 1991, 1996, 2001 and 2006 and in different versions, from local areas to the whole of Canada. Numerous products related to the index are available online free of charge. RESULTS: The index has been used extensively in the field of health and social services, mainly in the province of Quebec but

also elsewhere in Canada. It has had four main uses, all related to public health: describing geographic variations of deprivation, illustrating inequalities in population health status and in service use according to deprivation, supporting the development of health reports and policies, and guiding regional resource allocation. These applications are facilitated by a close partnership between the producers and users of the index. CONCLUSION: The deprivation index is a marker of social inequalities in health. It allows for monitoring of inequalities over time and space, and constitutes a useful tool for public health planning, intervention and service delivery.

Penchansky, R. et Thomas, J. W. (1981). "The concept of access: definition and relationship to consumer satisfaction." Med Care **19**(2): 127-140.

Access is an important concept in health policy and health services research, yet it is one which has not been defined or employed precisely. To some authors "access" refers to entry into or use of the health care system, while to others it characterizes factors influencing entry or use. The purpose of this article is to propose a taxonomic definition of "access." Access is presented here as a general concept that summarizes a set of more specific dimensions describing the fit between the patient and the health care system. The specific dimensions are availability, accessibility, accommodation, affordability and acceptability. Using interview data on patient satisfaction, the discriminant validity of these dimensions is investigated. Results provide strong support for the view that differentiation does exist among the five areas and that the measures do relate to the phenomena with which they are identified.

Phillips, R. L., Liaw, W., Crampton, P., et al. (2016). "How Other Countries Use Deprivation Indices-And Why The United States Desperately Needs One." Health Aff (Millwood) **35**(11): 1991-1998.

Integrating public health and medicine to address social determinants of health is essential to achieving the Triple Aim of lower costs, improved care, and population health. There is intense interest in the United States in using social determinants of health to direct clinical and community health interventions, and to adjust quality measures and payments. The United Kingdom and New Zealand use data representing aspects of material and social deprivation from their censuses or from administrative data sets to construct indices designed to measure socioeconomic variation across communities, assess community needs, inform research, adjust clinical funding, allocate community resources, and determine policy impact. Indices provide these countries with comparable data and serve as a universal language and tool set to define organizing principles for population health. In this article we examine how these countries develop, validate, and operationalize their indices; explore their use in policy; and propose the development of a similar deprivation index for the United States.

Pourat, N., Chen, X., Lee, C., et al. (2019). "HRSA-funded Health Centers Are an Important Source of Care and Reduce Unmet Needs in Primary Care Services." Medical Care **57**(12): 996-1001. https://doi.org/10.1097/mlr.0000000000001206

Background: Evidence indicates the unmet need for primary care services including medical, mental health, and dental care is greater among uninsured and Medicaid beneficiaries than privately insured individuals, many of whom use Health Resources and Services Administration–funded health centers (HRSA HCs). Objective: We examined differences in rates of unmet need between low-income uninsured and Medicaid patients of HRSA HCs and safety-net clinics in general or private physicians. Research Design: We used logistic regression models to compare the predicted probabilities of unmet need for uninsured and Medicaid individuals whose usual source of care is HRSA HCs versus clinics in general or private physicians. Sample: We used a nationally representative survey of low income, adult patients who identified HRSA HCs as their usual source of care. We used the National Health Interview Survey to independently identify low-income individuals whose usual source of care was clinics (National Health Interview Survey clinics) or physicians (National Health Interview Survey physicians) in the general population. Measures: Dependent variables were unmet need and delay in medical care, and unmet need for prescription medications, mental health, and dental care. The primary independent variable of interest was the usual source of care. We controlled for potential confounders. Results: We found the probability of unmet need for medical and dental care to be lower

among HRSA HC patients than individuals whose usual source of care were not HRSA HCs. Conclusions: HRSA HC patients have lower probabilities of unmet need for medical and dental care. This is likely because HRSA HCs provide accessible, affordable, and comprehensive primary care services. Expanding capacity of these organizations will help reduce unmet need and its consequences.

Powell, M. A. (1990). "Need for and provision of general practice in London." Br J Gen Pract **40**(338): 372-375.

This study examines the spatial distribution of general practice in London, taking into account both practice and population characteristics. While need for general practice is higher in inner London, some areas of outer London experience high levels of need. Inner London tends to have a greater quantity but lower quality of general practice. However, as in the case of the needs indices, this situation cannot be described as a simple inner city/outer city dichotomy. It is concluded that not all inner London areas suffer from high need and poor general practice and not all outer London areas have low need and good general practice.

Raynaud, J. (2013). Access to health care : from territorial perceptions to the initiatives of stakeholders : concepts, measures and surveys for a geographical analysis of the organization and the development of a sustainable supply of care, Université Paul Valéry - Montpellier III.
https://tel.archives-ouvertes.fr/tel-00967067

L'accès aux soins est une préoccupation des pouvoirs publics, des patients et des médecins. Après avoir identifié le rôle et les différentes aspirations de ces acteurs de santé, une synthèse reposant sur la construction des concepts en sciences sociales est proposée afin de comparer les différentes approches de l'analyse et de la mesure de l'accès aux soins. En France, ce concept est principalement étudié à travers les difficultés financières ou la distance géographique, pourtant sa nature est multidimensionnelle. A partir de cette analyse, deux enquêtes ont été menées pour recueillir les perceptions de mille patients et cinq cents médecins libéraux afin de déterminer précisément la nature et la fréquence des difficultés d'accès aux soins. Les résultats montrent que les principaux obstacles sont le temps d'attente en cabinet chez les généralistes et le délai d'obtention d'un rendez-vous chez les spécialistes. Ces éléments sont également des facteurs de renoncement aux soins. L'enquête réalisée auprès des médecins identifie leurs perceptions concernant les difficultés d'accès aux consultations de leurs patients, leurs conditions de travail et les solutions privilégiées pour diminuer lesdélais de prise en charge des patients. Un vif intérêt pour le regroupement avec d'autres confrères est exprimé, en particulier pour les jeunes médecins. Ainsi, les deux principaux modes d'organisation émergents de l'offre de soins, les maisons de santé pluriprofessionnelles et la télémédecine, sont analysés et discutés à la suite de retours d'expériences et d'entretiens semi-directifs. A l'initiative des acteurs locaux, ces coopérations entre professionnels de santé favorisent la qualité et la durabilité des services de soins sur les territoires.

Rees, G. H., Crampton, P., Gauld, R., et al. (2018). "Rethinking health workforce planning: Capturing health system social and power interactions through actor analysis." Futures **99**: 16-27.
http://www.sciencedirect.com/science/article/pii/S0016328717303051

Future health systems will be required to accommodate changing social and treatment environments along with new and not-before-contemplated health care roles. Thus, health workforce planning is likely to benefit from improved problem identification, response formulation and data and methods that provide deeper understandings of socially influenced systems. Actor analysis is able to facilitate this through its examination of actor goals, interactions, and influences. We explore the use of this infrequently reported method in the context of health workforce planning. Through an embedded mixed methods design, we draw on data from inductive document analysis, deductively coded semi-structured interview responses from two separate but interconnected health sub sectors and numerically transform these to comply with the selected actor analysis software's input requirements. Our findings underline the importance of actor analysis as an investigative resource for delineating actor positions on a range of strategic issues pertinent to health workforce futures to reveal a different perspective of the system's evolution than that derived from conventional health workforce forecasting methods. A hierarchy of critical issues and the influential actors that hold sway over the

workforce discourse are found, providing some insight into why conventional workforce plans can provide less than expected results.

Ricketts, T. C., Goldsmith, L. J., Holmes, G. M., et al. (2007). "Designating places and populations as medically underserved: a proposal for a new approach." J Health Care Poor Underserved **18**(3): 567-589.

This article describes the development of a theory-based, data-driven replacement for the Health Professional Shortage Area (HPSA) and Medically Underserved Area (MUA) designation systems. Data describing utilization of primary medical care and the distribution of practitioners were used to develop estimates of the effects of demographic and community characteristics on use of primary medical care. A scoring system was developed that estimates each community's effective access to primary care. This approach was reviewed and contributed to by stakeholder groups. The proposed formula would designate over 90% of current geographic and low-income population HPSA designations. The scalability of the method allows for adjustment for local variations in need and was considered acceptable by stakeholder groups. A data-driven, theory-based metric to calculate relative need for geographic areas and geographically-bounded special populations can be developed and used. Its use, however, requires careful explanation to and support from affected groups

Ricketts, T. C. (2005). "Workforce issues in rural areas: a focus on policy equity." Am.J Public Health **95**(1): 42-48.

Rural communities in the United States are served by relatively fewer health care professionals than urban or suburban areas. I review the geographic distribution of 6 classes of health professionals and describe the multiple government and private policies and programs intended to affect their geographic distribution. These programs can be classified into 3 categories--coercive, normative, and utilitarian--that characterize the major policy levers used to influence practice location decisions. Health workforce policies must be normative to ensure equity for rural communities, but goals in this area can be achieved only through a balance of utilitarian and coercive mechanisms

Ricketts, T. C. (2010). "Organisation territoriale de l'offre de soins primaires destin,es aux populations les plus défavorisés, l'exemple de l'Etat de Caroline du Nord." Revue Francaise Des Affaires Sociales(3): 73-80.

Ricketts, T. C. et Goldsmith, L. J. (2005). "Access in health services research : the battle of the frameworks." Nursing Outlook **53**(6): 274-280.

Ricketts, T. C., et al. (2007). "Designating places and populations as medically underserved: a proposal for a new approach." J Health Care Poor Underserved **18**(3): 567-589.

This article describes the development of a theory-based, data-driven replacement for the Health Professional Shortage Area (HPSA) and Medically Underserved Area (MUA) designation systems. Data describing utilization of primary medical care and the distribution of practitioners were used to develop estimates of the effects of demographic and community characteristics on use of primary medical care. A scoring system was developed that estimates each community's effective access to primary care. This approach was reviewed and contributed to by stakeholder groups. The proposed formula would designate over 90% of current geographic and low-income population HPSA designations. The scalability of the method allows for adjustment for local variations in need and was considered acceptable by stakeholder groups. A data-driven, theory-based metric to calculate relative need for geographic areas and geographically-bounded special populations can be developed and used. Its use, however, requires careful explanation to and support from affected groups

Russell, D. J. et Humphreys, J. S. (2016). "Meeting the primary healthcare needs of small rural communities: lessons for health service planners." Rural and Remote Health **16**(1): 12.
<Go to ISI>://WOS:000374925500023

Introduction: The struggle of many small rural and remote communities to sustain comprehensive primary healthcare (PHC) services is an issue of global interest. Recent research has identified

essential service requirements (workforce, funding, management, linkages, and infrastructure) and environmental enablers (supportive policies, Commonwealth and state/territory relations, community readiness) associated with the provision of high-quality PHC services in these communities. However, little is known about how best to expand the provision of core high-quality PHC services to the many small and diverse non-metropolitan communities that currently lack them. This study investigates the transition of an integrated model of PHC service delivery, which provided PHC services to a single community, to a rurally 'networked' model of PHC delivering PHC to multiple communities. It seeks to enhance understanding of the factors and processes enabling and impeding successful PHC service expansion into small rural communities. Salient lessons for other rural health services seeking to expand into neighbouring small rural communities are proffered. Methods: This mixed-methods study of the expansion of Elmore Primary Health Service in northern Victoria, Australia, into eight neighbouring rural communities was conducted using audio-recorded semi-structured interviews with members of staff (n=11). Staff members were purposively sampled according to their knowledge and experience of the expansion, ensuring that a broad range of perspectives were captured and that these related to each of the eight sites. Additionally, interviewees completed a questionnaire indicating the importance of 16 different factors to the service expansion. Results: Community engagement, vision and leadership, linkages with other health services, improving residents' access to PHC, broadening the range of care provided and professional satisfaction were each identified by almost all participants (>9 0%) as having very important associations with successful expansion. A conceptual model with five distinctive stages was developed to explain the processes underpinning PHC service expansion: initiative, consultation, roll-out, evaluation and consolidation. Previously identified essential service requirements and key environmental enablers come in to play at different stages of expansion. Working closely with communities and community stakeholders, however, is critically important at all stages of expansion. The expansion of the Elmore Primary Health Service to a regionally 'networked' PHC model conferred substantial benefits by virtue of the assistance that could be provided to individual services to effectively manage change and meet essential service requirements in rapidly changing circumstances. Conclusions: This evaluation of a 'networked' model of PHC in rural areas identified the factors and processes underpinning service expansion during five distinct stages, represented in a conceptual model of service expansion. The full range of key environmental enablers and essential service requirements were very important for successful expansion, particularly during roll-out and consolidation stages, whilst community engagement was important at all stages.

Ryan, M. (2017). Health Professional Shortage Areas and Scoring. 2017.

Ryan, M. (2017). "Key Principles of Shortage Designation. Webinar; 2017." from http://clinicians.org/wpcontent/uploads/2017/05/ACU-HPSA-Key-Concepts-Webinar_Ryan.pdf. Accessed August 7, 2017.

Salmond, C. et Crampton, P. (2002). "Heterogeneity of deprivation within very small areas." J Epidemiol Community Health **56**(9): 669-670.

Scheffler, R. M. et Arnold, D. R. (2019). "Projecting shortages and surpluses of doctors and nurses in the OECD: what looms ahead." Health Econ Policy Law **14**(2): 274-290.

There is little debate that the health workforce is a key component of the health care system. Since the training of doctors and nurses takes several years, and the building of new schools even longer, projections are needed to allow for the development of health workforce policies. Our work develops a projection model for the demand of doctors and nurses by Organisation for Economic Co-operation and Development (OECD) countries in the year 2030. The model is based on a country's demand for health services, which includes the following factors: per capita income, out-of-pocket health expenditures and the ageing of its population. The supply of doctors and nurses is projected using country-specific autoregressive integrated moving average models. Our work shows how dramatic imbalances in the number of doctors and nurses will be in OECD countries should current trends continue. For each country in the OECD with sufficient data, we report its demand, supply and shortage or surplus of doctors and nurses for 2030. We project a shortage of nearly 400,000 doctors

across 32 OECD countries and shortage of nearly 2.5 million nurses across 23 OECD countries in 2030. We discuss the results and suggest policies that address the shortages.

Schroder, L., Flagel, K., Goetz, K., et al. (2018). "Mobility concepts and access to health care in a rural district in Germany: a mixed methods approach." BMC Fam Pract **19**(1): 47.

BACKGROUND: Western countries are facing the challenges of an imminent shortage of physicians, especially general practitioners. As a consequence longer travel times to doctors' practices may arise. This study aimed to investigate the mobility behavior of a rural population in terms of medical consultations. METHODS: An exploratory mixed-methods design was conducted in the Waldshut district of the federal state Baden-Wurttemberg in Germany. Focus groups and a single telephone-interview with representatives, occupationally affiliated with mobility in the district (e.g. representatives of public transport, nursing-services or the District Office Waldshut), were performed in 2016 and analyzed using Mayring's structuring content analysis. A questionnaire based on the collected qualitative data was subsequently distributed to a random sample of 1000 adult inhabitants living in the Waldshut district. Quantitative data were analyzed employing descriptive statistics. RESULTS: Qualitatively, four focus groups and one single telephone-interview with a total of 20 participants were performed. Therein the necessity of reaching a nearby general practitioner and the importance of individual motor traffic was emphasized. Novel mobility modes of ride sharing and telemedicine were controversially discussed as future transport and consultation options, respectively. Quantitatively, 277 questionnaires (27.7%) were valid and included in our analysis. Mean age was 51 years (SD = 18.5) and 58% (n = 160) were female. Irrespective of the mode of transport 60% (n = 166) expected to reach their general practitioner within 15 min. Using the possibility of multiple answers 47% (n = 192) stated to use a car in order to reach their general practitioner, public transport was used by 5% (n = 19). Nearly 80% (n = 220) could imagine sharing a car with well-known persons for consultations. Turning to a general practitioner via telemedicine was imaginable for 32% (n = 91). CONCLUSIONS: Individual motor car traffic seems to be an important factor in providing accessibility to rural medical care. As a supplementation, web based ride sharing has economic and structural potential for reaching a doctor's practice. However, familiarity and trustworthiness need to be guaranteed within this flexible transport mode. Furthermore, telemedicine may be a future approach in order to reduce travel time to a doctor's practice.

Shah, T. I., Milosavljevic, S. et Bath, B. (2017). "Measuring geographical accessibility to rural and remote health care services: Challenges and considerations." Spat Spatiotemporal Epidemiol **21**: 87-96.

This research is focused on methodological challenges and considerations associated with the estimation of the geographical aspects of access to healthcare with a focus on rural and remote areas. With the assumption that GIS-based accessibility measures for rural healthcare services will vary across geographic units of analysis and estimation techniques, which could influence the interpretation of spatial access to rural healthcare services. Estimations of geographical accessibility depend on variations of the following three parameters: 1) quality of input data; 2) accessibility method; and 3) geographical area. This research investigated the spatial distributions of physiotherapists (PTs) in comparison to family physicians (FPs) across Saskatchewan, Canada. The three-steps floating catchment areas (3SFCA) method was applied to calculate the accessibility scores for both PT and FP services at two different geographical units. A comparison of accessibility scores to simple healthcare provider-to-population ratios was also calculated. The results vary considerably depending on the accessibility methods used and the choice of geographical area unit for measuring geographical accessibility for both FP and PT services. These findings raise intriguing questions regarding the nature and extent of technical issues and methodological considerations that can affect GIS-based measures in health services research and planning. This study demonstrates how the selection of geographical areal units and different methods for measuring geographical accessibility could affect the distribution of healthcare resources in rural areas. These methodological issues have implications for determining where there is reduced access that will ultimately impact health human resource priorities and policies.

Sheldon, G. F., Ricketts, T. C., Charles, A., et al. (2008). "The global health workforce shortage: role of surgeons and other providers." Adv Surg **42**: 63-85.

> The debate over the status of the physician workforce seems to be concluded. It now is clear that a shortage of physicians exists and is likely to worsen. In retrospect it seems obvious that a static annual production of physicians, coupled with a population growth of 25 million persons each decade, would result in a progressively lower physician to population ratio. Moreover, Cooper has demonstrated convincingly that the robust economy of the past 50 years correlates with demand for physician services. The aging physician workforce is an additional problem: one third of physicians are over 55 years of age, and the population over the age of 65 years is expected to double by 2030. Signs of a physician and surgeon shortage are becoming apparent. The largest organization of physicians in the world (119,000 members), the American College of Physicians, published a white paper in 2006 titled, "The Impending Collapse of Primary Care Medicine and Its Implications for the State of the Nation's Health Care" [37]. The American College of Surgeons, the largest organization of surgeons, has published an article on access to emergency surgery [38], and the Institute of Medicine of the National Academies of Science has published a book on the future of emergency care (Fig. 10). The reports document diminished involvement and availability of emergency care by general surgeons, neurologic surgeons, orthopedists, hand surgeons, plastic surgeons, and others. The emergency room has become the primary care physician after 5 PM for much of the population. A survey done by the Commonwealth Fund revealed that less than half of primary care practices have an on-call arrangement for after-hours care. Other evidence of evolving shortage are reports of long wait times for appointments, the hospitalist movement, and others. The policies for the future should move beyond dispute over whether or not a shortage exists. The immediate need is for the United States, as a society, to commit to workforce self sufficiency in health care. The reliance on international graduates for more than 25% of the nation's physicians is a transnational problem. Reliance on IMGs, nurses and other health professions for the United States workforce is an issue of international distributive justice. Wealthy, developed countries, such as the United States, should be able to educate sufficient health professionals without relying on a less fortunate country's educated health workers. The 2000 Report of the Chair of the AAMC, the accrediting agency for United States and Canadian medical schools through the LCME, recommended expansion of medical school class sizes and expansion of medical schools [41]. For the past 25 years, the AAMC has supported a no-growth policy and the goal that 50% of USMGs be primary care physicians. In 2003, the AAMC developed a workforce center,-led by Edward Salsberg. The workforce center has provided valuable data and monitoring of the evolving workforce graduating from medical and and osteopathic schools in the United States. The NRMP, also managed by the AAMC, has begun useful studies analyzing the specialty choices of the more than 20,000 participants in the Match each year. The AAMC workforce policy was altered in 2006, and a 12-point policy statement was issued (see http://aamc.workforceposition.pdf). Three of the 12 points reflected significant change from past positions. They are a call for a 30% increase in physicians graduated by United States allopathic medical schools and an increase in residency positions now limited by the BBA of 1997. The recommendation that students make personal specialty choices reversed the prior recommendation that a majority of students enter primary care practice.

Sibbald, B. (2005). Putting general practitioners where they are needed: an overview of strategies to correct maldistribution. Manchester National Primary Care Research and Development Centre**:** 15.

> Inequalities in general practitioner (GP) distribution in the UK have persisted for many decades. Domestic strategies for improving equity have placed greatest reliance on restricting GP entry to over served areas and financially compensating those who locate to deprived areas. Greater use might be made of the wider range of strategies that have been deployed in other countries. These include: educational and other programmes dedicated to the selection, training and professional support of doctors willing to work in underserved areas; additional non-pecuniary benefits for doctors working in underserved areas such as the provision of excellent clinical facilities, higher professional training and a wider range of employment benefits; scholarships or educational loan repayment in return for service in underserved areas; or restricting immigrant doctors to service in designated areas as a condition of licensure. The comparative cost-effectiveness of different incentives is largely unknown.

However it is clear that no one strategy is fully effective and that a blend of approaches, incorporating both pecuniary and non-pecuniary incentives, is needed.

Siegel, M., Koller, D., Vogt, V., et al. (2016). "Developing a composite index of spatial accessibility across different health care sectors: A German example." Health Policy **120**(2): 205-212.

The evolving lack of ambulatory care providers especially in rural areas increasingly challenges the strict separation between ambulatory and inpatient care in Germany. Some consider allowing hospitals to treat ambulatory patients to tackle potential shortages of ambulatory care in underserved areas. In this paper, we develop an integrated index of spatial accessibility covering multiple dimensions of health care. This index may contribute to the empirical evidence concerning potential risks and benefits of integrating the currently separated health care sectors. Accessibility is measured separately for each type of care based on official data at the district level. Applying an Improved Gravity Model allows us to factor in potential cross-border utilization. We combine the accessibilities for each type of care into a univariate index by adapting the concept of regional multiple deprivation measurement to allow for a limited substitutability between health care sectors. The results suggest that better health care accessibility in urban areas persists when taking a holistic view. We believe that this new index may provide an empirical basis for an inter-sectoral capacity planning.

Spero, J. C. et Fraher, E. P. (2014). "Running the numbers: the maldistribution of health care providers in rural and underserved areas in North Carolina." N C Med J **75**(1): 74-79.

Streeter, R. A., Snyder, J. E., Kepley, H., et al. (2020). "The geographic alignment of primary care Health Professional Shortage Areas with markers for social determinants of health." PLoS One **15**(4): e0231443.

BACKGROUND: The Health Resources and Services Administration (HRSA), an agency within the U.S. Department of Health and Human Services (HHS), works to ensure accessible, quality, health care for the nation's underserved populations, especially those who are medically, economically, or geographically vulnerable. HRSA-designated primary care Health Professional Shortage Areas (pcHPSAs) provide a vital measure by which to identify underserved populations and prioritize locations and populations lacking access to adequate primary and preventive health care-the foundation for advancing health equity and maintaining health and wellness for individuals and populations. However, access to care is a complex, multifactorial issue that involves more than just the number of health care providers available, and pcHPSAs alone cannot fully characterize the distribution of medically, economically, and geographically vulnerable populations. METHODS AND FINDINGS: In this county-level analysis, we used descriptive statistics and multiple correspondence analysis to assess how HRSA's pcHPSA designations align geographically with other established markers of medical, economic, and geographic vulnerability. Reflecting recognized social determinants of health (SDOH), markers included demographic characteristics, race and ethnicity, rates of low birth weight births, median household income, poverty, educational attainment, and rurality. Nationally, 96 percent of U.S. counties were either classified as whole county or partial county pcHPSAs or had one or more established markers of medical, economic, or geographic vulnerability in 2017, suggesting that at-risk populations were nearly ubiquitous throughout the nation. Primary care HPSA counties in HHS Regions 4 and 6 (largely lying within the southeastern and south central United States) had the most pervasive and complex patterns in population risk. CONCLUSION: HHS Regions displayed unique signatures with respect to SDOH markers. Descriptive and analytic findings from our work may help inform health workforce and health care planning at all levels, and, by illustrating both the complexity of and differences in county-level population characteristics in pcHPSA counties, our findings may have relevance for strengthening the delivery of primary care and addressing social determinants of health in areas beset by provider shortages.

Streeter, R. A., Zangaro, G. A. et Chattopadhyay, A. (2017). "Perspectives: Using Results from HRSA's Health Workforce Simulation Model to Examine the Geography of Primary Care." Health Serv Res **52 Suppl 1**: 481-507.

OBJECTIVE: Inform health planning and policy discussions by describing Health Resources and Services Administration's (HRSA's) Health Workforce Simulation Model (HWSM) and examining the HWSM's

2025 supply and demand projections for primary care physicians, nurse practitioners (NPs), and physician assistants (PAs). DATA SOURCES: HRSA's recently published projections for primary care providers derive from an integrated microsimulation model that estimates health workforce supply and demand at national, regional, and state levels. PRINCIPAL FINDINGS: Thirty-seven states are projected to have shortages of primary care physicians in 2025, and nine states are projected to have shortages of both primary care physicians and PAs. While no state is projected to have a 2025 shortage of primary care NPs, many states are expected to have only a small surplus. CONCLUSIONS: Primary care physician shortages are projected for all parts of the United States, while primary care PA shortages are generally confined to Midwestern and Southern states. No state is projected to have shortages of all three provider types. Projected shortages must be considered in the context of baseline assumptions regarding current supply, demand, provider-service ratios, and other factors. Still, these findings suggest geographies with possible primary care workforce shortages in 2025 and offer opportunities for targeting efforts to enhance workforce flexibility.

Sundquist, K., et al. (2003). "Care need index, a useful tool for the distribution of primary health care resources." Journal of Epidemiology and Community Health **57**(5): 347-352.

This study aims to demonstrate how Care Need Index (CNI), a social deprivation index, may be used to allocate total primary health care resources. It uses a cross sectional survey and register data. The CNI was based on sociodemographic factors: elderly persons living alone, children under age 5, unemployed people, people with low educational status, single parents, high mobility, and foreign born people. The CNI weights were calculated from the ratings of Swedish GPs of the impact of these factors on their workload. The CNI scale was transformed into a positive scale to avoid negative values. CNI weights were calculated for each decile of the study population. The risk of poor self reported health in the CNI deciles was estimated by means of a hierarchical logistic regression in the age range 25-74 (n=27 346). The MigMed database comprising all people living in Sweden was used to calculate the CNI for Stockholm. The results show that the means of the CNI for deciles ranged from 61 (most affluent neighbourhoods) to 140 (most deprived) in Stockholm County. The ratio between the tenth and the first decile was 1.66. There was an approximately 150% increased risk of poor self reported health for people living in the most disadvantaged neighbourhoods (OR=2.50) compared with those living in the most affluent ones (OR=1). CNI ratios for the deciles corresponded approximately to the odds ratios of poor self reported health status.The CNI can be used to allocate total primary health care resources.

Taylor, D. H., Ricketts, T. et Kolimaga, J. T. (1994). The measurement of underservice and provider shortage in the United States: a policy analysis. Working Paaper ; 34. Cecil G. Sheps Center for Health Services Research, University of North Carolina.
https://books.google.fr/books/about/The_Measurement_of_Underservice_and_Prov.html?id=JPtEygAACAAJ&redir_esc=y

Taylor, D. H., Jr. (1998). "The natural life of policy indices: geographical problem areas in the U.S. and U.K." Soc Sci Med **47**(6): 713-725.

In spite of many fundamental differences between the health systems in the U.S. and U.K., each has pursued a policy of identifying geographical small-areas believed to have inadequate primary care physicians given local health care needs. The magnitude of the problems in such areas differ in the U.S. and U.K. leading to idiosyncratic policy responses that are dictated by overall health system realities. However, there are several common themes identified in this comparative study: goals for remedial health policy are often unclear, making evaluation difficult; in the absence of conceptual clarity, a consensus-based approach of identifying existing and widely available variables to designate areas has been used to identify geographical problem areas; there are widespread concerns that the present indices used to implement policy are inappropriate, but no alternative index has been adopted. The paper concludes that clarifying goals for remedial health policy is key if the effectiveness of such policy is to be improved. Guidelines for assessing the usefulness of existing and future indices used to designate areas as eligible for resources as a part of this type of small-area remedial policy are developed from this U.S./U.K. comparison.

Tuffs, A. (2011). "Germany passes law to attract doctors to rural areas." BMJ **343**: d5255. PM:21846711

Thouez, J. P., Bodson, P. et Joseph, A. E. (1988). "Some methods for measuring the geographic accessibility of medical services in rural regions." Med Care **26**(1): 34-44.

This paper presents two complementary measures of geographic access to medical care in rural regions that necessitate only modest information inputs on the location of services and client populations. An application for the Abitibi-Temiscamingue region in the Province of Quebec, Canada, is used to illustrate the types of product yielded by the measures. These include mapped patterns of potential accessibility by rural community and a graphic display of the delivery system's potential effectiveness in 'reaching' distant consumers. The relevance of the measures to the planning of medical care provision in rural areas is discussed, as is their extension through disaggregation and improvement of data inputs.

Tomblin Murphy, G., Birch, S., MacKenzie, A., et al. (2016). "A synthesis of recent analyses of human resources for health requirements and labour market dynamics in high-income OECD countries." Human Resources for Health **14**(1): 59.
https://doi.org/10.1186/s12960-016-0155-2

Recognition of the importance of effective human resources for health (HRH) planning is evident in efforts by the World Health Organization (WHO) and the Global Health Workforce Alliance (GHWA) to facilitate, with partner organizations, the development of a global HRH strategy for the period 2016–2030. As part of efforts to inform the development of this strategy, the aims of this study, the first of a pair, were (a) to conduct a rapid review of recent analyses of HRH requirements and labour market dynamics in high-income countries who are members of the Organisation for Economic Co-operation and Development (OECD) and (b) to identify a methodology to determine future HRH requirements for these countries.

van den Bussche, H. (2019). "[The future problems of general practice in Germany: current trends and necessary measures]." Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz **62**(9): 1129-1137.

In Germany there is a threat of a shortage of junior general practitioners (GPs). One third of currently employed GPs are 60 years and older. Every year, 1700GPs leave the profession, while only about 1350 new GP-specialist approvals are issued. The Advisory Council on the Assessment of Developments in the Health Care Sector estimates that there will be around 20,000 unmet replacement needs by 2025. By 2017, 2600 GP seats were already vacant.Based on the results of the KarMed study, this paper examines the questions as to how many residents intend to become general practitioners after graduation and how they develop during postgraduate training. Furthermore, the consequences of the increasing proportion of female physicians in primary care in terms of the possible volume of work will be investigated. Finally, measures that could reduce a possible personnel shortage are discussed.The attractiveness of general practice has increased considerably during residency over the last six years of observation. The preference for GP work is linked to parenthood. More female doctors strive for part-time work and an employment contract instead of a private practice. On this basis, it can be estimated that the volume of work performed by these female GPs will be half that of the traditional (male) working model in private practice.The forecasted numbers of new recruits are unlikely to be sufficient to cover the demand for GP care in Germany. Possible effective measures would be, for example, the introduction of a gatekeeper system, creation of multi-professional centers, a quota system for access to postgraduate training of specialists, a reformed national planning of GP supply in the country, and a shortening and flexibilization of postgraduate training for general practice.

Van den Bussche, H. et Du, M., M. (2010). "Career entry and career perspectives of medical graduates in Germany." Cahiers De Sociologie Et De Demographie Medicales **50**: 43-61.

van Hassel, D., Verheij, R. et Batenburg, R. (2019). "Assessing the variation in workload among general practitioners in urban and rural areas: An analysis based on SMS time sampling data." Int J Health Plann Manage **34**(1): e474-e486.

OBJECTIVE: An important reason why general practitioners (GPs) are less inclined to work in rural areas is a perception of a higher workload. This study assesses the differences in the workloads of GPs in rural and urban areas. We used two definitions of rurality, one based on the number of addresses per square kilometre, and a second defined by the expected decline in population. METHODS: We collected time use data over 1 year by sending SMS text messages to Dutch GPs who each participated during a period of 1 week. This data was matched with those from GPs' registration and practice location. Data from 596 self-employed GPs were analysed using descriptive statistics and multiple regression analyses. RESULTS: In group practices, the patient list size of rural GPs was, on average, 231 patients more than those of urban GPs. They worked 3.5 more hours per week, with 2.6 more hours directly related to patients. A small significant relation was found between degree of urbanisation and the dependent variables list size and working hours. Working in a depopulation area had no significant effect on the workload indicators. Furthermore, GPs in group practices worked significantly fewer hours, and had smaller list sizes, than GPs in single-handed practices. CONCLUSION: The results show that the assumption of a higher workload in rural practices does not completely match the objective workload of GPs in these areas. Rural GPs have a higher workload in certain cases, but the type of a practice seems a more important determinant.

Wang, F. (2012). "Measurement, Optimization, and Impact of Health Care Accessibility: A Methodological Review." Annals of the Association of American Geographers. Association of American Geographers **102**(5): 1104-1112.
https://www.ncbi.nlm.nih.gov/pubmed/23335813
https://www.ncbi.nlm.nih.gov/pmc/PMC3547595/

Despite spending more than any other nation on medical care per person, the United States ranks behind other industrialized nations in key health performance measures. A main cause is the deep disparities in access to care and health outcomes. Federal programs such as the designations of Medically Underserved Areas/Populations and Health Professional Shortage Areas are designed to boost the number of health professionals serving these areas and to help alleviate the access problem. Their effectiveness relies first and foremost on an accurate measure of accessibility so that resources can be allocated to truly needy areas. Various measures of accessibility need to be integrated into one framework for comparison and evaluation. Optimization methods can be used to improve the distribution and supply of health care providers to maximize service coverage, minimize travel needs of patients, limit the number of facilities, and maximize health or access equality. Inequality in health care access comes at a personal and societal price, evidenced in disparities in health outcomes, including late-stage cancer diagnosis. This review surveys recent literature on the three named issues with emphasis on methodological advancements and implications for public policy.

Weinhold, I. et Gurtner, S. (2014). "Understanding shortages of sufficient health care in rural areas." Health Policy **118**(2): 201-214.
http://www.sciencedirect.com/science/article/pii/S0168851014001997

Background and purpose Despite efforts to provide comprehensive health care services and reduce inequalities, most developed countries face serious challenges in achieving comprehensive health care delivery in rural areas. The purpose of this study is to characterize health care shortages in the rural areas of developed countries and to comprehensively explore the underlying reasons for these shortages. Methods and sample To answer the research questions, we conducted a systematic literature review. The content analysis included 176 papers on the topic of rural health care. The thematic-analysis approach revealed key aspects of health care shortages in rural areas and evidence regarding the reasons for these shortages. Findings and conclusion Shortages of sufficient health care in rural areas were clustered into the following five categories: provider shortages, maldistribution, quality deficiencies, access limitations and the inefficient utilization of health care services. The reasons for the occurrence of these shortage problems are manifold and are related to

physical/infrastructural, professional, educational, social–cultural, economic and political issues. This paper contributes to a comprehensive understanding of the health care problems in rural areas by creating an integrated framework that examines several aspects of shortages in sufficient health care in rural areas as well as their underlying reasons. The results provide directions for future research and specific advice for policy makers.

Whitehead, J., Pearson, A. L., Lawrenson, R., et al. (2020). "Defining general practitioner and population catchments for spatial equity studies using patient enrolment data in Waikato, New Zealand." Applied Geography **115**: 102137.
http://www.sciencedirect.com/science/article/pii/S0143622819301997

The enhanced-two-step-floating-catchment-area (E2SFCA) method is a popular measure of the spatial accessibility of healthcare such as general practitioner (GP) services. However, the key step of defining appropriate GP and population catchment sizes is often overlooked. Applications of E2SFCA methods use a range of catchment sizes, most of which are arbitrarily defined due to a lack of real-world data to inform this decision. The use of inappropriate catchment sizes may under- or over-estimate spatial accessibility in some areas. In this paper patient enrolment data is used to determine appropriate GP and population catchment sizes in the Waikato, central North Island, region of New Zealand. A range of thresholds were tested, including: 100, 95, 90, 85, 75, and 65 percent of enrolled patients. Initial results suggest that catchment sizes vary across rural and urban areas. Further, incorporating variable data-driven population catchments recognises patient travel patterns and appears to improve spatial accessibility results in a mixed urban-rural context, although further modification may be necessary. This study has demonstrated an effective approach to defining appropriate GP and population catchments for use with the E2SFCA method, where access to patient enrolment data is available.

Wende, D., Kopetsch, T. et Richter, W. (2021). A Demand-Oriented Approach to Health Care Capacity Planning. Iza Discussion Paper Series ; 14860. Bonn Iza**:** 26.
https://docs.iza.org/dp14860.pdf

The planning practice of health care capacities suffers from sectoral and regional constraints and it remains difficult to ensure an equal access for patients. Moreover, standard planning approaches lack the choice-theoretic grounding necessary for making reliable predictions of the demand and competition for supplied care. This paper presents a general equilibrium model designed to overcome such shortcomings. The derived metric of access to care is demand-oriented measuring the time patients waste seeking treatment. It contrasts with the usual metrics based on the floating catchment area (FCA) method, which suffer from supply bias and ad hoc specification. The approach is illustrated using Germany as an example. Much in line with official planning figures, overcapacities are shown to exist in all specialities. However, a closer look at the data provides a differentiated picture. Overcapacities are typical for urban regions and they go hand in hand with supply deficits in rural areas, albeit to a specialty-specific extent. In smaller towns, the supply is more in line with demand.

Whitehead, J., Pearson, A. L., Lawrenson, R., et al. (2020). "Defining general practitioner and population catchments for spatial equity studies using patient enrolment data in Waikato, New Zealand." Applied Geography **115**: 102137.
http://www.sciencedirect.com/science/article/pii/S0143622819301997

The enhanced-two-step-floating-catchment-area (E2SFCA) method is a popular measure of the spatial accessibility of healthcare such as general practitioner (GP) services. However, the key step of defining appropriate GP and population catchment sizes is often overlooked. Applications of E2SFCA methods use a range of catchment sizes, most of which are arbitrarily defined due to a lack of real-world data to inform this decision. The use of inappropriate catchment sizes may under- or over-estimate spatial accessibility in some areas. In this paper patient enrolment data is used to determine appropriate GP and population catchment sizes in the Waikato, central North Island, region of New Zealand. A range of thresholds were tested, including: 100, 95, 90, 85, 75, and 65 percent of enrolled patients. Initial results suggest that catchment sizes vary across rural and urban areas. Further, incorporating variable data-driven population catchments recognises patient travel patterns and appears to improve spatial

accessibility results in a mixed urban-rural context, although further modification may be necessary. This study has demonstrated an effective approach to defining appropriate GP and population catchments for use with the E2SFCA method, where access to patient enrolment data is available.

Wilson, N. W., Couper, I. D., De Vries, E., et al. (2009). "A critical review of interventions to redress the inequitable distribution of healthcare professionals to rural and remote areas." Rural Remote Health **9**(2): 1060.

INTRODUCTION: The shortage of healthcare professionals in rural communities is a global problem that poses a serious challenge to equitable healthcare delivery. Both developed and developing countries report geographically skewed distributions of healthcare professionals, favouring urban and wealthy areas, despite the fact that people in rural communities experience more health related problems. This review provides a comprehensive overview of the most important studies addressing the recruitment and retention of doctors to rural and remote areas. METHODS: A comprehensive search of the English literature was conducted using the National Library of Medicine's (PubMed) database and the keywords '(rural OR remote) AND (recruitment OR retention)' on 3 July 2008. In total, 1261 references were identified and screened; all primary studies that reported the outcome of an actual intervention and all relevant review articles were selected. Due to the paucity of prospective primary intervention studies, retrospective observational studies and questionnaire-driven surveys were included as well. The search was extended by scrutinizing the references of selected articles to identify additional studies that may have been missed. In total, 110 articles were included. RESULTS: In order to provide a comprehensive overview in a clear and user-friendly fashion, the available evidence was classified into five intervention categories: Selection, Education, Coercion, Incentives and Support - and the strength of the available evidence was rated as convincing, strong, moderate, weak or absent. The main definitions used to define 'rural and/or remote' in the articles reviewed are summarized, before the evidence in support of each of the five intervention categories is reflected in detail. CONCLUSION: We argue for the formulation of universal definitions to assist study comparison and future collaborative research. Although coercive strategies address short-term recruitment needs, little evidence supports their long-term positive impact. Current evidence only supports the implementation of well-defined selection and education policies, although incentive and support schemes may have value. There remains an urgent need to evaluate the impact of untested interventions in a scientifically rigorous fashion in order to identify winning strategies for guiding future practice and policy.

Wing, P. et Reynolds, C. (1988). "The availability of physician services: a geographic analysis." Health Serv Res **23**(5): 649-667.

This article describes a new technique for estimating the availability of physician services in small geographic areas. Given counts or estimates of the number of physicians practicing in small geographic areas (e.g., zip codes), the technique allocates a portion of the services of each physician in an area to his home area and to nearby areas in proportion to both the propensity of patients to travel for medical care and the availability of potential patients. The longer the time required for a patient to travel to the physician, the smaller the proportion of the physician's services allocated to the patient's area, with the precise relationship determined by a special analysis. The final estimate of the availability of physician services in each small area is the sum of the service proportions of every physician in all of the small areas. The total supply of physician services is the same as the original total, but the distribution is adjusted to reflect the time that patients are willing to spend traveling to obtain medical care. Although this technique requires considerable data processing, it permits more accurate estimation of the supply of physician services in small geographic areas than is possible with traditional methods. It better represents the probabilistic and interpenetrating nature of physician service areas than alternative techniques and appears to be particularly applicable in estimating the supply of primary care physician services. Actual data for pediatricians and children in northeastern New York using zip codes as the geographic units illustrate the technique. Limitations, applications, and possible extensions are discussed.

Wright, R. A., Andres, T. L. et Davidson, A. J. (1996). "Finding the medically underserved: a need to revise the federal definition." J Health Care Poor Underserved **7**(4): 296-307.

> The relationship between the primary service area (PSA) of an urban community health center (CHC) program and a federally defined "medically underserved area" (MUA) was assessed. Federal guidelines that most reliably predicted medical underservice were identified. The service area was statistically defined by census tract penetration rates. The MUA was defined by an index of medical underservice (IMU) according to federal parameters of physician supply, poverty level, percentage elderly persons, and infant mortality. An index score was calculated for the country, service area, and each census tract. Analysis by tract determined the most significant discriminating parameters. By excluding two tracts concentrated with managed-care physicians, the service area qualified as an MUA. Tracts that fulfilled MUA and service area criteria were highly associated ($p < 0.0001$). Only poverty level and infant mortality were useful discriminating parameters. Federal indicators of demand (elderly population) and supply (physicians) did not adequately address issues to access for the medically underserved in urban neighborhoods. Other parameters that might serve as proxies of care access and underserved are discussed.

Wysong, J. A. (1975). "The index of medical underservice: problems in meaning, measurement, and use." Health Serv Res **10**(2): 127-135.

Xia, T., Song, X., Zhang, H., et al. (2019). "Measuring spatio-temporal accessibility to emergency medical services through big GPS data." Health & Place **56**: 53-62.
http://www.sciencedirect.com/science/article/pii/S1353829218303319

> Medical accessibility is an important indicator for evaluating the effectiveness of public health services. However, the previous medical accessibility studies mainly focus on spatial accessibility without considering temporal variation in population distribution which is significant for evaluating access to emergency medical service (EMS). This paper proposes a model of spatio-temporal accessibility to EMS called ST-E2SFCA based on adapting the enhanced two-step floating catchment area (E2SFCA) method. We apply our method to the greater Tokyo area for a large volume of GPS dataset with millions of users and compare the accessibility difference over space and time. To evaluate our model, we also analyze the distinction of our model over different weight sets and compare the performance of ST-E2SFCA with the traditional E2SFCA. The result shows that our method can illustrate the temporal difference and is suitable for measuring the spatio-temporal accessibility to EMS, thus can guide the hospital location selection and urban planning.

ÉTUDES FRANÇAISES

(2018). "Accessibilité potentielle localisée : un critère moins flou que les "déserts médicaux"." Revue Prescrire **38**(418): 622-623.

> L'existence de "déserts médicaux" est un problème régulièrement soulevé en France. Un indicateur dit "accessibilité potentielle localisée" a été défini par des organismes publics français afin d'appréhender plus précisément les manques d'offre de soins selon des entités territoriales disposant des services les plus courants. Il est prévu que les professionnels de santé qui s'installent et exercent dans les territoires dits de vie-santé dont l'accessibilité potentielle localisée est la plus faible, puissent bénéficier d'aides à l'installation ou au maintien de l'activité. Cet indicateur territorial ne prend pas en compte des facteurs d'inégalités sociales importants tels que : le niveau socioéconomique, l'absence de moyen de transport autonome, la diminution d'accès aux spécialistes, l'offre de soins au tarif Sécurité sociale sans dépassement d'honoraires.

Audras-Marcy, S., Gheno, M. et Mondesir, H. (2019). L'accessibilité à pieds aux équipements sportifs, aux équipements culturels et à l'offre de soins de proximité dans les quartiers prioritaires. Rapport annuel 2018 de l'ONPV., Paris : O.N.P.V.**:** 6.

Les habitants des quartiers prioritaires bénéficient globalement d'une meilleure accessibilité en moins de 15 minutes de marche à l'offre de soins de proximité, aux équipements sportifs et culturels, que les résidents des autres quartiers : 97,6 % habitants des QPV peuvent accéder à au moins un médecin généraliste en moins de 15 minutes de marche contre 85,8% des habitants des autres quartiers des unités urbaines englobantes, 99 % à au moins un équipement sportif structurant contre 90 % des habitants des autres quartiers, 70,8 % à au moins un équipement culturel contre 58,5 % des habitants des autres quartiers. Mais les équipements culturels et sportifs accessibles sont peu variés dans les quartiers prioritaires, et le nombre de dentistes accessibles en moins de 15 minutes de marche y est insuffisant : 10,7 en moyenne en QPV contre 16,6 dans les autres quartiers des unités urbaines englobantes. Ces résultats globaux masquent des situations contrastées selon la taille et le type des quartiers prioritaires. En outre, l'accessibilité à pied ne préjuge pas de l'accès effectif aux équipements ou aux praticiens. Les freins sont nombreux : coûts, horaires, disponibilité des praticiens, freins culturels ou d'image.

Barlet, M., Coldefy, M., Collin, C., et al. (2012). L'accessibilité aux médecins généralistes libéraux : plus faible en milieu rural. Pour
Santé en milieu rural : réalités et controverses. Dossier, Paris : Groupe de recherche pour l'éducation et la prospective (GREP)**:** 31-40.
http://www.grep.fr/pour/numeros/pour214.htm#sommaire

Mesurer l'adéquation spatiale entre l'offre et la demande de médecins généraliste libéraux est une tâche délicate car elle nécessite de définir correctement à la fois la demande de soins, l'offre considérée et la maille territoriale pertinente pour cette mesure. Un nouvel outil a donc été mis en œuvre afin de répondre aux principales critiques faites aux indicateurs usuels d'accessibilité aux soins, tout en restant relativem- ent aisé à calculer dans la mesure où il mobilise des données facilement disponibles. Cet outil, l'indicateur d'accessibilité potentielle localisée (APL), est un indicateur local, calculé au niveau de chaque commune, mais qui considère également l'offre de médecins et la demande des communes environnantes. Il intègre également une meilleure définition de l'offre et de la demande de soins en prenant en compte l'activité des professionnels et la structure par âge de la population pouvant recourir à ces soins. Cet indicateur est notamment particulièrement adapté pour confronter l'accessibilité aux médecins généralistes libéraux des habitants des communes rurales à celles des habitants des communes urbaines. Cet indicateur a été développé conjointement par la Drees et l'Irdes

Barlet, M., Coldefy, M., Collin, C., et al. (2012). "L'Accessibilité potentielle localisée (APL) : une nouvelle mesure de l'accessibilité aux médecins généralistes libéraux." Questions D'economie De La Sante (Irdes)(174): 1-8.
http://www.irdes.fr/Publications/2012/Qes174.pdf

Cette étude propose un indicateur original et enrichi de mesure de l'accessibilité spatiale aux soins, appliqué ici aux médecins généralistes libéraux. Cet indicateur, l'Accessibilité potentielle localisée (APL), tient compte du niveau d'activité des médecins pour mesurer l'offre et du taux de recours différencié par âge des habitants pour mesurer la demande. Il s'agit d'un indicateur local, calculé au niveau de chaque commune mais qui considère également l'offre de médecins et la demande des communes environnantes

Barlet, M., Coldefy, M., Collin, C., et al. (2012). L'Accessibilité potentielle localisée (APL) : une nouvelle mesure de l'accessibilité aux soins appliquée aux médecins généralistes libéraux en France, Paris : Irdes
http://www.irdes.fr/EspaceRecherche/DocumentsDeTravail/DT51AccessibilitePot- entielleLocalisee.pdf

Les soins de premiers recours jouent un rôle essentiel sur la santé de la population. En France, bien que la densité médicale soit l'une des plus élevées d'Europe, l'accessibilité aux soins est aujourd'hui un enjeu majeur des politiques de santé, du fait du rôle important accordé au médecin généraliste, de l'existence de disparités spatiales de l'offre de soins et des tendances démographiques à la baisse du nombre de médecins sur le court terme ainsi que des fortes attentes d'une population vieillissante aux besoins de soins élevés et à la mobilité réduite. Dans cette recherche, nous nous intéressons à la mesure de l'accessibilité spatiale au médecin généraliste. Profitant des récents développements en

géographie de la santé sur les soins de premiers recours, nous proposons de construire un indicateur permettant de considérer simultanément l'offre, la demande de soins et l'accès aux soins, en nous appuyant sur la méthode du Two-step floating catchment area développée dans quelques pays anglophones. Nous l'adaptons ici au contexte des soins français et proposons quelques pistes d'amélioration dans trois dimensions principales : la définition et la quantification de l'offre de soins, l'intégration du besoin de soins du côté de la demande, une définition plus précise de l'interaction entre l'offre et la demande (résumé d'auteur)

Chaix, B., et al. (2005). "Area-level determinants of specialty care utilization in France : a multilevel analysis." Public Health **119**: 97-104.

We investigated the effects of the density of specialists and of the area-level percentage of highly educated individuals on the odds of consulting a specialist, and examined whether these variables could explain the observed urban/rural contrast in utilization of specialty care. The study sample, representative of the French population aged 18-75 years in 1999, comprised 12,435 individuals. Multilevel logistic models allowed us to investigate predictors of the odds of consulting a specialist occasionally, regularly and frequently over the previous 12 months. We observed a modest but significant clustering within areas of the utilization of specialty care, with higher levels of clustering for behaviours representing heavy consumption of care. After adjustment for individual factors, the odds of consulting a specialist were higher in larger cities compared with rural areas, but most of this effect was attributable to other area-level variables. These area-level effects were different in magnitude and nature among males and females. Among males, the odds of consulting a specialist increased with the area-level density of specialists. Among females, such an effect was not significant, but the odds of consulting a specialist increased with the area-level percentage of highly educated individuals.Further investigation is required to better understand the processes operating at the area level that were shown to affect healthcare utilization in a different way for males and females. Policies may be needed to address problems of geographical access to specialty care, as well as situations of overuse of specialty care without regular recourse to primary care.

Coldefy, M., Barlet, M., COLLIN, C., et al. (2012). "L'accessibilité potentielle localisée (APL) : une nouvelle mesure de l'accessibilité aux soins appliquée aux médecins généralistes libéraux en France." Serie Etudes Et Recherches - Document De Travail - Drees(124): 61p.

[BDSP. Notice produite par MIN-SANTE oCA7R0x8. Diffusion soumise à autorisation]. Profitant des récents développements en géographie de la santé sur les soins de premiers recours, les auteurs proposent de construire un indicateur permettant de considérer simultanément l'offre, la demande de soins et l'accès aux soins, en nous appuyant sur la méthode du "Two-step floating catchment area" développée dans quelques pays anglophones. Après analyse, ils présentent quelques pistes d'amélioration dans trois dimensions principales : la définition et la quantification de l'offre de soins ; l'intégration du besoin de soins du côté de la demande ; une définition plus précise de l'interaction entre l'offre et la demande. Au final, l'indicateur d'Accessibilité potentielle localisée (APL) propose une approche renouvelée et améliorée de l'accès aux médecins généralistes libéraux, prenant en compte l'offre et la demande de soins à l'échelle de la commune. L'APL répond ainsi aux principales critiques faites aux indicateurs usuels d'accessibilité aux soins tout en restant relativement aisée à calculer dans la mesure où elle mobilise des données facilement disponibles. L'APL s'interprète comme une densité et constitue ainsi un outil complémentaire utile à l'observation et au pilotage de l'organisation des soins à un niveau local

Coldefy, M., Com-Ruelle, L. et Lucas-Gabrielli, V. (2011). "Distances et temps d'accès aux soins en France métropolitaine." Etudes Et Resultats (Drees)(764): 8p.

[BDSP. Notice produite par MIN-SANTE R0xJFlGG. Diffusion soumise à autorisation]. La question de l'accès aux soins médicaux est devenue centrale dans le contexte actuel de fortes mutations du monde hospitalier et de réduction à venir des effectifs de médecins sur le territoire. Cette étude s'intéresse à l'accessibilité spatiale, au regard des distances et temps d'accès aux soins les plus proches en ville et à l'hôpital. Pour les soins hospitaliers, une méthodologie novatrice est proposée pour le repérage et la

géo-localisation des principales spécialités. 95% de la population française accède à des soins de proximité en moins de quinze minutes. De même, la plupart des médecins spécialistes libéraux et les équipements médicaux les plus courants sont accessibles en moyenne à moins de 20 minutes par la route. Pour les soins hospitaliers courants, ils sont à moins de 45 minutes pour 95% de la population française, les trois quarts en moins de 25 minutes. Cependant, des inégalités d'accès persistent tant pour les spécialités les plus courantes que les plus rares. Les régions rurales, à faible densité de population, cumulent l'éloignement des soins de proximité et de la plupart des soins spécialisés. Depuis 1990, la distance moyenne d'accès aux soins a diminué pour certains spécialistes, notamment les urologues, mais a augmenté pour d'autres, en particulier les pédiatres

Coldefy, M., Com-Ruelle, L. et Lucas-Gabrielli, V. (2011). "Les distances d'accès aux soins en France métropolitaine au 1er janvier 2007 : rapport : annexes." Serie Sources Et Methodes - Document De Travail - Drees(22): 2vol.

[BDSP. Notice produite par MIN-SANTE m78EER0x. Diffusion soumise à autorisation]. La question de l'accès aux soins médicaux est devenue centrale dans le contexte actuel de fortes mutations du monde hospitalier et de réduction à venir des effectifs de médecins sur le territoire. Cette étude s'intéresse à l'accessibilité spatiale, au regard des distances et temps d'accès aux soins les plus proches en ville et à l'hôpital. Pour les soins hospitaliers, une méthodologie novatrice est proposée pour le repérage et la géolocalisation des principales spécialités

Debrand, T., Pierre, A. et Lucas-Gabrielli, V. (2012). "Critical urban areas, deprived areas and neighbourhood effects on health in France." Health Policy **105**(1): 92-101.

Since the 1980s, different French governments have formulated public policies aimed at taking into account the specific problems of deprived neighbourhoods. The aim of this paper is to determinate the existence of a neighbourhood effect on health and to discuss the implementation of a geographical index of deprived areas in France. Using the National Health Survey of 2002–2003 and 1999 French census data, we attempt to measure the individual and collective determinants of SelfReported Health Status (SRH). By using a principal component analysis of aggregated census data, we obtain three synthetic factors: “economic and social condition”, “residential stability” and “generational”, and show that these contextual factors are correlated with individual SRH. Our research shows that health inequalities cannot be tackled by using only the Critical Urban Area criterion (the fact of living in a CUA or not) because some inequalities remain ignored and thus, hidden. We suggest a methodology to build a new health deprivation index allowing to better target health inequalities

Feral-Pierssens, A. L., Ameur, L., Akodad, H., et al. (2019). "[Medical Demography and Local Wealth - DeuroMERITeuroR Study]." Presse Med **48**(5): 567-568.

Gilliland, J. A., Shah, T. I., Clark, A., et al. (2019). "A geospatial approach to understanding inequalities in accessibility to primary care among vulnerable populations." PLoS One **14**(1): e0210113.

Many Canadians experience unequal access to primary care services, despite living in a country with a universal health care system. Health inequalities affect all Canadians but have a much stronger impact on the health of vulnerable populations. Health inequalities are preventable differences in the health status or distribution of health resources as experienced by vulnerable populations. A geospatial approach was applied to examine how closely the distribution of primary care providers (PCPs) in London, Ontario meet the needs of vulnerable populations, including people with low income status, seniors, lone parents, and linguistic minorities. Using enhanced two step floating catchment area (E2SFCA) method, an index of geographic access scores for all PCPs and PCPs speaking French, Arabic, and Spanish were separately developed at the dissemination area (DA) level. To analyze how PCPs are distributed, comparative analyses were performed in association with specific vulnerable groups. Geographical accessibility to all PCPs, and PCPs who speak specific minority languages vary considerably across the city of London. Access scores for French- and Arabic-speaking PCPs are found comparatively high (mean = 2.85 and 1.01 respectively) as compared to Spanish-speaking PCPs (mean

= 0.47). Additionally, many areas with high proportions of vulnerable populations experience low accessibility. Despite its exploratory nature, this study offers insight into intra-urban distributions of geographical accessibility to primary care resources for vulnerable groups. These findings can facilitate health researchers and policymakers in the development of recommendations to increase levels of accessibility of specific population groups in underserved areas.

Lucas-Gabrielli, V. et Mangeney, C. (2020). "Comment enrichir la mesure des inégalités spatiales d'accessibilité aux médecins généralistes ? Illustration en Ile-de-France." Questions D'economie De La Sante (Irdes)(246): 8. https://www.irdes.fr/recherche/questions-d-economie-de-la-sante/246-comment-enrichir-la-mesure-des-inegalites-spatiales-d-accessibilite-aux-medecins-generalistes.pdf

La recherche sur les inégalités spatiales d'accessibilité aux soins primaires, en s'appuyant sur des indicateurs de type « densité flottante », a permis de dépasser les limites des indicateurs classiques de densité et de distance. L'Accessibilité potentielle localisée (APL) - qui tient compte des distances entre communes en voiture, de la disponibilité de l'offre et de la structure d'âge de la population - est une adaptation de ce type de méthode au contexte français qui permet de reconsidérer les constats préalablement établis. Pour améliorer encore la mesure, l'indicateur est affiné de plusieurs manières dans cette étude méthodologique : en réduisant l'échelle géographique d'observation, de la commune à la maille de 200 mètres, en prenant en compte la dimension sociale des besoins et les pratiques de mobilité différenciées (voiture, transports en commun…), en considérant l'effet systémique des interactions entre l'offre et la demande de soins à l'échelle régionale. Cet effet permet de tenir compte du fait que la probabilité de recourir à une offre éloignée est d'autant plus faible que les patients disposent d'une offre à proximité. Cette dernière proposition est celle qui modifie le plus la mesure en lissant la représentation spatiale des niveaux d'accessibilité. La prise en compte de la dimension sociale dans les besoins de soins et la diversification des moyens de transport et de ses usages selon le type d'espaces impactent plus localement les résultats. Cependant, pour certains territoires urbains défavorisés socialement, la prise en compte de ces nouvelles dimensions permet de mieux souligner des difficultés locales d'accessibilité aux médecins généralistes.

Lucas, V. et Tonnellier, F. (1995). Distances d'accès aux soins en 1990. Rapport Credes**:** 59p.

La distance est un indicateur d'accès aux soins révélateur d'inégalités. Elle définit la bonne ou la concentration des équipements ou des personnels de santé et permet de classer chaque type de soins selon une hiérarchie classique pour les services. Suivant le degré d'urbanisation, la distance montre le seuil (variable dans le temps) au delà duquel l'accessibilité d'une spécialité d'une discipline hospitalière ou d'un équipement lourd devient difficile. On remarque d'autre part qu'il existe de fortes inégalités entre milieu urbain et milieu rural ou encore entre centre et banlieue, même pour des spécialités "courantes". Ainsi, les infirmières, bien que moins nombreuses que les omnipraticiens, sont mieux réparties dans les communes rurales. Les questions posées par ces résultats concernen- t la disponibilité des soins et peut-être l'aménagement du territoire. Par ailleurs, certains résultats donnés ici sont attendus mais d'autres révèlent des évolutions qui n'étaient pas évidentes a priori. Par exemple, la distance moyenne d'accès a diminué pour toutes les spécialités libérales entre 1982 et 1990, à l'exception des chirurgiens. La concentration urbaine des chirurgiens libéraux a donc augmenté et la diffusion s'est

Lucas-Gabrielli, V. et Chevillard, G. (2018). "Déserts médicaux et accessibilité aux soins : de quoi parle-t-on ?" Medecine/Sciences **34**(6-7): 599-603.
www.medecinesciences.org/fr/

L'accessibilité aux soins des français apparaît menacée par l'existence ou l'apparition d'espaces caractérisés par un manque de soignants souvent appelés « déserts médicaux ». Ces espaces renvoient en fait à des réalités multiples relatives à la faiblesse de l'offre médicale disponible couplée à l'enclavement des territoires et à l'importance des besoins de soins. Nous proposons ici d'exposer les différentes manières de mesurer l'accessibilité aux médecins généralistes libéraux ou de qualifier les espaces avec des inadéquations entre offre et besoins de soins afin de montrer la confusion que

peut générer ce concept, ainsi que les enjeux pour les pouvoirs publics quand il s'agit de définir des mesures pour y faire face (résumé d'auteur).

Lucas-Gabrielli, V., Coldefy, M. et Com-Ruelle, L. (2011). Les distances d'accès aux soins en France métropolitaine au 1er janvier 2007. 2 volumes avec annexes méthodologiques. Rapport Irdes ; 1838-1839**:** 124p.
http://www.irdes.fr/Publications/Rapports2011/rap1838.pdf
http://www.irdes.fr/Publications/Rapports2011/rap1839.pdf

La question de l'accès aux soins médicaux est devenue centrale dans le contexte actuel de fortes mutations du monde hospitalier et de réduction à venir des effectifs de médecins sur le territoire. Cette étude s'intéress- e à l'accessibilité spatiale, mesurée au 1er janvier 2007, au regard des distances et temps d'accès aux soins les plus proches en ville et à l'hôpital. Pour les soins hospitaliers, une méthodologie novatrice est proposée pour le repérage et la géolocalisation des principales spécialités. Le temps d'accès aux soins est globalement satisfaisant : 95 % de la population française a accès à des soins de proximité en moins de quinze minutes. De même, la plupart des médecins spécialistes libéraux et les équipements médicaux les plus courants sont accessibles en moyenne à moins de 20 minutes par la route. Concernant les soins hospitaliers courants, 95 % de la population française peut y accéder en moins de 45 minutes, les trois quarts en moins de 25 minutes. Cependant- , des inégalités d'accès persistent tant pour les spécialités les plus courantes que les plus rares. Les régions rurales, à faible densité de population, cumulent l'éloignement des soins de proximité et de la plupart des soins spécialisés. Depuis 1990, la distance moyenne d'accès aux soins a diminué pour certains spécialistes, notamment les urologues, mais a augmenté pour d'autres, en particulier les pédiatres

Lucas-Gabrielli, V. et Mangeney, C. (2019). "Comment améliorer les mesures d'accessibilité aux soins pour mieux cibler les zones sous-denses ?" Rev Epidemiol Sante Publique.
http://www.sciencedirect.com/science/article/pii/S0398762018314834

Introduction Compared to the other countries of the Organization for Economic Cooperation and Development (OECD), France now enjoys an average level of medical staffing. Yet accessibility to healthcare is a major public policy issue because of the unequal distribution of health professionals throughout the French territories; the authorities are trying to fight the problem by deploying a set of measures favoring the installation and maintenance of healthcare services in areas identified as underserved. Objectives The identification of underserved zones raises the question of what healthcare accessibility measures exist for clarifying the situation in the territories. Localized potential accessibility calculated at the municipal level has been used since 2017 as a criterion for the national selection of underserved areas. We show how this indicator represents an advance in the measurement of accessibility to care, but we also discuss the limits. Proposals for improvement are put forward. Methodology Taking advantage of the availability of new databases, we propose for the Île-de-France region an infra-communal APL indicator that is calculated at a more appropriate geographical level, integrates better consideration of mobility practices linked to the use of care, and takes into account the social aspect of healthcare needs. Results This type of indicator represents an important step forward in measuring territorial disparities in access to care. As in other countries, and in France for other fields, its use as an instrument of public policy raises questions related to the derivation of an operational indicator for delineating areas of action. Résumé Introduction Comparativement aux autres pays de l'Organisation de coopération et de développement économique (OCDE), la France bénéficie aujourd'hui d'un niveau de dotation médicale qui la situe dans la moyenne. L'accessibilité aux soins est pourtant un enjeu majeur des politiques publiques du fait de l'inégale répartition des professionnels de santé sur le territoire que les pouvoirs tentent de combattre en déployant un ensemble de mesures en faveur de l'installation et du maintien de l'offre dans les zones identifiées comme sous-denses. Objectif L'identification des zones sous-denses pose la question des mesures de l'accessibilité aux soins mobilisables pour qualifier la situation des territoires. L'accessibilité potentielle localisée calculée au niveau communal est utilisée depuis 2017 comme critère de sélection nationale des zones sous-dotées. Nous montrons en quoi cet indicateur constitue une avancée dans la mesure de l'accessibilité aux soins, mais nous en discutons aussi les limites. Des propositions d'amélioration sont avancées. Méthode En profitant de la mise à disposition de nouvelles

bases de données, un indicateur d'accessibilité potentielle localisée (APL) infra-communal calculé à un niveau géographique plus adapté, intégrant une meilleure prise en compte des pratiques de mobilité liée aux recours aux soins et une prise en compte de la dimension sociale des besoins est ici proposé pour la région Île-de-France. Résultats Ce type d'indicateur constitue une avancée importante pour mesurer les disparités territoriales d'accessibilité aux soins. Son utilisation en tant qu'instrument de politique publique soulève comme dans d'autres pays ou en France pour d'autres domaines, des débats liés au fait d'en tirer un indicateur opérationnel servant à délimiter des territoires d'action.

Lucas-Gabrielli, V. et Mangeney, C. (2020). "Comment enrichir la mesure des inégalités spatiales d'accessibilité aux médecins généralistes ? Illustration en Ile-de-France." Questions D'economie De La Sante (Irdes)(246): 8. https://www.irdes.fr/recherche/questions-d-economie-de-la-sante/246-comment-enrichir-la-mesure-des-inegalites-spatiales-d-accessibilite-aux-medecins-generalistes.pdf

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Lucas-Gabrielli, V., Nabet, N. et Tonnellier, F. (2001). "Les soins de proximité : une exception française ?" Questions D'economie De La Sante (Credes)(39): 4p. http://www.irdes.fr/Publications/Qes/Qes39.pdf

Pour éclairer le débat sur les soins de proximité survenu à l'occasion de la planification de l'offre hospitalière, cette étude a recensé au niveau international les travaux empiriques sur le dilemme proximité/con- centration. Pour l'accessibilité et le recours aux soins, il apparaît que l'utilisation des services est plus faible pour les personnes éloignées des services, et que l'effet de l'accessibilité semble plus marqué pour les soins préventifs que sur le plan curatif. Pour l'effet du volume sur la qualité (la pratique améliore-t-elle les performances ?), il est difficile de conclure car de nombreuses études ne tiennent pas compte des facteurs de confusion (sévérité du diagnostic). Après avoir considéré l'approche des soins de proximité dans d'autres pays (Grande-Bretagne, Québec, Catalogne), il semble que l'importance accordée aux soins de proximité est une forme d'exception française car dans aucun pays n'apparaît explicitement ce concept comme axe directeur de l'organisation du système de soins

Lucas-Gabrielli, V. et Tonnellier, F. (2001). "Déserts médicaux ou zones défavorisées ? Démographie médicale et indicateur- s de besoins." Technologie Et Sante(45): 32-38.

Mace, J.-M. (2003). Les territoires d'accès et de recours aux soins : l'identification d'arrières pays médicaux

[BDSP. Notice produite par ORSMIP 4Z9R0xVR. Diffusion soumise à autorisation]. Cet article tente d'étudier les réelles disparités spatiales de la densité médicale à travers une échelle géographique opérationnelle infra départementale. Pourtant rechercher une telle échelle territoriale adéquate à la médecine ambulatoire reste aujourd'hui problématique. Est-ce que la méthode pour délimiter les

bassins hospitaliers est transposable à la médecine de ville ? Pour tenter de répondre à cette question, l'auteur teste dans un premier temps, la cohérence entre la pratique spatiale des usagers de la médecine de ville et celle des usagers de la médecine hospitalière en prenant comme exemple la cardiologie médicale. Dans un deuxième temps, l'auteur généralise cette approche à la France entière en nous référant cette fois aux bassins de la médecine hospitalière afin de rechercher d'éventuelles zones fragilisées par la faible présence de médecins généralistes. Enfin le risque d'aggravation de la situation de ces zones sensibles est étudié en s'intéressant au taux de renouvellement des médecins (extrait du texte).

Mangeney, C. (2019). "L'accessibilité aux médecins généralistes en Ile-de-France : méthodologie de mesures des inégalités infra-communales." Synthese : Observatoire Regional De Sante Ile-De-France: 4.

La France, comme les autres pays développés, se trouve dans un contexte de répartition inégale des ressources en santé sur le territoire. L'Île-de-France n'est pas épargnée par ce processus. La question de l'accès aux médecins généralistes occupe une place croissante dans le débat public. Evaluer les inégalités d'accessibilité est un enjeu. La mesure des niveaux d'accessibilité aux soins s'est notablement améliorée ces dernières années grâce à l'indicateur d'Accessibilité potentielle localisée (APL) développé, au niveau national, par la Drees et l'Irdes. En se focalisant sur une seule région (l'Île-de-France), de nouvelles données deviennent disponibles et permettent de proposer des adaptations de cette méthode nationale aux spécificités franciliennes. Différentes hypothèses sont testées. Les résultats sont présentés sous forme de scénarios, illustrés cartographiquement pour en avoir une lecture spatiale. Cette étude a été menée en collaboration avec l'Institut de recherche et de documentation en économie de la santé (Irdes). Parmi les résultats marquants : les résultats sont présentés sous forme de scénarios comparant l'effet de chacune des hypothèses introduites. Des séries de cartes permettent également d'en avoir une lecture spatiale. La réduction de l'échelle géographique d'observation, de la commune à la maille de 200 mètres, met en exergue des disparités infra-communales importantes. La prise en compte des interactions entre l'offre et la demande à l'échelle régionale est la seconde évolution qui modifie le plus les niveaux d'accessibilité mesurés. L'intégration de la dimension sociale des besoins et des pratiques de mobilité différenciées (voiture, transports en commun…) a des impacts plus locaux. Enfin, la mise en contexte plus globale de l'indicateur, notamment en tenant compte des offres médicales alternatives en spécialistes de premier recours, conduit à apporter une vision des équilibres infra-régionaux très sensiblement modifiée. Les résultats sont présentés sous forme de scénarios comparant l'effet de chacune des hypothèses introduites. Des séries de cartes permettent également d'en avoir une lecture spatiale.

Raynaud, J. (2013). L'accès aux soins : des perceptions du territoire aux initiatives des acteurs : concepts, mesures et enquêtes pour une analyse géographique de l'organisation et du développement d'une offre de soins durable. Montpellier Université Paul Valéry. **Thèse ; Doctorat de géographie et aménagement du territoire.:** 426 , tab., graph., fig.
https://tel.archives-ouvertes.fr/tel-00967067

L'accès aux soins est une préoccupation des pouvoirs publics, des patients et des médecins. Après avoir identifié le rôle et les différentes aspirations de ces acteurs de santé, une synthèse reposant sur la construction des concepts en sciences sociales est proposée afin de comparer les différentes approches de l'analyse et de la mesure de l'accès aux soins. En France, ce concept est principalement étudié à travers les difficultés financières ou la distance géographique, pourtant sa nature est multidimensionnelle. A partir de cette analyse, deux enquêtes ont été menées pour recueillir les perceptions de mille patients et cinq cents médecins libéraux afin de déterminer précisément la nature et la fréquence des difficultés d'accès aux soins. Les résultats montrent que les principaux obstacles sont le temps d'attente en cabinet chez les généralistes et le délai d'obtention d'un rendez-vous chez les spécialistes. Ces éléments sont également des facteurs de renoncement aux soins. L'enquête réalisée auprès des médecins identifie leurs perceptions concernant les difficultés d'accès aux consultations de leurs patients, leurs conditions de travail et les solutions privilégiées pour diminuer lesdélais de prise en charge des patients. Un vif intérêt pour le regroupement avec d'autres confrères est exprimé, en particulier pour les jeunes médecins. Ainsi, les deux principaux modes d'organisation émergents de l'offre de soins, les maisons de santé pluriprofessionnelles et la

télémédecine, sont analysés et discutés à la suite de retours d'expériences et d'entretiens semi-directifs. A l'initiative des acteurs locaux, ces coopérations entre professionnels de santé favorisent la qualité et la durabilité des services de soins sur les territoires.

Rican, S., Simon, M., Charraud, A., et al. (1999). "La répartition spatiale des médecins : une analyse selon le zonage en aires urbaines." Solidarite Sante - Etudes Statistiques(1): 23-33, tabl., graph., carte.

Au premier janvier 1997, 174600 médecins étaient en activité en France métropolitaine. Le découpage en zone urbaine permet d'analyser la répartition spatiale des médecins généralistes et spécialistes. L'opposition Nord-Sud persiste, caractérisée par une densité médicale forte dans toutes les villes du pourtour méditerranéen, le Sud-Ouest et une densité faible dans les villes industrielles du Nord. Si la médecine généraliste libérale se répartit de façon équilibrée entre espace urbain et rural, 95% des médecins spécialistes exercent par contre dans les pôles urbains. Paris a la plus forte densité de médecins généralistes libéraux. Cette situation laisse supposer qu'aires de recours aux soins et migrations quotidiennes ne sont pas indépendantes.

Rican, S., Simon, M., Charraud, A., et al. (1999). "Les médecins généralistes libéraux dans les aires urbaines : des densités plus élevées dans le sud et les centres-villes." Etudes Et Resultats(9): 4 , 1 carte, 1 graph., 1 tabl.

Tonnellier, F. (1990). Géographie des soins, géographie économique : Etude des divers contours géographiques en France. Paris Credes .**:** 83 , 23 cartes, 87 graph., 89 tabl.

Ce travail étudie les disparités de géographie de la santé et de géographie des soins en utilisant des contours géographiques plus fins (zone d'emploi, unités urbaines, zone de peuplement industriel et urbain, communes) que ceux employés habituellement (régions, départements). Cette méthode révèle la diversité des situations que peuvent masquer les moyennes départementales. Dans une seconde partie, le rapport étudie les relations entre la géographie des soins et la géographie économique. Il y a notamment une corrélation forte entre la densité des spécialistes et les variables caractéristiques du secteur tertiaire et une liaison forte entre l'offre et la consommation de soins de généraliste.

Tonnellier, F. (1993). L'impossible équité spatiale en France, Paris : CREDES

Tonnellier, F. (2001). L'enjeu territorial dans le domaine de la santé : faits et tendances, Noisy le Grand : SFE

Les inégalités géographiques dans le domaine de la santé (consommation de soins, espérance de vie, densités de médecins ou de lits d'hospitalisation) sont bien connues en France. Certaines personnes persistent d'ailleurs depuis plus d'un siècle : la répartition départementale des médecins n'a pas changé profondément depuis 1900 (alors que les effectifs ont été multipliés par douze). Les enjeux territoriaux concernent la santé publique, la maîtrise de la progression des dépenses d'assurance maladie, les restructurations hospitalières et l'aménagement du territoire. Le débat concerne également le choix d'institutions entre centralisation, décentralisation ou cogestion locale. A cet enjeu institutionnel national comme local s'ajoute la pauvreté des outils d'évaluation de la qualité du service et du caractère adéquat des dépenses effectivement engagées. Car les systèmes d'information en France ont été trop exclusivement tournés vers les recueils de dépenses sans référence à la morbidité ou aux procédures médicales pratiquées (Résumé d'auteur).

Vallée, J., Shareck, M., Le Roux, G., et al. (2019). "Is accessibility in the eye of the beholder? Social inequalities in spatial accessibility to health-related resources in Montréal, Canada." Social Science & Medicine: 112702. https://doi.org/10.1016/j.socscimed.2019.112702

Neighbourhood resources are often considered to be spatially accessible to people when they are located close to their place of residence, a perspective which overlooks individuals' unique lived experience of their neighbourhood and how they define it. Drawing on the relational approach to place and on Sen's capability approach, we explore spatial accessibility to health-related resources, and the social gradient therein, in light of people's place experiences. Using data from 1101 young

adults from Montreal (Canada) who participated in the Interdisciplinary Study of Inequalities in Smoking (ISIS), we compare the social gradients in the presence of health-related resources located (i) within uniform areas (defined as circular buffers and road-network buffers) around participants' place of residence; and (ii) within participants' self-defined neighbourhoods. Social inequalities in accessibility to a diversity of health-related resources (grocery stores, fruit and vegetable stores, eating and drinking places, recreational sports centres, civic, social, and fraternal organizations, bike paths, parks, social services, libraries, dental offices, physician offices) were more pronounced in self-defined neighbourhoods than in uniform buffer areas. Neglecting the variability in people's place experiences may distort the assessment of social inequalities in accessibility, and ultimately, of neighbourhood effects on health inequalities.

Veran, O. (2013). "Des bacs à sable aux déserts médicaux : construction sociale d'un problème public." Seve : Les Tribunes De La Sante(39): 77-85.

La problématique de l'accessibilité aux soins de premier recours, qui n'est pas nouvelle dans les faits, a émergé sur l'agenda public à la faveur de la réduction de l'offre de soins, au début des années 2000. Missions, commissions, projets de loi, articles de presse, reportages : les déserts médicaux font depuis l'objet d'une forte publicisation. Pointée du doigt, l'inégale répartition des médecins généralistes sur le territoire mobilise fortement les experts. Sans nier l'existence d'authentiques zones sous-dotées, et sans en relativiser l'impact pour les populations concernées, les études, bien que relativement affinées, peinent pourtant à décrire une réalité qui colle au vécu des usagers, élus et professionnels du soin, dans les territoires concernés. Cet article vise à mettre en exergue ce décalage et à en comprendre les enjeux sociologiques, étape de clarification indispensable avant toute nouvelle réforme (résumé de l'éditeur).

Vergier, N. et Chaput, H. (2017). "Déserts médicaux : comment les définir ? Comment les mesurer ?" Dossiers De La Drees (Les)(17): 63.
http://drees.solidarites-sante.gouv.fr/etudes-et-statistiques/publications/les-dossiers-de-la-drees/article/deserts-medicaux-comment-les-definir-comment-les-mesurer

[BDSP. Notice produite par MIN-SANTE rEC9oR0x. Diffusion soumise à autorisation]. Les vifs débats actuels sur l'accès aux soins, cristallisés autour de la notion de "déserts médicaux", posent une question centrale de mesure et de définition de termes communs. Ce dossier rassemble les éléments chiffrés disponibles et vise à poser quelques jalons dans la recherche de définitions partagées rendant possible l'objectivation.

Vilain, A. et Niel, X. (1999). "Les inégalités régionales de densité médicale." Etudes Et Resultats(30): 8 , tabl., graph.

Le lieu d'installation des jeunes médecins est, en partie, à l'origine des disparités de densité medicale. La démographie médicale est régulée au niveau régional, à la fois par le numérus clausus et par les ouvertures de postes d'internes.

Régulation de la répartition démographique des médecins généralistes : des résultats très mitigés

Les principales mesures de régulation de l'offre de soins ambulatoires en France

Initialement, la régulation de l'offre des soins ambulatoires obéissait à une stricte adéquation entre les capacités nécessaires pour former les professionnels de santé et la demande de soins. Mais face au constat d'une détérioration progressive de l'accès aux soins, les politiques publiques ont intégré une dimension teritoriale pour privilégier un accès équitable aux soins pour tous les citoyens. Les politiques de régulation ont ainsi évolué d'une logique de capacité vers une logique d'accessibilité.
- 1971 : instauration du Numerus clausus, qui fixe chaque année, par arrêté, le nombre d'étudiants pouvant accéder aux quatre professions des études médicales ;
- 2004 : au travers des conventions avec les professionnels de santé, l'Assurance maladie peut conditionner la liberté d'installation et les conditions de remboursement à l'amélioration de l'offre de soins. Mais cette dimension géographique n'est vraiment effective qu'à partir de 2008[13] ;
- 2009 : la loi HPST (Hôpital Patients Santé et Territoire) décrète des mesures régionales plus ciblées pour privilégier la démographie médicale dans les zones sous-médicalisées comme le soutien à l'exercice regroupé, des bourses d'études et des aides à l'installation ou au maintien de l'exercice en zones déficitaires.
- 2018 : la loi relative à l'adaptation et à la transformation du système de santé réforme les études médicales et supprime le Numerus clausus. Les facultés de médecine définissent les capacités d'accueil en 2e et 3e cycle des études médicales selon les besoins de santé du territoire et sur avis de l'Agence régionale de santé.

POLITIQUE D'ENSEMBLE ET MESURES INCITATIVES A L'INSTALLATION DANS LES ZONES SOUS-MEDICALISEES

Bilan de la politique incitative à l'installation médicale en France

Des mesures incitatives conventionnelles, mais également de nombreux dispositifs d'aides et de défiscalisation nationale et régionale pour soutenir l'installation médicale et l'activité dans les zones sous-dotées ont été enclenchées, en France, depuis les années 1990. Un panorama complet de ces aides figure dans la publication de Galilée sur la désertification médicale, ainsi qu'une évaluation chiffrée de ces mesures.[14] Divers rapports d'évaluation émanant notamment de la Cour des comptes, de l'Assemblée nationale ou du Sénat ont montré l'impact relatif de ces mesures sur la régulation de l'offre de soins, voire leur inefficacité ou leurs coûts excessifs. Ces aides généreraient surtout des effets d'aubaine[15].

Les derniers rapports et projets de loi en France sur la lutte contre la désertification

AMRF (2021). Accès aux soins en milieu rural : la bombe à retardement ? Paris : Association des maires ruraux de France.
Garot, G. (2021). Rapport sur la proposition de loi d'urgence contre la désertification médicale. Paris Assemblée Nationale.
Jumel, S. (2021). Rapport pour une santé accessible à tous et contre la désertification médicale. Paris Assemblée Nationale.
Mouiller, P., Schillinger, P. et Gatel, F. p. (2021). Les collectivités à l'épreuve des déserts médicaux : rapport d'information. Paris Sénat.
Polton, D., Chaput, H. et Portela, M. (2021). Remédier aux pénuries de médecins dans certaines zones géographiques - Les leçons de la littérature internationale. Paris Drees.

[13] Cour des comptes (2014). Les conventions avec les professions libérales de santé. In : Rapport sur l'application des lois de financement de la sécurité sociale. P ; 241-266
[14] Fromentin, V. (éd.). (2017). "La désertification médicale : mythes et réalités.Galilée, H.S. n° 2." Galilée(H.S. N°2
[15] Calmette A. et al. (2014). Rapport d'information sur les zones de revitalisation rurale (ZRR). Assemblée nationale

Revues de littérature

Asghari, S., Kirkland, M. C., Blackmore, J., et al. (2020). "A systematic review of reviews: Recruitment and retention of rural family physicians." Can J Rural Med **25**(1): 20-30.

> Introduction: The recruitment and retention of family physicians in rural and remote communities has been the topic of many reviews; however, a lack of consensus among them with regard to which factors are most influential makes it difficult for setting priorities. We performed a systematic review of reviews which helped to establish an overall conclusion and provided a set of fundamental influential factors, regardless of the consistency or generalisability of the findings across reviews. This review also identified the knowledge gaps and areas of priority for future research. Methods: A literature search was conducted to find the review articles discussing the factors of recruitment or retention of rural family physicians. Results were screened by two independent reviewers. The number of times that each factor was mentioned in the literature was counted and ordered in terms of frequency. Results: The literature search identified 84 systematic reviews. Fourteen met the inclusion criteria, from which 158 specific factors were identified and summarised into 11 categories: personal, health, family, training, practice, work, professional, pay, community, regional and system/legislation. The three categories referenced most often were training, personal and practice. The specific individual factors mentioned most often in the literature were 'medical school characteristics', 'longitudinal rural training' and 'raised in a small town'. Conclusion: The three most often cited categories resemble three distinct phases of a family physician's life: pre-medical school, medical school and post-medical school. To increase the number of physicians who choose to work in rural practice, strategies must encompass and promote continuity across all three of these phases. The results of this systematic review will allow for the identification of areas of priority that require further attention to develop appropriate strategies to improve the number of family physicians working in rural and remote locations.

Aubry, P. et Lemmonier, R. (2019). Les déterminants du parcours professionnel des médecins généralistes en France : une revue systématique de la littérature. Rouen Faculté mixte de médecine et de pharmacie, Université de Rouen. Faculté Mixte de Médecine et de Pharmacie. Rouen. FRA. **Thèse de doctorat en médecine.:** 89.
https://dumas.ccsd.cnrs.fr/dumas-02345119

> Devant la « désertification médicale », et l'accroissement des inégalités territoriales d'accès aux soins de premier recours il faut s'interroger sur les choix de carrière des médecins généralistes, et plus particulièrement sur les facteurs déterminants leur choix d'exercice en médecine ambulatoire de premier recours. De nombreuses études ont été réalisées afin de mieux appréhender ces déterminants. Les facteurs d'installation modifiables font l'objet d'une attention particulière, puisqu'ils devraient inspirer les mesures politiques facilitant l'installation des médecins. L'objectif principal était de recenser les déterminants de l'installation des médecins généralistes en France. L'objectif secondaire était d'identifier les facteurs d'installation modifiables les plus pertinents.

Barnighausen, T. et Bloom, D. E. (2009). "Financial incentives for return of service in underserved areas: a systematic review." Bmc Health Services Research **9**(86): 48, annexes.
http://www.biomedcentral.com/content/pdf/1472-6963-9-48.pdf

> In many geographic regions, both in developing and in developed countries, the number of health workers is insufficient to achieve population health goals. Financial incentives for return of service are intended to alleviate health worker shortages: A (future) health worker enters into a contract to work for a number of years in an underserved area in exchange for a financial pay-off. We carried out systematic literature searches of PubMed, the Excerpta Medica database, the Cumulative Index to Nursing and Allied Health Literature, and the National Health Services Economic Evaluation Database for studies evaluating outcomes of financial-i- ncentive programs published up to February 2009

Benahmed, N., Deliege, D., DeWever A., et al. (2018). "La planification des médecins en Europe : une revue de la littérature des modèles de projection." Rev Epidemiol Sante Publique **66**(1): 63-73.

[BDSP. Notice produite par ORSRA R0x98mAE. Diffusion soumise à autorisation]. Position du problème : Les soins de santé représentent un secteur à forte intensité en capital humain dans lequel les ressources humaines constituent la moitié des dépenses totales. Le nombre de professionnels, ainsi que la répartition de leurs compétences, font donc l'objet d'une attention soutenue de la part des décideurs tant au niveau national qu'au niveau international. L'objectif de cet article est d'analyser les différents modèles européens de projection de l'offre médicale et de la demande en médecins. Méthodes : Afin de décrire les outils de projection utilisés pour la planification médicale en Europe, une revue de la littérature grise a été menée via la consultation de rapports techniques de l'OCDE, de l'OMS et de l'Union européenne, et a été complétée par la consultation des bases de données bibliographiques Pubmed, Medine, Embase et Econlit. Résultats : Les méthodes quantitatives d'évaluation de l'offre médicale reposent généralement sur une modélisation de type "stock and flow" et plus rarement sur une dynamique systémique. Les paramètres inclus dépendent largement de la disponibilité et de la qualité de ces données. Les modélisations des besoins en médecins se limitent à la consommation de soins et n'envisagent que rarement les besoins dans leur globalité ou des objectifs de santé. Outre les méthodes quantitatives, l' "Horizon scanning" est une technique permettant d'apprécier l'évolution de l'offre et de la demande dans un futur incertain à l'aide de techniques qualitatives telles que celles des enquêtes semi-structurées, des panels Delphi ou des "focus group". Enfin, les modèles de projection de l'offre et de la demande doivent être régulièrement mis à jour pour vérifier la réalisation des hypothèses de travail. De plus, une analyse post-hoc est également nécessaire mais trop rarement réalisée. Conclusion : La planification des ressources humaines médicales est très inégalement implantée en Europe. L'implémentation politique des résultats des exercices de projection est cruciale pour une planification efficace. Cependant des données importantes comme celles relatives à la mobilité entre les États membres sont mal connues, compliquant les politiques de régulation de l'offre médicale. Ces politiques se limitent généralement à la régulation de la formation et n'envisagent que trop rarement la délégation et la substitution.

Danish, A., Blais, R. et Champagne, F. (2019). "Strategic analysis of interventions to reduce physician shortages in rural regions." Rural and Remote Health **19**(4): 5466.
https://doi.org/10.22605/RRH5466

Physician shortages in rural regions of OECD countries has led to the development of regulatory, financial, educational and tailored interventions designed to reduce physician shortages. Studies evaluating these interventions report weak or inconclusive results. The objective of this research is to examine the strategic relevance of the interventions by identifying and prioritizing the determinants of physician shortages and analyzing the interventions based on their ability to target the determinants. METHODS: First, the determinants of physician shortages were identified and categorized using Mays et al's 2005 method for reviewing qualitative literature. Second, the determinants were prioritized based on importance, severity and solvability, using Lehmann et al's multilevel categorization of factors affecting attraction and retention. Third, the interventions were analyzed based on their ability to target the determinants through a document analysis as descriptive commentary from a policy analysis perspective. RESULTS:Three individual and 10 contextual (work, rural or international context) determinants of physician shortages were identified. Non-rural background, inadequate training and inadequate incentive structure were prioritized as level 1. Lack of professional support, poor work infrastructure and personal interests were prioritized as level 2. Poor rural infrastructure, inadequate supply planning and cultural difference were prioritized as level 3. Non-minority background, geography and climate, global migration and aging population were prioritized as level 4. Establishing rural medical schools targets the greatest number of priority determinants, followed by financial interventions targeting practicing physicians and non-traditional health services delivery strategies. Curriculum changes, professional support strategies, selective admission to medical schools, financially targeting student physicians and coercive regulatory measures follow. Community support strategies target the fewest number of determinants and trickle-down economic regulation targets none. CONCLUSION:Strategic analysis demonstrates that most interventions designed to reduce physician shortages in rural regions are strategically relevant because they address the priority determinants of physician shortages. A link is established between the determinants of physician shortages and the interventions, thereby addressing an important concern expressed in the literature. An original contribution is made to health human resources literature by relying on established theoretical frameworks to achieve a strategic analysis of the interventions.

Danish, A., Champagne, F. et Blais, R. (2020). "Theoretical analysis of policies to improve the recruitment and retention of rural physicians." Aust J Rural Health **28**(5): 427-433.

The lack of success in resolving the shortage of rural physicians in Organisation for Economic Cooperation and Development countries has been attributed to the weakness of implemented policies. This research examines the theoretical plausibility of policies to improve the recruitment and retention of rural physicians, first, by modelling the policies; and then, by describing how they might achieve their intended outcome based on a theoretical analysis. A theory-driven method relying on published research and expert analysis is used. A conceptual model is created to represent the policies and their underlying assumptions. Then, the functional mechanism of the policies is defined. This research demonstrates that financial, educational and tailored interventions might improve rural physician recruitment and retention, but that regulatory interventions are unlikely to do this. The majority of the policies implemented in Organisation for Economic Cooperation and Development countries are therefore theoretically plausible.

Esu, E. B., Chibuzor, M., Aquaisua, E., et al. (2021). "Interventions for improving attraction and retention of health workers in rural and underserved areas: a systematic review of systematic reviews." J Public Health (Oxf) **43**(Suppl 1): i54-i66.

BACKGROUND: Global health workforce shortages exist with disparities in the skill mix and distribution of health workers. Rural and underserved populations are often disadvantaged in terms of access to health care. METHODS: This systematic review summarized all systematic reviews that assessed interventions for improving attraction and retention of health workers in rural and underserved areas. We systematically searched selected electronic databases up to 31 March 2020. The authors independently screened the reviews, extracted data and assessed the certainty of evidence using GRADE. Review quality was assessed using the ROBIS tool. RESULTS: There was a paucity of evidence for the effectiveness of the various interventions. Regulatory measures were able to attract health workers to rural and underserved areas, particularly when obligations were attached to incentives. However, health workers were likely to relocate from these areas once their obligations were completed. Recruiting rural students and rural placements improved attraction and retention although most studies were without control groups, which made conclusions on effectiveness difficult. CONCLUSIONS: Cost-effective utilization of limited resources and the adoption and implementation of evidence-based health workforce policies and interventions that are tailored to meet national health system contexts and needs are essential.

Grobler, L., Marais, B. J. et Mabunda, S. (2015). "Interventions for increasing the proportion of health professionals practising in rural and other underserved areas." Cochrane Database Syst Rev(6): Cd005314.

BACKGROUND: The inequitable distribution of health professionals, within countries, poses an important obstacle to the optimal functioning of health services. OBJECTIVES: To assess the effectiveness of interventions aimed at increasing the proportion of health professionals working in rural and other underserved areas. SEARCH METHODS: We searched the Cochrane Central Register of Controlled Trials (CENTRAL, including specialised register of the Cochrane Effective Practice and Organisation of Care Group; March 2014), MEDLINE (1966 to March 2014), EMBASE (1988 to March 2014), CINAHL (1982 to March 2014), LILACS (February 2014), Science Citation Index and Social Sciences Citation Index (up to April 2014), Global Health (March 2014) and the World Health Organization (WHO) International Clinical Trials Registry Platform (ICTRP) (June 2013). We also searched reference lists of all papers and relevant reviews identified, and contacted authors of relevant papers regarding any further published or unpublished work. SELECTION CRITERIA: Randomised trials, non-randomised trials, controlled before-and-after studies and interrupted time series studies evaluating the effects of various interventions (e.g. educational, financial, regulatory or support strategies) on the recruitment or retention, or both, of health professionals in underserved areas. DATA COLLECTION AND ANALYSIS: Two review authors independently screened titles and abstracts and assessed full texts of potentially relevant studies for eligibility. Two review authors independently extracted data from eligible studies. MAIN RESULTS: For this first update of the original review, we screened 8945 records for eligibility. We retrieved and assessed the full text of 125 studies. Only one study met the inclusion criteria of the review. This interrupted time series study, conducted

in Taiwan, found that the implementation of a National Health Insurance scheme in 1995 was associated with improved equity in the geographic distribution of physicians and dentists. We judged the certainty of the evidence provided by this one study very low. AUTHORS' CONCLUSIONS: There is currently limited reliable evidence regarding the effects of interventions aimed at addressing the inequitable distribution of health professionals. Well-designed studies are needed to confirm or refute findings of observational studies of educational, financial, regulatory and supportive interventions that might influence healthcare professionals' decisions to practice in underserved areas. Governments and medical schools should ensure that when interventions are implemented, their impacts are evaluated using scientifically rigorous methods to establish the true effects of these measures on healthcare professional recruitment and retention in rural and other underserved settings.

Hamouzadeh, P., Akbarisari, A., Olyaeemanesh, A., et al. (2019). "Physician preferences for working in deprived areas: a systematic review of discrete choice experiment." Med J Islam Repub Iran **33**: 83.

Background: Physician shortages in rural areas is a universal concern, and most countries face this challenge. Many attributes influence the physician preferences about the choice of working location. The aim of this systematic review was to investigate which attributes were included in discrete choice experiment studies and which of them valued the most by physicians. Methods: The following databases were searched: PubMed, Embase, and Web of Science Core Collection. Further studies were retrieved from reference lists of included studies, and grey literature. Studies used discrete choice experiments methods to elicit preferences for working in the deprived area, focus on physicians or medical students, and published between 2000 and 2017 in the English language were included. Results: The literature search yielded 192 studies, of which 14 studies met inclusion criteria. The attributes and attribute levels were identified by literature review and qualitative research. The number of attributes varied from five to ten, and the most frequent number was six attributes. In most studies, maximum of sixteen different scenarios were given to the study samples. The "salary or income" attribute was the most important in fifty percent of the studies and the attributes related to "study and education" was at the next level. Conclusion: Financial attributes are not the only significant attributes considered by the physicians for deciding where to practice, but also the other non-financial attributes are important. It is suggested that based on the economic, social and cultural conditions of each country, a specific incentive package, including a set of financial and non-financial incentives, is developed to attract physicians to the deprived areas.

Holloway, P., Bain-Donohue, S. et Moore, M. (2020). "Why do doctors work in rural areas in high-income countries? A qualitative systematic review of recruitment and retention." Aust J Rural Health **28**(6): 543-554.

OBJECTIVE: To identify and assess the drivers and barriers to recruiting and retaining doctors in rural communities of high-income countries. DESIGN: A systematic review and thematic analysis. SETTING: Publications were sourced from medical and scientific databases online. PARTICIPANTS: Qualitative, mixed-methods and review studies from peer-reviewed journals published since 2000 that discussed recruitment or retention of doctors to rural areas in high-income countries. MAIN OUTCOME MEASURES: Identification and assessment of themes in the literature pertaining to recruitment and retention of rural doctors. Recurrent themes were assessed for relevance and applicability to current rural shortages. RESULTS: A thematic analysis was completed on 41 papers assessed as in scope of the review. Papers were scrutinised for relevance to established rural recruitment and retention strategies. Key themes were rural background, education and training, personal and professional circumstances, and integration with the community. CONCLUSION: While rural origin has long been promoted as the key factor for recruiting rural doctors, initiatives targeting only these individuals ignore a potentially larger cohort of future rural doctors. Rurally focused medical education and training need to encompass students and doctors from all backgrounds. The major barriers to rural recruitment are family-unit considerations for partners and children, concerns over isolation and a poor perception of rural practice. Attracting doctors to practise rurally is only half the challenge however, and strategies to retain rural doctors need a greater focus on personal and professional support networks and community integration. Additional strategies are needed to retain international and bonded doctors restricted to rural areas.

Koebisch, S. H., Rix, J. et Holmes, M. M. (2020). "Recruitment and retention of healthcare professionals in rural Canada: A systematic review." Can J Rural Med **25**(2): 67-78.

INTRODUCTION: This review explores a pertinent issue for healthcare professionals and recruiters alike: which factors are most important in the recruitment and retention of these professionals in rural practice in Canada. Existing research concentrates on specific factors or focused populations. This review was created to explore multiple factors and a wider population of healthcare professionals, including chiropractors, osteopaths, dentists and physiotherapists. METHODS: A literature search was carried out on four databases. Data from included studies were extracted, and thematic analysis was conducted on relevant findings. The quality of individual studies was assessed, and then themes were evaluated for overall confidence based on four components, using the Confidence in the Evidence for Reviews of Qualitative Research. RESULTS: One quantitative and four qualitative articles were identified, all of which targeted physicians. Five themes - Personal/family matters, Community factors, Professional practice factors, Professional education factors and Economic factors - were generated in two domains, recruitment and retention. Forty major codes were generated through axial coding of open codes. Codes included attraction to rural lifestyle, recreational activities, Scope of practice, rural training and incentives. Scope of practice was deemed very important as a factor of recruitment, as was attraction to rural lifestyle. Incentives were found to be of little importance in influencing the recruitment of healthcare professionals, and even less important for retention. CONCLUSION: Wide scope of practice and attraction to the rural lifestyle were considered the most important for recruitment and to a lesser extent, retention, among the five papers studied. A lack of research was determined in the realm of factors influencing the recruitment and retention in healthcare professionals other than medical doctors in Canada. Therefore, it is recommended that further such studies investigate specific healthcare professionals.

Mbemba, G. I. C., Gagnon, M.-P. et Hamelin-Brabant, L. (2016). "Factors influencing recruitment and retention of healthcare workers in rural and remote areas in developed and developing countries: an overview." Journal of Public Health in Africa **7**(2).

Polton, D., Chaput, H. et Portela, M. (2021). Remédier aux pénuries de médecins dans certaines zones géographiques - Les leçons de la littérature internationale. Paris Drees**:** 78. https://drees.solidarites-sante.gouv.fr/sites/default/files/2021-12/DD89.pdf

Depuis une vingtaine d'années, la référence de plus en plus fréquente aux « déserts médicaux » dans les médias et le débat public traduit la préoccupation croissante de la population concernant l'accessibilité géographique aux soins de médecins. Même si ce terme recouvre une réalité qu'il est difficile d'objectiver, il est indéniable que l'évolution de la démographie médicale en France, notamment pour la médecine générale, a accru les tensions dans les territoires qui étaient déjà les moins bien desservis. Dans les prochaines années, alors que le vieillissement de la population entraînera une augmentation des besoins de soins, les projections laissent augurer une diminution de l'offre médicale en médecine de ville, surtout en soins primaires. Ces tendances risquent de dégrader encore l'accessibilité dans les zones les moins attractives. La situation de la France n'est pas unique. La répartition géographique des effectifs médicaux est inégale dans tous les pays, à des degrés divers. Partout, l'accès aux services de santé est plus difficile à assurer dans certains territoires, tels que les zones rurales, notamment éloignées ou isolées, ou les zones urbaines défavorisées. Répondre aux besoins sur l'ensemble du territoire et mieux équilibrer la distribution de l'offre sont des préoccupations largement partagées, dont plusieurs rapports internationaux se sont fait l'écho dans les années récentes (respectivement des rapports de l'Organisation mondiale de la santé [OMS], de l'Organisation de coopération et de développement économiques [OCDE] et de la Com-mission européenne). Pour remédier à ces difficultés, des stratégies variées ont été déployées au cours des dernières décennies. L'objectif de ce Dossier de la DREES est, à partir d'une analyse de la littérature internationale, de décrire ces politiques, de rassembler les éléments d'évaluation de leurs impacts et de dégager quelques réflexions pour alimenter le débat sur la situation française. Ce dossier comporte également un état des lieux des préférences des médecins dans leur choix d'installation et des princi-paux déterminants de leur installation et de leur maintien sur leur lieu d'exercice, autant de leviers potentiels pour l'action publique.

Russell, D., Mathew, S., Fitts, M., et al. (2021). "Interventions for health workforce retention in rural and remote areas: a systematic review." Hum Resour Health **19**(1): 103.

BACKGROUND: Attracting and retaining sufficient health workers to provide adequate services for residents of rural and remote areas has global significance. High income countries (HICs) face challenges in staffing rural areas, which are often perceived by health workers as less attractive workplaces. The objective of this review was to examine the quantifiable associations between interventions to retain health workers in rural and remote areas of HICs, and workforce retention. METHODS: The review considers studies of rural or remote health workers in HICs where participants have experienced interventions, support measures or incentive programs intended to increase retention. Experimental, quasi-experimental and observational study designs including cohort, case-control, cross-sectional and case series studies published since 2010 were eligible for inclusion. The Joanna Briggs Institute methodology for reviews of risk and aetiology was used. Databases searched included MEDLINE (OVID), CINAHL (EBSCO), Embase, Web of Science and Informit. RESULTS: Of 2649 identified articles, 34 were included, with a total of 58,188 participants. All study designs were observational, limiting certainty of findings. Evidence relating to the retention of non-medical health professionals was scant. There is growing evidence that preferential selection of students who grew up in a rural area is associated with increased rural retention. Undertaking substantial lengths of rural training during basic university training or during post-graduate training were each associated with higher rural retention, as was supporting existing rural health professionals to extend their skills or upgrade their qualifications. Regulatory interventions requiring return-of-service (ROS) in a rural area in exchange for visa waivers, access to professional licenses or provider numbers were associated with comparatively low rural retention, especially once the ROS period was complete. Rural retention was higher if ROS was in exchange for loan repayments. CONCLUSION: Educational interventions such as preferential selection of rural students and distributed training in rural areas are associated with increased rural retention of health professionals. Strongly coercive interventions are associated with comparatively lower rural retention than interventions that involve less coercion. Policy makers seeking rural retention in the medium and longer term would be prudent to strengthen rural training pathways and limit the use of strongly coercive interventions.

Études françaises

Voir aussi :

« Déserts médicaux » : quelles réponses d'ici 2030, et au-delà… ? Position Paper du CES avec J. Mousquès et G. Chevillard
> Site du CES, février 2022

AMRF (2021). "Le manque de médecins : aux sources de la désertification. Troisièmes résultats exclusifs." 36 000 Communes(382): 4.
https://fr.calameo.com/read/0053079897f705c96d3d5

Cette étude pointe les inégalités importantes entre ville et campagne concernant l'accès aux soins en France. Dans les départements hyper-ruraux, le nombre de spécialistes est de 0,56 pour 1 000 habitants, contre 1,38 dans les territoires hyper-urbains.

AMRF (2021). Accès aux soins en milieu rural : la bombe à retardement ? Paris : Association des maires ruraux de France**:** 48p.
https://santeterritoiresnouvelleaquitaine.org/2021/12/14/acces-aux-soins-en-milieu-rural-la-bombe-a-retardement/

AMRF. (2021). "Santé : vous reprendrez bien un peu de désert ? Dossier." 36 000 Communes(372): 7.
https://fr.calameo.com/read/00530798976b211c0b720

Alors que la population augmente et notamment celle des personnes âgées, la croissance du nombre des médecins ne permet plus de suivre la demande et l'on assiste à une stagnation de la densité médicale depuis les années 2000 à l'échelle du pays tout entier et à une désertification médicale dans de nombreux territoires. Depuis 30 ans, cette désertification est chaque année un peu plus marquée car il s'y est ajouté une baisse passagère des effectifs de nouveaux docteurs qui a encore aggravé le

peu d'installations et de reprises de cabinet. Ce sont des régions entières ou presque qui sont atteintes : la région Centre, la Champagne-Ardenne, l'Auvergne en dehors du Puy de Dôme ou la Bourgogne. S'observe ainsi un déclassement de pans entiers du territoire.

Ambert, V. (2019). Bien-être au travail et installation pérenne des médecins généralistes en milieu rural une étude qualitative**:** 125.
https://dumas.ccsd.cnrs.fr/dumas-02296417

Contexte:Actuellement, les modes d'investissement professionnels, aussi bien des femmes que des hommes médecins tendent vers un juste équilibre entre l'organisation de leur activité professionnelle et la gestion de leur vie familiale. Les nouvelles générations de médecins redoutent que l'installation en milieu rural ne permette pas cet équilibre.Objectif: Apporter une contribution à la connaissance des déterminants de la décision de jeunes MG ruraux à s'installer et à se sentir bien dans leur travail.Méthode:Recherche qualitative par entretiens semi-dirigés auprès de MG installés en milieu rural dans le Puy-de-Dôme et de professionnels ressources.Résultats: Les facteurs favorisants l'installation rurale étaient l'expérience des remplacements, le regroupement, le soutien des patients et l'accompagnement du projet d'installation.Les freins étaient représentés par la crainte de perdre leur qualité de vie et les difficultés de gestion d'un cabinet. Le milieu rural se concevait à condition de l'avoir préalablement expérimenté et si l'entourage familial adhérait au projet,souvent dans le but de répondre aux besoins d'un territoire déficitaire. La charge de travail et l'éloignement étaient les principales contraintes évoquées propres au milieu rural. Enfin, l'accès au bien-être dépendait des possibilités d'une maitrise de sa charge de travail, d'une organisation optimale du cabinet médical, et du sentiment d'être un bon médecin, permises par l'exercice coordonné.Conclusion:Parvenir en milieu rural à réguler sa charge de travail et préserver sa qualité de vie ne s'improvise pas. Il est nécessaire de s'y confronter au préalable, notamment par l'exercice de remplacements. Si beaucoup de contraintes imposées par le territoire rural dépendent de paramètres solutionnables, le concept d'attachement au territoire (inné ou acquis)est ancré. L'accès au bien-être au travail en milieu rural semble pour la plupart des jeunes MG passer par l'exercice coordonné. Le concept nouveau «d'équipe de soin primaire» semble profitable à la fois aux MG et aux patients.

Arnaud, C. et Thiron, P. (2013). Médecine générale en milieu rural : freins à l'installation : étude qualitative nationale auprès d'internes et de médecins installés**:** 167.
https://dumas.ccsd.cnrs.fr/dumas-00904065

Introduction : L'accès aux soins est inégal en France. Les zones rurales sont particulièrement touchées car elles cumulent les départs en retraite massifs des médecins et les réticences d'installation des nouveaux diplômés. L'objectif de cette étude est de définir les freins à l'installation en milieu rural chez les futurs médecins. Matériel et méthodes : Cette étude qualitative a été menée par voie téléphonique auprès de médecins généralistes et d'internes travaillant en France métropolitaine. Le recueil des données a été réalisé entre le 27 avril et le 15 août 2013 par entretiens semi-dirigés. Résultats : Dix-huit entretiens ont permis de dégager trois types de freins à l'installation en milieu rural. Les premiers étaient liés à la ruralité : problème de la définition de la ruralité, isolement global et difficultés d'emploi pour le conjoint. Venaient ensuite les freins liés à la pratique de la médecine en milieu rural : isolement professionnel, surcharge de travail et proximité de la population. Les derniers freins étaient liés à la formation : sélection initiale des étudiants et stage ambulatoire en milieu rural. Conclusion : Les freins à l'installation en milieu rural sont nombreux et non résolus par les mesures incitatives actuelles. Cependant, les internes semblent porter un intérêt certain à l'exercice de la médecine en zone rurale. L'enjeu est donc de considérer les attentes des jeunes médecins pour espérer les voir s'installer en zone rurale. D'autres études pourraient préciser les motivations à l'installation en milieu rural et évaluer l'impact réel des mesures incitatives.

APVF (2020). Pour une offre de soins de qualité et de proximité dans les territoires : Contribution de l'APVF. Paris APVF**:** 20.
https://www.apvf.asso.fr/publications/contribution-pour-une-offre-de-soins-de-qualite-et-de-proximite-dans-les-territoires/

Dans cette étude, l'Association des petites villes de France propose une transformation du système de soins français et l'instauration d'une véritable démocratie sanitaire dans les territoires fondée sur la proximité et une logique de coopération entre tous les acteurs du système de soins. Avec un chantier prioritaire : la lutte contre la désertification médicale.

Babinet, O. et Isnard Bagnis, C. (2021). Les déserts médicaux en question(s), Rennes : HyGée

En 2018, les territoires sous-dotés en médecins généralistes concernaient près de 6 % de la population, soit environ 3,8 millions de Français. Dans l'imaginaire collectif, le désert médical, c'est la campagne à perte de vue, des villages dépeuplés, sans écoles, sans services publics et quelques habitants obligés de s'exiler pour être soignés… Or, la réalité est tout autre : au-delà de territoires dépourvus d'offre sanitaire, les déserts sont partout, de la périnatalité à la dépendance, en santé mentale, dans les maladies rares… La discordance entre besoin et offre en santé est ici retenue comme l'expression d'un désert médical. Comment notre société peut-elle laisser s'installer, parfois à son insu, ces déserts médicaux ? Comment la pandémie a-t-elle pu aggraver encore la situation et quelles leçons en tirer ? Pourquoi les solutions, dont la e-santé, ont-elles tant de mal à émerger ? En 10 questions simples et directes, ce livre propose un panorama et une nouvelle vision des déserts médicaux qui intéressera les collectivités, professionnels de santé et toute personne curieuse de la question des inégalités de santé.

Barbat-Bussiere, S. (2009). L'offre de soins en milieu rural. L'exemple d'une recherche appliquée en Auvergne, Clermont-Ferrand : Presses universitaires Blaise Pascal

Issu d'une thèse de doctorat, cet ouvrage prend acte de la persistance des inégalités territoriales face à une demande croissante d'équité sociale en matière d'offre de soins dans les régions à dominante rurale, qui sont sous-médicalisées. Alors que les acteurs de la santé sont les éléments clés de la vie locale et des animateurs potentiels du tissu économique et de l'attractivité des territoires, cette analyse questionne la pertinence des découpages territoriaux pour aborder la question de la gestion collective de la santé dans les campagnes sensibles.

Barlet, M., et al. (2012). "L'accessibilité aux médecins généralistes libéraux : plus faible en milieu rural." Pour(214): 31-40.

Mesurer l'adéquation spatiale entre l'offre et la demande de médecins généraliste libéraux est une tâche délicate car elle nécessite de définir correctement à la fois la demande de soins, l'offre considérée et la maille territoriale pertinente pour cette mesure. Un nouvel outil a donc été mis en œuvre afin de répondre aux principales critiques faites aux indicateurs usuels d'accessibilité aux soins, tout en restant relativement aisé à calculer dans la mesure où il mobilise des données facilement disponibles. Cet outil, l'indicateur d'accessibilité potentielle localisée (APL), est un indicateur local, calculé au niveau de chaque commune, mais qui considère également l'offre de médecins et la demande des communes environnantes. Il intègre également une meilleure définition de l'offre et de la demande de soins en prenant en compte l'activité des professionnels et la structure par âge de la population pouvant recourir à ces soins. Cet indicateur est notamment particulièrement adapté pour confronter l'accessibilité aux médecins généralistes libéraux des habitants des communes rurales à celles des habitants des communes urbaines. Cet indicateur a été développé conjointement par la Drees et l'Irdes.

Barlet, M., et al. (2012). "Santé en milieu rural : réalités et controverses. Dossier." Pour(214): 85-171.

Réalisé par le Groupe de recherche pour l'éducation et la prospective (Grep) avec le concours des acteurs de terrain (élus locaux, professions de santé), ce numéro de la revue POUR, paru en juillet 2012, propose d'abord un état des lieux, où il n'est pas seulement question de l'accessibilité des médecins généralistes, mais aussi des difficultés rencontrées par les pharmacies rurales ou des mesures prises pour équilibrer l'offre de soins infirmiers sur le territoire. Il est ensuite question des mesures prises ou à prendre pour améliorer l'offre de soins mais surtout en améliorer l'accès pour les habitants des zones rurales. Ce dossier invite à ne pas se focaliser sur la notion de distance ou de

temps de trajet pour se rendre à l'hôpital ou chez le médecin, mais à considérer l'état de santé de la population (proportion de personnes âgées et d'enfants, plus vulnérables), sa mobilité et sa situation sociale. Ainsi, pour l'association Médecins du Monde, "l'enjeu majeur de la santé en milieu rural n'est pas celui du désert médical mais celui de l'accès aux soins de populations précaires". Il présente aussi des arguments pour ou contre les mesures d'incitation à l'installation de jeunes médecins à la campagne. Si les contrats (incitatifs) d'engagement de service public semblent faire leurs preuves en Bourgogne, la régulation (coercitive) de l'offre de soins infirmiers aussi. Et quand certains fustigent de simples "effets d'aubaine", d'autres dénoncent la complexité de dispositifs mal connus des principaux concernés : 95% des internes interrogés au niveau national semblent ne pas connaître ce type de mesures... Plus largement, ce dossier invite à adopter une démarche qualitative, pour évaluer correctement les besoins mais surtout apporter une réponse adaptée. En effet les élus, professionnels de santé et autres acteurs de terrain s'accordent tous pour souligner : l'importance et l'intérêt de toutes les initiatives de coordination entre acteurs sanitaires et sociaux, via des maisons de santé, des rencontres régulières, des dispositifs de transmission d'information... ; le poids de facteurs non économiques dans le choix d'installation des médecins : attractivité du cadre de vie et présence de services, possibilité de travailler en relation avec d'autres professionnels, poids des tâches administratives et de gestion dans l'activité...Quelques retours d'expériences illustrent ce point de vue.

Barlet, M. et Collin, C. (2010). "Localisation des professionnels de santé libéraux." Serie Statistiques - Document De Travail - Drees(149): 27-56, tabl., cartes.

La présente étude s'intéresse à la localisation des professionnels de santé libéraux de premier recours (médecins généralistes, pharmacies, infirmiers, masseurs-kinésithérapeutes, chirurgiens-dentistes) ainsi qu'à certains des médecins spécialistes en accès direct (en pédiatrie, en ophtalmologie, en gynécologie) en France métropolitaine en 2008. À l'échelle des bassins de vie, les médecins et les pharmacies sont mieux distribués sur le territoire que la plupart des services et équipements sanitaires ou non sanitaires. Les médecins généralistes libéraux et les pharmacies sont situés là où se trouve la population. Ainsi, même s'il peut exister localement des problèmes d'accès géographique à ces professionnels, ce résultat suggère que ce phénomène est globalement limité. Les autres professionnels de premier recours sont un peu moins bien répartis que les médecins généralistes libéraux. Enfin, les médecins spécialistes présentent l'adéquation avec la population la plus faible des professions étudiées. L'étude distingue pour les médecins généralistes les médecins de moins de 40 ans. Ces derniers ne sont pas aussi bien répartis sur le territoire que leurs confrères au regard de la répartition de la population. L'étude des situations de colocalisation (présence simultanée dans une même zone géographique) montre que les autres professionnels de santé et, en particulier les médecins spécialistes, tout en étant moins bien répartis sur le territoire que leurs confrères généralistes, sont plus fréquemment présents parmi les équipements ou services à proximité des médecins généralistes libéraux que sur l'ensemble du territoire. Les médecins généralistes de moins de 40 ans sont, quant à eux, plutôt installés à proximité d'un de leurs jeunes confrères.

Barnay, T. et Ulmann, P. (2005). "La médecine de ville : vers de nouvelles règles ?" Cahiers Francais(324): 66-71.

Si l'activité des praticiens libéraux continue de reposer sur la Charte de la médecine libérale élaborée en 1927, les principes qui la sous-tendent sont d'ores et déjà, selon les auteurs, largement dépassés dans les faits. Cela devrait faciliter l'acceptation des nécessaires changements à opérer dans l'exercice de la médecine de ville. Les auteurs expliquent aussi que l'inégale répartition territoriale de l'offre de santé, bientôt aggravée par les départs massifs à la retraite de la génération du baby boom, rendront indispensable un aménagement de la liberté d'installation reconnue aujourd'hui encore aux médecins (résumé d'auteur).

Barthe, L. et Lima, S. (2012). "L'émergence d'une politique locale de santé dans les territoires ruraux : enjeux et limites." 50-69.
http://sds.revues.org/1686

La désertification médicale progresse dans les territoires ruraux. Dans les campagnes les plus isolées, l'accès au soin est mis à mal par une série de mutations sociales et spatiales (du vieillissement démographique au développement de la mobilité). Enjeu national, le maintien d'un service public de santé au niveau local est devenu une priorité pour les collectivités territoriales de plus en plus en prises avec la problématique de l'équité spatiale.

Barthe, L. et Milian, J. (2012). "Les espaces de la faible densité." Territoires 2040(3): 151-183.

Définie à partir d'un seuil inférieur de 30 habitants au km2, la faible densité marque de son empreinte l'espace national : 42 % des communes françaises, 48 % du territoire, 5,3 millions d'habitants permanents. La faiblesse relative de l'occupation humaine, longtemps appréhendée comme un phénomène de déprise ou de dévitalisation révélateur d'inégalités de développement (Béteille R. & Montagné-Villette S., 1996), apparaît aujourd'hui sous de nouveaux prismes.

Baudier, F., et al. (2010). "La dynamique de regroupement des médecins généralistes libéraux de 1998 à 2009." Questions D'economie De La Sante (Irdes)(157): 6.
http://www.irdes.fr/Publications/2010/Qes157.pdf

À partir des enquêtes Baromètre santé médecins généralistes de 1998, 2003 et 2009, l'Inpes et l'Irdes analysent ici, sur la base d'échantillons représentatifs au plan national, l'exercice en groupe des généralistes libéraux, ses caractéristiques et son évolution. L'exercice en groupe est aujourd'hui majoritaire. La part des médecins généralistes libéraux déclarant travailler en groupe est passée de 43 % en 1998 à 54 % en 2009. Cette augmentation est particulièrement marquée chez les médecins de moins de 40 ans qui sont près de huit sur dix à travailler en groupe. Les médecins généralistes exerçant en groupe travaillent pour les trois quarts d'entre eux dans des cabinets exclusivement composés de médecins généralistes et/ou spécialistes. Ces cabinets rassemblent en majorité deux ou trois praticiens. Le regroupement semble par ailleurs transformer le rythme de travail hebdomadaire des généralistes sans pour autant modifier leur volume d'activité sur la semaine : les généralistes exerçant en groupe déclarent en effet travailler plus souvent moins de cinq jours mais réaliser plus d'actes par jour que les médecins exerçant seuls. La pratique de groupe est également associée à un mode d'exercice qui laisse une plus grande place à la formation, l'encadrement des étudiants et s'appuie également plus fréquemment sur l'outil informatique (résumé d'auteur).

Bergeron, M. et Moyal, A. (2019). Quel avenir pour l'organisation des soins primaires en France : synthèse du séminaire international pluridisicplinaire coordonné par la Chaire santé de Sciences po, Paris : Sciences Po

Après une définition et un aperçu historique sur les soins primaires, cet ouvrage rassemble les communications données lors d'un congrès (Chaire santé, LIEPP...) sur la recherche et l'organisation des soins primaires en France.

Bismuth, M., Birebent, J., Driot, D., et al. (2019). "Les facteurs de satisfaction professionnelle favorisant le maintien dans la profession des médecins généralistes libéraux français : revue systématique de la littérature." Medecine : De La Medecine Factuelle a Nos Pratiques **15**(3): 138-144.

Le contexte actuel de crise des Soins premiers, combiné aux nouvelles aspirations et responsabilités familiales des praticiens, sont à l'origine d'une pénurie en acteurs des soins de premier recours. Pour solutionner cette problématique, une nouvelle dynamique tend à s'intéresser aux aspects « positifs » de la Médecine générale. Pour cela il est important d'identifier les facteurs de satisfaction professionnelle des médecins généralistes libéraux français, favorisant leur maintien dans la profession.

Blondin, S. (2012). Zones rurales, à votre santé, Paris : Ginkgo Editions

La désertification médicale est une réalité qui n'est plus niée par personne. Certaines régions manquent cruellement de médecins alors que d'autres sont saturées ; certaines spécialités sont désertées, alors que d'autres sont encombrées. Comment aborder la problématique des

désertifications médicales ? Quelles solutions rapides apporter ? Cet ouvrage rend public un rapport présenté au Sénat, analyse les causes, dénonce les dysfonctionnements et propose des solutions rapides et efficaces à mettre en place (d'après la 4è de couv.)

Bonnet, C., Leclerc, C., Noel, C., et al. (2021). Approche synthétique des besoins de la population dans les domaines couverts par certaines formations du 3ème cycle d'études médicales. Paris ONDPS**:** 106. https://solidarites-sante.gouv.fr/IMG/pdf/notes_de_synthese_fnors_ondps__besoins_de_la_population_en_lien_avec_les_fst_et_options.pdf

En 2017, la ministre de la santé Agnès Buzyn invitait l'Observatoire national de la démographie des professions de santé (ONDPS) à faire des propositions pour « la détermination du nombre de postes à ouvrir par subdivision à compter de 2019 pour les options et les formations spécialisées transversales proposées dans le cadre du troisième cycle des études médicales». C'est dans ce cadre que l'ONDPS a sollicité la Fnors pour lui apporter des éléments d'appréciation des besoins de la population dans un certain nombre de domaines au niveau national et au niveau des subdivisions d'internat. Ce document restitue les huit monographies thématiques réalisées sur les champs couverts par cinq formations spécialisées transverses (Addictologie, Douleur, Maladies allergiques, Nutrition appliquée, Sommeil) et pour les deux options du DES de Psychiatrie (Psychiatrie de l'enfant et de l'adolescent, Psychiatrie de la personne âgée).

Bouet, P., et al. (2003). Liberté d'installation, liberté d'exercice : quelle médecine pour quels médecins ? Paris CNOM**:** 46 , graph.

Ce rapport de la Commission nationale permanente a été adopté lors des Assises du Conseil national de l'Ordre des médecins du 14 juin 2003. Les auteurs se sont interrogés sur l'évolution de l'installation des médecins, notamment des problèmes à venir et des possibilités d'y remédier. En premier lieu, le document fait le point sur l'installation professionnelle actuelle des jeunes médecins : qui sont les nouveaux installés, où vont-ils, quelles sont leurs aspirations. Celui-ci analyse ensuite les facteurs influençant la future installation professionnelle des étudiants durant la période des études médicales, puis décrit les caractéristiques des médecins installés. Il aborde également la question de la migration des médecins dans les pays européens. La réflexion se poursuit sur les besoins de la population et les priorités de santé publique, pour se demander s'il est possible de déterminer les besoins en médecins. Après avoir exposé le bilan de la situation, les difficultés actuelles et à venir, les outils à la disposition des pouvoirs publics, et élabore des propositions d'orientation du métier de médecin en termes de compétence et de mode d'organisation des soins et des professionnels.

Bouf, A. (2017). "Désertification tout court : qui va sauver l'Eure-er-Loir ? Qu'en est-il de l'offre de soins ?" Medecine : De La Medecine Factuelle a Nos Pratiques **13**(9): 421-427.

La démographie médicale, la désertification des zones rurales, la non-installation des jeunes médecins, notamment généralistes, une fois diplômés font régulièrement la une des médias. Nombre de petites communes se désespèrent et voudraient apporter une réponse à leurs administrés. À l'issue de ses longues années d'études dans une ville universitaire, le jeune médecin diplômé, citadin accompli, volontiers parent, en couple avec un autre diplômé dont la carrière décolle dans sa propre profession, ayant déjà un aperçu de la médecine générale au cours de ses stages de fin d'étude, refuse d'endosser l'habit de ses anciens à l'activité souvent débordante. L'appréhension de la lourdeur administrative et de l'engagement financier, voire pour certains un sentiment de difficulté de maintenir une qualité de pratique exigeante hors du cadre hospitalier, expliquent une hésitation à sauter le pas d'un engagement définitif, loin de « ses bases », dans un environnement mal appréhendé. Quelle est la réalité du terrain et de l'offre de soins dans un département comme l'Eure-et-Loir, finalement relativement proche de la capitale, mais aussi plus largement dans toute la région Centre comparativement au reste du territoire ? Quelles sont les raisons de la disparité ? Cet article apporte quelques éléments de réponse.

Bourgueil, Y., Bourdillon, F., Brucker, G., et al. (2016). Démographie et ressources humaines en santé. Traité de santé publique., Paris : Lavoisier Médecine Sciences: 381-387.

Cet article vise à présenter dans un premier temps, l'éventail des métiers de la santé, les principes de régulation et leurs évolutions récentes. Dans un deuxième temps, nous exposerons la situation de la ressource humaine en santé en France en 2015 en termes démographiques quantitatifs et les perspectives que dessinent les choix de régulation quantitative adoptés, mais également les questions posées par les évolutions très récentes, aussi bien à l'échelle de l'Europe qu'à l'échelle des individus dont les comportements changent en début comme en fin de carrière. Enfin, nous proposerons plusieurs pistes d'actions publiques actuellement débattues sur la ressource humaine en santé pour faciliter la transformation des organisations de soins et des pratiques au service de la santé publique (résumé d'auteur).

Bourgueil, Y. (2009). "Secteur ambulatoire : des enjeux majeurs d'organisation et de régulation pour l'avenir." Regards Croises Sur L'economie(5): 159-167.
http://www.cairn.info/revue-regards-croises-sur-l-economie-2009-1-p-159.htm

Bourgueil, Y., et al. (2010). "Évolution des métiers de la santé : coopérations entre professionnels. Dossier." Actualite Et Dossier En Sante Publique(70): 13-66.

[BDSP. Notice produite par EHESP nGBpkR0x. Diffusion soumise à autorisation]. Pourquoi parle-t-on aujourd'hui de coopération interprofessionnelle ? Quels sont les enjeux soulevés par l'évolution des métiers de la santé ? Que peuvent nous apprendre les expériences des autres pays ? Que sait-on des pratiques réelles ? Pourquoi des expérimentations en France ? Quelles en sont les enseignements ? Quelles sont les perspectives d'évolution ? Autant de questions qui sont explorées par ce dossier. Celui-ci met en lumière l'importance de la ressource humaine dans le fonctionnement des services de santé et donc de sa régulation comme outil et levier de toute politique de santé. Il vise à éclairer les lecteurs sur les raisons d'une adaptation du cadre de régulation des professions de santé, les dimensions impliquées par une telle adaptation et les enjeux qu'une telle démarche soulève. Il apporte également des enseignements sur les caractéristiques d'une démarche d'expérimentation et son issue dans le champ de la santé en France.

Brechat, N., Brechat, P. H., Ross, F., et al. (2019). "Réduire les « déserts médicaux » et désengorger les urgences tout en prenant en charge les « usagers complexes » et le développement de la prévention et diminuer les inégalités de santé est possible : des systèmes y parviennent." Journal De Droit De La Sante Et De L' Assurance Maladie(22): 28-35.

En France, les « déserts médicaux » progressent, les « usagers complexes », c'est à dire âgés, atteints de pathologies chroniques, précaires, ont des difficultés de prise en charge, les urgences sont engorgées, la prévention est peu développée et les inégalités de santé s'accroissent. Notre système de santé et d'assurance maladie peut être discriminant et ne favorise pas l'atteinte des objectifs modernes des systèmes. Arriver à résoudre ces défis impose de s'inspirer de solutions innovantes que d'autres systèmes ont mis en place avec succès. Cet article présente les organisations modernes, efficientes et efficaces, mises en place par Intermountain Healthcare en Utah et Stanford Health Care en Californie aux États-Unis d'Amérique, systèmes de santé et d'assurance maladie considérés comme faisant partie des meilleurs du monde. Ces systèmes de santé et d'assurance maladie ont mis en place des dispositifs qui permettent de réduire les « déserts médicaux », de prendre en charge au mieux les « usagers complexes » et de désengorger les urgences tout en réduisant les inégalités de santé. Ces systèmes favorisent l'amélioration continue de la qualité ainsi que le management scientifique. Ces deux systèmes laïcs sont intégrés et ont mis en place une organisation étagée en quatre lignes, notamment dans les territoires de santé défavorisés. Ces systèmes permettent une prise en charge globale, stratifiée et suivie et mettent en œuvre le modèle des soins chroniques. Ils prennent en charge tout le monde de façon non discriminante. Ils sont en capacité d'atteindre les objectifs modernes du Triple Aim : améliorer la santé de la population ; accroitre la qualité des soins ; et maîtriser les coûts.

Breuil-Genier, S. (2005). "La situation professionnelle des conjoints de médecins." Etudes Et Resultats(430): 12.

Bruguiere, M. T. (2011). Les territoires de santé : rapport d'information. Paris Sénat: 81 , ann. http://www.senat.fr/rap/r10-600/r10-6001.pdf

L'offre de soins, dans nombre de territoires français, n'est plus au diapason de la demande. En s'emparant, à son tour, de cette question, la Délégation du Sénat aux collectivités territoriales et à la décentralisation a souhaité l'aborder avec un regard différent : celui des élus locaux. Estimant qu'une politique efficace de protection de la santé ne peut se concevoir sans prendre en compte leur rôle et leurs attentes en la matière, le rapport avance une vingtaine de propositions pour assurer une répartition équilibrée de l'offre de soins sur l'ensemble des territoires.

Burdillat, M. (2009). "Les nouvelles questions posées à la démographie médicale." Regards Croises Sur L'economie(5): 74-85. http://www.cairn.info/revue-regards-croises-sur-l-economie-2009-1-page-74.htm

En tant que membres d'une profession libérale, les médecins du secteur ambulatoire peuvent librement choisir leur lieu d'installation. Malgré la forte croissance du nombre de médecins (+ 15 % entre 1995 et 2005), des déserts médicaux se sont ainsi formés au cours du temps. Même dans les régions fortement dotées en médecins, l'accès aux soins peut rester difficile pour les personnes les plus modestes quand les praticiens opèrent essentiellement en secteur 2, c'est-à-dire lorsqu'ils tarifient leurs services au-delà du plafond remboursé par la Sécurité sociale. On ne pourra pas réduire les inégalités territoriales sans une remise en cause des principes de la médecine libérale ? ou une révolution de ses conditions d'exercice (résumé d?auteur).

Calmette, A. et Vigier, J. P. (2014). Rapport d'information sur les zones de revitalisation rurales (ZRR). Paris : Assemblée nationale: 154p. http://www.assemblee-nationale.fr/14/rap-info/i2251.asp

Caby, D., Deffin, C. et Zafar, J. D. (2018). Comment se déterminent les choix de spécialité et de région de formation des étudiants en médecine ? Documents de Travail ; 2018/5. Paris DG Trésor: 27. https://www.tresor.economie.gouv.fr/Articles/2018/07/06/document-de-travail-n-2018-5-comment-se-determinent-les-choix-de-specialite-et-de-region-de-formation-des-etudiants-en-medecine

L'organisation des études de santé en France s'articule autour de deux concours : la PACES en fin de première année, et les ECN en fin de sixième année qui permettent aux étudiants de choisir un poste d'interne, pour une spécialité et une région de formation données, en fonction du classement qu'ils ont obtenu. Après avoir analysé les évolutions passées relatives à ces deux concours, le document détermine les caractéristiques qui semblent déterminantes dans les choix pour une spécialité ou une région de formation, à partir d'une modélisation ad-hoc développée à cette fin. Cette modélisation permet en outre d'estimer, si entre choix de la spécialité ou choix de la région de formation, l'un prédomine ou non sur l'autre. Les principaux résultats montrent que les choix ne dépendent que très peu du sexe des étudiants et que le choix de la spécialité paraît prédominant relativement à celui de la région de formation. À cet égard, la forte différenciation entre spécialités et le relativement faible intérêt pour la médecine générale ou pour les disciplines liées à la prévention sont potentiellement des éléments à prendre en compte quant à l'allocation optimale de l'offre de soins concernant les besoins immédiats et à venir.

Caby, D., Zafar, J. D. et Cluzel, V. (2019). "Comment lutter contre les déserts médicaux ?" Tresor-Éco(247): 12. https://www.tresor.economie.gouv.fr/Articles/2019/10/11/tresor-eco-n-247-comment-lutter-contre-les-deserts-medicaux

Depuis les années 2000, certains territoires français, les zones sous-denses ou « déserts médicaux », présentent des difficultés, variables selon les spécialités, à maintenir une offre suffisante de médecins.

Cette situation perdure malgré la mise en place d'aides incitant les médecins à s'installer en zone sous-dense, dont l'efficacité reste à évaluer. La suppression du numérus clausus, qui limitait les effectifs de médecins à la fin de la première année d'études ou le renforcement du nombre de consultations à nombre de médecins inchangé (via le déploiement d'assistants médicaux), prévus par la stratégie de transformation du système de santé « Ma santé 2022 : un engagement collectif » et concrétisés par la loi d'organisation et de transformation du système de santé, propose des réponses à long terme au manque général de médecins.Toutefois, des réponses complémentaires aux déséquilibres territoriaux pourraient se révéler utiles, l'augmentation à terme du nombre de médecins pouvant ne pas être suffisante en elle-même pour une meilleure allocation entre offre et besoins au profit des zones sous-denses.Sans remettre en cause le principe de liberté d'installation, son adaptation temporaire à court terme dans certaines zones particulièrement sur-dotées pourrait être envisagée, afin d'éviter une accumulation de l'offre là où elle est déjà très forte et de tendre à une plus grande adéquation entre densité médicale et première installation. Ceci ne pourrait être mis en place que de façon progressive et en étroite concertation avec les médecins, pour ne pas risquer d'affecter l'attractivité de l'exercice libéral. Par ailleurs, certaines mesures pourraient intervenir au moment des études de médecine : - en fléchant des places à l'internat vers des installations dans ces zones ou en ouvrant des places supplémentaires pour les premiers étudiants réorientés au cours du premier cycle, à condition qu'ils s'installent en zone sous-dense ; - en réallouant les places à l'internat dans les spécialités attractives vers les régions ayant des difficultés à attirer les nouveaux internes.

Cardoux, J. N. et Daudigny, Y. (2017). Rapport d'information sur les mesures incitatives au développement de l'offre de soins primaires dans les zones sous-dotées. Paris Sénat**:** 129 , tab., graph., fig. http://www.senat.fr/rap/r16-686/r16-6861.pdf

La France ne manque pas de professionnels de santé mais leur répartition sur le territoire est très inégale. En outre, les tensions devraient s'accroître à court terme du fait des perspectives de la démographie médicale. La question de l'accès géographique aux soins cristallise un sentiment d'abandon d'une partie de la population et des élus, dans un domaine où l'attachement à une prise en charge solidaire est fort. Elle est toutefois le symptôme de fragilités territoriales dont les enjeux dépassent la politique de santé et appellent une réponse cohérente des différentes politiques publiques. Les nombreux dispositifs mis en place pour favoriser le développement ou le maintien de l'offre de soins primaires dans les zones fragiles (aides à l'installation, mesures fiscales, aides à l'investissement, bourses d'étude, etc.) poursuivent des ambitions louables. Cependant, mis en place en ordre dispersé, leur articulation est imparfaite ; par ailleurs, ils se sont superposés sans évaluation, dans des zones aux contours fluctuants. Pour les rapporteurs de ce rapport sénatorial, il est nécessaire de bâtir des réponses concertées avec les acteurs de terrain pour agir plus efficacement.

Castaigne, S. et Lasnier, Y. (2017). Les déserts médicaux : avis. Paris Cese **:** 48 , tab., graph., fig. http://www.lecese.fr/content/le-cese-adopte-son-avis-sur-les-deserts-medicaux

La question des « déserts médicaux » est de plus en plus prégnante dans le débat public, comme l'illustre la multiplication des analyses, témoignages et déclarations dans les médias et les réseaux sociaux, émanant des citoyen.ne.s, des praticien.ne.s de la santé comme des acteur.rice.s de la société civile et des responsables politiques.

CCMSA (2005). Ciblage des zones de fragilité en médecine générale. Bagnolet CCMSA**:** 55.

Cette étude, publiée par les trois régimes de l'assurance-maladie : la MSA, pilote du projet, le Régime Général et le Régime des Professions Indépendantes a pour objectif de cibler les zones fragilisées par une trop faible densité médicale. Cette étude repose sur le choix d'une méthode spécifique de découpage par zones de recours aux soins de médecine générale et permet de prendre en compte les flux réels des patients vers les cabinets médicaux, de même que les caractéristiques de leur demande de soins.

Cerny, T., et al. (2016). "[Reasons for General Practitioner Shortage - a Comparison Between France and Switzerland]." Praxis (Bern 1994) **105**(11): 619-636.

BACKGROUND AND OBJECTIVES: Both France and Switzerland face a general practitioner (GP) shortage. What differences or parallels exist between the two countries with regard to the causes for this shortage? What conclusions might be drawn from a systematic comparison? METHODS: Literature review with qualitative and semi-quantitative content analysis. RESULTS: Parallels exist in the comparing categories work contents, working structure, income and social status, medical school formation, private life, psychological motives. Differences are found in the categories biography and social selection, medical socialisation, residency. In Switzerland, residency is not uniformly structured, rarely institutionally organised and contains only few elements specific to general medicine. In France, medical socialisation not only exalts the specialists, but also strongly devaluates the GPs. CONCLUSIONS: By systematic analysis and comparison of both countries' pertinent literature, France and Switzerland can deepen their understanding of GP shortage. This paper identifies possible fields of action from medical school through residency up to workplace conditions that are pivotal in addressing the shortage of GPs.

CGET (2015). Etude pour la caractérisation des territoires en tension pour l'installation des jeunes médecins. Commissariat Général à l'Egalité des Territoires. (C.G.E.T.). Paris**:** 95 , tab., graph., carte.

Les études menées pour expliquer le phénomène d'inégalité de répartition de l'offre en médecine générale insistent sur l'évolution des mentalités et des aspirations des jeunes médecins qui souhaitent aujourd'hui concilier épanouissement personnel dans un cadre de vie de qualité pour eux-mêmes et pour leur famille avec carrière professionnelle (trouver un équilibre entre vie privée, familiale et professionnelle, maîtriser son temps de travail, exercer dans un cadre sécurisé…). Face à ces nouvelles attentes et priorités, certains territoires présentent des atouts, alors que les faiblesses d'autres territoires se traduisent par l'existence de zones fragiles. L'étude cible son analyse au périmètre des jeunes médecins généralistes (hors médecins à exercice particulier) s'installant ou exerçant en ambulatoire (libéral, salariés en centre de santé…). Elle est organisée en trois phases : • Phase 1 : Identifier les facteurs d'attractivité des territoires pour les jeunes médecins ; • Phase 2 : Établir une typologie des territoires en fonction de leur attractivité ; • Phase 3 : Identifier des pistes d'actions et des bonnes pratiques. Cette étude a consisté à dresser une typologie des territoires sur la base d'indicateurs territoriaux, traduisant les facteurs d'attractivité pour les jeunes médecins généralistes. Cette attractivité « théorique » a ensuite été comparée avec l'attractivité « réelle » (flux réels d'installation des jeunes médecins). In fine, ces travaux orientés vers l'action ont également porté sur la définition de pistes d'actions susceptibles d'aider les acteurs locaux à pérenniser ou développer l'offre de soin, en fonction des critères d'attractivité (extrait du préambule).

Chaix, B. et Chauvin, P. (2005). "Influence du contexte de résidence sur les comportements de recours aux soins : l'apport des méthodes d'analyse multiniveaux et spatiales." Questions D'economie De La Sante (Irdes)(104): 6.
http://www.irdes.fr/Publications/Qes/Qes104.pdf

L'étude des inégalités géographiques de recours aux soins utilise souvent des données agrégées au niveau des zones de résidence. Ces analyses sont incapables d'évaluer si les disparités géographiques d'utilisation des soins sont dues aux seules caractéristiques des individus, qui varient d'un endroit à l'autre, ou si les caractéristiques du contexte de résidence (densité médicale, environnement socio-économique, etc.) exercent un effet propre. La présente analyse, réalisée à l'aide de méthodes multiniveaux et spatiales, permet de dépasser cette limite. Elle s'intéresse à deux comportements de recours aux soins : avoir ou non un médecin généraliste habituel et consulter des spécialistes plutôt que des généralistes. Elle met en évidence des variations de comportements de recours aux soins sur le territoire métropolitain.

Chaix, B., et al. (2005). "Access to general practitioner services: the disabled elderly lag behind in underserved areas." European Journal of Public Health **15**(3): 282?287.

Several studies have shown that people living in areas underserved in physicians have reduced odds of consulting. However, beyond the magnitude of this effect averaged for the whole population,

policymakers need to know whether specific subgroups faced with transportation difficulties, such as the elderly and especially the disabled elderly, have a particularly restricted access to physicians when residing in underserved areas. The study sample, representative of the French population aged 18?75 in 1999, comprised 12 405 individuals. Multilevel Poisson models were used to investigate the impact of the area-level density of general practitioners (GPs) on the number of GP consultations reported over the previous 12 months. Results: The mean number of GP consultations over the previous 12 months was 3.8 (S.D. ¼ 4.9). Multivariate analyses indicated that living in areas underserved in GPs lead to a greater reduction in primary care utilization for the elderly, and especially for the disabled elderly, than for younger age groups. The disabled elderly had 244% more GP consultations (95% CI:+79%, +562%) when they lived in areas with high versus low GP density (defined with the 10th and 90th percentiles as cut-offs). Conclusion: If further research confirms our findings, this increasingly disturbing public health issue in industrialized countries where populations are ageing will require priority policy measures. Ensuring that elderly people living in underserved areas have adequate access to primary care may prevent future hospitalizations, use of home care services and institutionalization.

Chambaretaud, S., et al. (2005). Pour une régionalisation du système de santé en 2025 : offre, régulation, acteurs : essai de prospective. Paris Commissariat Général du Plan **:** 132.
http://lesrapports.ladocumentationfrancaise.fr/BRP/054000747/0000.pdf

Ce rapport rassemble les recommandations du groupe de projet POLES, du Commissariat général du Plan, sur la régionalisation du système de santé. L'une d'entre-elles préconise de donner un rôle majeur aux régions dans la réforme du système de santé. "Cette gestion régionale de la santé doit passer par la décentralisation. Aujourd'hui, les conditions ne sont pas réunies, mais dans 20 ans, c'est un pari plausible", indique le groupe qui retient trois scénarios possibles du futur d'un système de santé régionalisé. Dans le scénario "L'an II de la décentralisation", privilégié par le groupe, "les collectivités régionales se voient confier les missions de régulation, de planification de l'offre de soins et de financement du système de santé". L'État central garde ses prérogatives en matière de fixation des priorités de santé, édicte les règles communes, alloue aux régions des enveloppes de péréquation et négocie avec elles des programmations pluriannuelles. L'échelon national de l'assurance maladie disparaît purement et simplement. Chaque région gère le système de santé soit en direct par une direction ad hoc soit par le truchement d'une agence régionale. Le scénario "La déconcentralisation" s'appuie sur une agence régionale de santé qui serait dotée d'un exécutif fort disposant de pouvoirs propres inspirés des prérogatives des directeurs des ARH ou des diverses agences sanitaires. Quant au scénario "Le chariot des desserts", il poursuit la tendance actuelle : ni décentralisation, ni déconcentration, ni délégation. "Fortement empreint d'un esprit de déconcentration, sans toucher l'architecture et les compromis implicites actuels, le système régional se scinde en trois opérateurs : l'État déconcentré définit les politiques de prévention et les programmes de santé, l'ARH gère l'offre de soins en établissements, l'Urcam renforcée se constitue en véritable interlocuteur du secteur ambulatoire, qu'elle régule ou avec lequel elle contracte en empruntant aux outils actuels des ARH". Ce scénario ne bouleverse pas les équilibres, il spécialise et renforce les blocs de compétence. Mais ce découpage "fait fi de l'unité de l'utilisateur final, le patient". "Au regard de ces scénarios futurs ramenés au présent, et en vue d'accompagner les processus de territorialisation du système de santé", le rapport POLES propose six principes fondateurs pour l'Etat et les collectivités territoriales autour de trois axes : "L'évolution de l'offre" (poursuivre la gradation de l'offre de soins et la spécialisation avec un continuum des soins de premier recours aux soins les plus techniques, affirmer le rôle majeur des régions dans une démarche de planification ouverte sur la base d'appels d'offres et de délégation des tâches) ; "le système de régulation" (choisir résolument la régionalisation selon un principe unique mais des modes de gestion diversifiés, ce qui permet par exemple d'articuler décentralisation et agence régionale de santé, recentrer le rôle de l'Etat sur l'évaluation et la péréquation) ; "les relations entre les acteurs du système de santé" (privilégier le niveau régional dans les négociations avec les professionnels de santé, conforter la légitimité du politique en santé, autrement dit faire en sorte que le politique s'empare des questions de santé plutôt que construire une démocratie sanitaire spécifique).

Chaput, H., Monziols, M., Ventelou, B., et al. (2020). "Difficultés et adaptation des médecins généralistes face à l'offre de soins locale." Etudes Et Resultats (Drees)(1140): 5.
https://drees.solidarites-sante.gouv.fr/IMG/pdf/er1140.pdf

> En 2019, 7 médecins généralistes sur 10 estiment que l'offre de médecine générale dans leur zone d'exercice est insuffisante, et près de 4 sur 5 s'attendent à une baisse de cette offre dans les années à venir, d'après le Panel d'observation des pratiques et conditions d'exercice en médecine générale. Ils sont par ailleurs 8 sur 10 à déclarer des difficultés pour répondre aux sollicitations des patients. Nombreux sont ceux qui déclarent allonger leurs journées de travail ou refuser de nouveaux patients en tant que médecin traitant, sans que cela soit toujours lié au fait d'exercer en zone sous-dense. De plus, 3 généralistes sur 4 ont également des difficultés à trouver des confrères spécialistes pour assurer la prise en charge de leurs patients. Ces difficultés sont principalement liées aux délais d'obtention d'un rendez-vous, en particulier chez les ophtalmologues, les dermatologues et les psychiatres. Avec l'évolution de l'offre de soins environnante, 3 sur 10 déclarent se « spécialiser », notamment en gynécologie, en pédiatrie ou en gériatrie. Devant la perspective de la baisse de l'offre locale de soins, les médecins généralistes comptent adapter leurs pratiques, par exemple en rendant le patient plus autonome ou en rejoignant une structure d'exercice coordonné.

Chasles, V., et al. (2013). "La démographie médicale en France, le risque des déserts médicaux. L'exemple de la Montagne ardéchoise." Geoconfluences: 13.

> A l'heure où les débats sur la question des « déserts médicaux » se multiplient, cet article se propose de faire un état des lieux de la démographie médicale en France à travers le prisme des différentes échelles communément retenues dans ce domaine. L'exemple de la région Rhône-Alpes, et plus particulièrement celui de l'Ardèche, permettra d'illustrer à la fois la pluralité des inégalités territoriales et la complexité des situations inhérente à l'imbrication des sphères économique, politique et sociologiques. Au regard des constats nationaux et des réalités locales, il faudra finalement s'interroger sur l'efficience des mesures visant à limiter la désertification médicale.

Chevillard, G. et Lucas-Gabrielli, V. (2018). Accessibilité aux médecins généralistes en France : les méandres de la construction des zones sous-dotées
https://hal.archives-ouvertes.fr/CIST2018/hal-01854414

> Face à l'inégale répartition géographique des médecins, les pouvoirs publics ont défini depuis 2005 des zones sous-dotées pour y déployer des mesures permettant d'attirer et de maintenir ces professionnels de santé. La définition de ces zones s'est complexifiée au fur et à mesure que les dispositifs s'étoffaient et que de nouveaux acteurs s'emparaient de cette question (collectivités territoriales, État, Assurance maladie). L'objectif est ici de montrer comment la montée en puissance d'une politique publique conduit, de par la multiplicité des acteurs et des territoires afférents mobilisés, à en réduire la portée. Nous nous appuyons dans cette communication sur l'historique de la définition des zones sous-dotées en médecins généralistes libéraux en France. L'enchevêtrement des zonages et dispositifs qui en résulte réduit la lisibilité de la politique auprès des médecins concernés et pose ainsi la question de son efficacité (résumé d'auteur).

Chevillard, G., Lucas-Gabrielli, V., Mousques, J., et al. (2021). Comment améliorer l'accès aux soins primaires selon les spécificités des territoires ? Le système de santé français aujourd'hui : enjeux et défis., Paris : Éditions Eska**:** 273-292.

> Cet article vise, dans un premier temps, à définir les concepts de soins primaires et de soins de santé primaires, à montrer les singularités françaises en la matière et les défis auxquels ils sont confrontés. Nous montrons qu'un des principaux enjeux du domaine des soins primaires en France est celui de l'accessibilité et des inégalités selon les territoires, et de leur évolution compte tenu de la diminution de l'offre de médecins en cours et à venir. Ensuite, nous analysons plus précisément la manière de mesurer l'accessibilité aux soins primaires et d'identifier les déséquilibres entre l'offre et la demande selon le type de territoire. Nous examinons ensuite la manière dont les pouvoirs publics ont développé une politique d'amélioration de la répartition des médecins généralistes en définissant des zones

prioritaires, et en déployant, dans ces zones, des mesures pour attirer et maintenir des médecins généralistes. Nous concluons enfin en exposant cinq enjeux, qui sont autant de leviers de court, moyen et long terme, pour améliorer la répartition des médecins dans les zones sous denses et défavorisées et l'accès aux soins (résumé d'auteur).

Chevillard, G., Lucas-Gabrielli, V. et Mousques, J. (2018). ""Déserts médicaux" en France : état des lieux et perspectives de recherches." Espace Geographique (L') **47**: 362-380.
https://www.cairn.info/revue-espace-geographique-2018-4-page-362.htm

L'expression de « déserts médicaux » est abondamment utilisée pour décrire des territoires où les habitants rencontrent des difficultés d'accès aux soins. Cette expression n'apparaît pas assez précise, ni pour décrire la pluralité des difficultés rencontrées, ni pour réfléchir aux mesures permettant de les résoudre. L'objectif de cet article est d'abord d'analyser l'évolution de la mesure d'un faible niveau d'accessibilité aux médecins généralistes à travers le temps. Nous analysons ensuite les réponses des pouvoirs publics aux « déserts médicaux » par deux éléments : la définition de zones prioritaires et le déploiement de mesures pour y attirer et maintenir des médecins généralistes. À partir des constats établis et du cadre conceptuel usité, nous proposons des perspectives de recherches pour améliorer la description de l'accessibilité aux médecins généralistes ainsi que l'évaluation de la politique menée contre les « déserts médicaux » (résumé d'auteur).

Chevillard, G. et Mousques, J. (2018). "Accessibilité aux soins et attractivité territoriale : proposition d'une typologie des territoires de vie français." Cybergeo : Revue Europeene De Geographie(873): 21.
https://journals.openedition.org/cybergeo/29737

Cet article présente la méthodologie et les résultats d'une typologie socio-sanitaire des espaces français à l'échelle des territoires de vie. Cette typologie ambitionne d'offrir un cadre d'étude à l'analyse des soins de premier recours en France et à l'évaluation d'un certain nombre de dispositifs pour améliorer la répartition de l'offre de soins. À partir de la littérature nous identifions les dimensions et indicateurs pertinents pour répondre à ces enjeux. Nous réalisons ensuite une analyse en composante principale des 32 variables retenues puis une classification ascendante hiérarchique. Nous obtenons de la sorte 6 groupes de territoires de vie dont la répartition spatiale est parfois fortement contiguë (littoraux, « diagonale du vide », départements homogènes), plus hétérogène avec des départements ayant tous les types de territoires de vie ou encore une répartition illustrant des oppositions entre centres et périphéries.

Chevillard, G. et Mousques, J. (2019). Accessibilité aux soins et attractivité territoriale : proposition d'une typologie des territoires de vie français. Document de travail Irdes ; 76. Paris Irdes**:** 28.
http://www.irdes.fr/recherche/documents-de-travail/076-accessibilite-aux-soins-et-attractivite-territoriale.pdf

Cet article présente la méthodologie et les résultats d'une typologie socio-sanitaire des espaces français à l'échelle des territoires de vie. Cette typologie ambitionne d'offrir un cadre d'étude à l'analyse des soins de premiers recours en France et à l'évaluation d'un certain nombre de dispositifs pour améliorer la répartition de l'offre de soins. A partir de la littérature, nous identifions les dimensions et indicateurs pertinents pour répondre à ces enjeux. Nous réalisons ensuite une Analyse en composante principale (ACP) des 32 variables retenues puis une Classification ascendante hiérarchique (CAH). Nous obtenons de la sorte six groupes de territoires de vie dont la répartition spatiale est parfois fortement contiguë (littoraux, « diagonale du vide », départements homogènes), plus hétérogène avec des départements ayant tous les types de territoires de vie ou encore une répartition illustrant des oppositions entre centres et périphéries.

Chevillard, G., Mousquès, J., Lucas-Gabrielli, V., et al. (2019). "Has the diffusion of primary care teams in France improved attraction and retention of general practitioners in rural areas?" Health Policy: 123(5): 508-515.
http://www.sciencedirect.com/science/article/pii/S016885101930048X

Many countries, including France, are facing the old and persistent problem of geographical inequalities of their health human resources, in particular general practitioners (GPs). This situation

leads, among other things, to underserved areas, which could result in a lower level of primary health care accessibility. Since the mid-2000s in France, several policies were implemented to provide financial as well as other incentives to support the development of multi-professional group practices, Primary Care Teams (PCTs), in order to attract and retain GPs in underserved areas. This study aims to measure the impact of PCTs settlement on the evolution of GP density in rural areas. To this end, we compare the evolution of GP density between rural areas with PCTs and similar rural areas without PCTs, before (2004-2008) and after (2008-2012) the development of PCTs facilities. The results show that PCTs are mainly located in underserved areas and suggest that they could attract and retain GPs there. Those results should be of interest to countries facing relatively similar geographical inequalities issues and that are also experimenting with multi-professional group practices.

Chevillard, G. et Mousques, J. (2021). "Medically Underserved Areas: Are Primary Care Teams Efficient at Attracting and Retaining General Practitioners?" Social Science & Medicine **287**: En ligne. https://www.sciencedirect.com/science/article/abs/pii/S0277953621006900

The geographical imbalances of General Practitioners (GPs) may affect their accessibility for populations, especially in medically underserved areas. We investigate the effect of the dramatic and recent diffusion of Primary Care Teams (PCTs), especially in medically underserved areas, in order to attract and retain GPs through an improvement of their working conditions. We analyze the evolution of GPs and young GPs density between 2004 and 2017 according to a spatial taxonomy of French living areas in 6 clusters. Based on a quasi-experimental design comparing living areas, depending on the clusters, with PCTs (treated) and without PCTs (control), we used difference-in-differences models to estimate the impact of PCT new settlements on the evolution of both attraction and retention of GPs. Our results show that PCT settlements are efficient to attract young GPs and that the magnitude of the effects depends on the living area clusters. Results call for specific policies to address geographical inequalities of GPs that consider the type of place and also, in France, for new measures to attract and retain GPs in rural fringes.

Chevillard, G., et al. (2015). "Mesure de l'impact d'une politique publique visant à favoriser l'installation et le maintien de médecins généralistes : L'exemple du soutien au développement des maisons et pôles de santé en France." Revue D'economie Regionale & Urbaine(4): 657-694. http://www.revues.armand-colin.com/geographie-economie/revue-deconomie-regionale-urbaine/revue-deconomie-regionale-urbaine-ndeg-42015/mesure-limpact-dune-politique-publique-visant

Cet article propose une première évaluation des maisons et pôles de santé à travers une démarche mobilisant des outils géographique et économétrique. L'objectif de cette double démarche est l'analyse de l'implantation de ces structures, puis une analyse de l'impact de celles-ci sur la densité de médecins généralistes libéraux. La méthodologie repose sur l'élaboration de typologies spatiales, puis d'une analyse cas-témoin comparant l'évolution de la densité de médecins généralistes dans les espaces avec et sans maisons de santé, avant et après la généralisation de cette politique. Les résultats obtenus mettent en évidence une implantation davantage rurale de ces structures, de surcroît dans des espaces fragiles, ainsi qu'une moindre diminution de l'offre dans certains espaces ruraux et périurbains dotés de maisons et pôles de santé.

Chevillard, G., et al. (2016). "Dépeuplement rural et offre de soins de premiers recours : quelles réalités et quelles solutions ?" Espace Populations Societes **2015/3-2016/1** 1-19. http://eps.revues.org/6177

Les espaces ruraux en dépeuplement ont été peu explorés du point de vue de l'offre de soins de premiers recours et des besoins des populations résidentes, alors que ces questions y occupent une place importante. Ce travail caractérise les espaces en dépeuplement comparativement aux autres espaces ruraux à partir d'une typologie socio-sanitaire et d'une approche statistique nationale. Il met en évidence le déclin plus prononcé de l'offre de médecins généralistes libéraux dans ces espaces, alors que les besoins sanitaires demeurent élevés. Cette contribution évalue également les effets des maisons de santé mises en place pour attirer et maintenir des médecins généralistes dans les zones sous-dotées. Les maisons de santé permettent de diminuer l'érosion de l'offre de médecins

généralistes dans certains espaces en dépeuplement, mais pas dans l'ensemble de ceux-ci appelant à des mesures plus larges ou spécifiques (résumé d'auteur).

Clapier, P., et al. (2016). Enquête qualitative relative aux déterminants des choix d'installation des médecins anesthésistes bretons. Rennes ORSB**:** 51 +annexes.

Dans le cadre de la mise en place de la Commission Régionale Paritaire (CRP) et au regard d'une problématique aiguë de démographie médicale concernant les médecins anesthésistes réanimateurs (MAR) en région Bretagne, l'Agence Régionale de Santé de Bretagne a sou¬haité, dans la perspective d'obtenir des éléments d'aide à la décision quant aux modalités de régulation de la profession qui pourraient être mises en place à l'avenir, améliorer sa connaissance sur 3 axes complémentaires : les motivations et critères des choix des modes et lieux d'exercice, les freins et les facteurs favorisant un mode d'exercice partagé entre plusieurs sites hospitaliers, les atouts en termes d'attractivité de la région Bretagne.

Cohen, F. (2015). "Une politique de santé pour les régions et les territoires, la territorialisation : une donnée politique forte." Cahiers De Sante Publique Et De Protection Sociale (Les)(18): 19-25.

Définir une politique de santé ne peut être mené sans se poser la question des territoires et de leurs présences. Le cadre législatif qui s'est développé depuis plusieurs années en est la meilleure preuve et en même temps le meilleur vecteur. Cet article en dresse un historique de l'articulation entre la politique de santé et les territoires depuis les années 1980.

Conti, B., Baudet-Michel, S. et Le Neindre, C. (2020). "Envisager la rétraction d'un équipement dans le système urbain français : le cas des lits d'hospitalisation en court séjour." Géographie, économie, société **22**(1): 5-33. https://www.cairn.info/revue-geographie-economie-societe-2020-1-page-5.htm

Cet article propose d'analyser, à travers la notion de rétraction, l'évolution du nombre de lits d'hospitalisation à temps complet (séjour supérieur à un jour) en médecine, chirurgie ou gynécologie-obstétrique dans les villes de France métropolitaine sur la période 2000-2016. La notion de rétraction, utilisée dans les travaux sur la décroissance urbaine, est ici mobilisée afin de mettre l'accent sur le retrait de cet équipement de soins dans le système des villes. Après avoir présenté la manière dont la distribution spatiale des hôpitaux a été pensée et modifiée par l'État au cours des 50 dernières années, la rétraction des lits d'hospitalisation est interrogée dans sa relation à l'organisation du système urbain : affecte-t-elle davantage les petites villes ? Affecte-t-elle de manière préférentielle les villes en décroissance ? Plusieurs indicateurs de rétraction sont proposés pour répondre à ces questions. La rétraction par diminution permet de mettre en valeur une évolution qui a affecté la quasi-totalité du système urbain. La rétraction par disparition concerne davantage les petites villes et les villes en décroissance. D'une manière générale, les grandes villes sont moins touchées par la rétraction des lits hospitaliers que les villes petites et moyennes.

Cour des Comptes (2014). Les conventions avec les professions libérales de santé : répondre aux besoins des patients, mieux assurer l'efficience de la dépense. Rapport sur l'application des lois de financement de la sécurité sociale., Paris : Cour des comptes**:** 241-266.
http://www.ladocumentationfrancaise.fr/var/storage/rapports-publics/144000552.pdf

Cour des Comptes (2021). Réanimation et soins critiques en général : un modèle à repenser après la crise. Le rapport public annuel 2021 de la Cour des Comptes; Tome 1, Paris : Cour des comptes**:** 150-174.
https://www.ccomptes.fr/fr/publications/le-rapport-public-annuel-2021

Depuis le début de la crise sanitaire, en France comme à l'étranger, les capacités hospitalières en réanimation ont conditionné, non seulement le fonctionnement des systèmes de santé, mais aussi la vie économique et la vie sociale dans leur ensemble, et même les libertés publiques. Il s'agit là d'un phénomène inédit : la réanimation constitue une activité hospitalière très spécifique, peu connue du grand public, rarement analysée par les institutions publiques d'évaluation et de contrôle et peu mise en avant dans les politiques publiques. Elle concerne des patients au pronostic vital engagé qui ont

besoin, 24h/24, de soins et de surveillance par des professionnels, avec des techniques dont la nature, le nombre et la disponibilité effective sont étroitement réglementés. Pour ces patients, il n'existe pas d'alternative à une hospitalisation en urgence dans une unité de réanimation. Les lits de ces unités sont en permanence occupés à 88 % en moyenne, avec des pics d'activité récurrents en hiver. Dans un contexte de crise sanitaire de longue durée, la Cour a cherché à évaluer dans quelle mesure l'organisation des soins critiques

Cour des Comptes (2015). Vingt ans de recomposition territoriale de l'offre de soins : un bilan décevant. Rapport sur l'application des lois de financement de la sécurité sociale., Paris : Cour des comptes **:** 185-216. http://www.ladocumentationfrancaise.fr/var/storage/rapports-publics/154000643.pdf

Daudigny, Y. (2012). Rapport d'information sur l'enquête de la Cour des comptes relative aux dépenses de l'Assurance maladie hors prise en charge des soins. Rapport d'information ; 656. Paris Sénat**:** 179. http://www.senat.fr/rap/r11-656/r11-6561.pdf

Les dépenses de l'Assurance maladie hors prise en charge des soins, de nature très disparate, représentent tout de même 6 à 7 milliards d'euros par an. Elles sont dispersées dans les comptes de l'Assurance maladie, mal identifiées, leur légitimité et leur évolution étant jusqu'ici restées peu étudiées. S'appuyant sur les conclusions de l'étude de la Cour des comptes commandée par la Mission d'évaluation et de contrôle de la Sécurité sociale, ce rapport préconise notamment de clarifier les conditions dans lesquelles l'Assurance maladie, sur décision de l'Etat, finance une vingtaine de fonds ou organismes dont le lien avec ses missions est parfois ténu. Yves Daudigny souhaite un encadrement pluriannuel systématique de ces contributions chiffrées par la Cour à 959 millions d'euros en 2010 et demande une plus grande transparence. Le sénateur recommande également une simplification des règles d'attribution des aides individuelles financées par l'action sanitaire et sociale des CPAM. Enfin, à propos de la prise en charge des cotisations sociales des praticiens et auxiliaires médicaux du secteur 1, qui représente un coût de 2 milliards d'euros par an pour l'Assurance maladie, la Cour des comptes suggérait qu'elle soit modulée selon des critères géographiques, en vue de corriger les inégalités de répartition territoriale des médecins. Le rapporteur général s'empresse d'écarter cette solution qui prise isolément pourrait réduire l'attractivité du secteur 1. Il souhaite une réponse plus globale à la question des déserts médicaux, passant par le soutien actif aux formes d'exercice en groupe et à un meilleur partage des rôles entre professionnels de santé et la lutte contre les dépassements d'honoraires. Les départements ruraux eux-mêmes sont aujourd'hui touchés par des dépassements élevés, subissant une forme de double peine de l'accès aux soins : désert médical et restes à charge importants.

Daudigny, Y. (2014). Les relations conventionnelles entre l'assurance maladie et les professions libérales de santé. Paris : IGAS**:** 235p. https://www.ccomptes.fr/fr/publications/les-relations-conventionnelles-entre-lassurance-maladie-et-les-professions-liberales

Del Bano, J. P. (2021). Ophtalmologie : déserts médicaux et délais d'attente moyens. Résultats d'une enquête, Paris : LeGuideSanté https://www.le-guide-sante.org/actualites/sante-publique/ophtalmologie-deserts-medicaux-delais-attente-moyens

Les difficultés d'accès aux soins en ophtalmologie sont indéniables et sont la plupart du temps la conséquence de zones médicalement sous-dotées en ophtalmologues. Mais peut-on pour autant qualifier des territoires de vie-santé ou des bassins de vie de déserts médicaux en ophtalmologie ? Le groupe Le Guide Santé, dont l'une des missions est de faciliter un accès aux soins pour tous, publie sur son site les résultats de son enquête annuelle sur l'accès aux soins en ophtalmologie. Près d'un tiers des ophtalmologistes refusent les nouveaux patients.

Delattre, E. et Samson, A. L. (2013). "Stratégies de localisation des médecins généralistes français : mécanismes économiques ou hédonistes ?" Economie Et Statistique(455-456): 115-142. http://www.insee.fr/fr/themes/document.asp?reg_id=0&id=3966

En France, la densité médicale est élevée mais les médecins généralistes sont très inégalement répartis sur le territoire. Parce qu'elle renvoie à des questions d'équité et d'efficacité, cette mauvaise répartition constitue aujourd'hui un enjeu majeur de la régulation de la démographie médicale. Un échantillon exhaustif de 9 000 médecins généralistes ayant débuté leur carrière libérale entre 1997 et 2002 est mobilisé afin d'analyser les déterminants des choix individuels de localisation des médecins généralistes et, ainsi, de rendre compte des outils qui pourraient être utilisés spécifiquement au niveau régional pour modifier leurs comportements de localisation. Nous modélisons deux décisions : le choix du changement de région entre la date de la soutenance de la thèse et l'installation et le choix de la région d'exercice pour les seuls médecins qui quittent la région où ils ont soutenu leur thèse. Au travers de ces choix individuels, nous étudions en particulier l'attractivité monétaire des régions afin de déterminer dans quelle mesure les comportements des médecins pourraient être influencés par l'instauration de primes à l'installation dans les zones sous-cotées en médecins (résumé d'auteur).

Denoyel-Jaumard, A. et Bochaton, A. (2015). "Des pratiques et espaces médicaux en transformation : effet générationnel ou conséquences de la féminisation de la profession ?" Revue Francophone Sur La Sante Et Les Territoires: 14.
http://rfst.hypotheses.org/denoyel-jaumard-alice-bochaton-audrey

La féminisation de la profession médicale est un phénomène croissant, de plus en plus étudié par les historiens, sociologues ou médecins qui analysent son impact sur les évolutions du métier dans un contexte d'augmentation des inégalités en matière de santé. Mais alors que les inégalités de répartition des médecins vont croissantes, les géographes se sont peu penchés sur le lien entre féminisation et organisation territoriale de l'offre de soins. De nombreux rapports officiels et travaux scientifiques montrent que les écarts de répartition de médecins augmentent sur le territoire français et à différentes échelles (Maurey, 2013). La tendance actuelle est à la concentration des médecins en zone urbaine et par conséquent un délaissement des zones rurales désignées généralement par l'expression de « déserts médicaux ». L'objectif de cet article est d'explorer les facteurs couramment évoqués et perçus pour expliquer ce phénomène. Parmi ces derniers, nous verrons comment la féminisation de la profession médicale est souvent désignée comme un déterminant central des évolutions actuelles de la médecine et de la distribution inégale des médecins sur le territoire français. Outre la féminisation de la profession de médecins, il convient d'avoir à l'esprit que le secteur médical traverse également de nombreux changements liés au contexte actuel de départ massif à la retraite, à l'application du numerus clausus pendant de longues années et aux attentes de la nouvelle génération de médecins. Face à la diversité des facteurs démographiques, économiques, sociaux et territoriaux qui sont au coeur des changements de la profession, nous déterminerons la manière dont les représentations et les discours associés à la féminisation du métier perdurent et tendent à simplifier les évolutions complexes du métier.

Descours, C. (2003). Propositions en vue d'améliorer la répartition des professionnels de santé sur le territoire. Paris Ministère chargé de la santé**:** 40 , ann.
http://www.ladocumentationfrancaise.fr/rapports-publics/034000383/index.shtml

Les perspectives démographiques des professionnels de santé font dès à présent apparaître un vieillissement et une diminution des effectifs avec, en filigrane, l'apparition de phénomènes de pénurie sur certains territoires, si aucune mesure n'était prise. Cette relative désertification, qui peut déjà être constatée notamment dans certaines zones rurales et périurbaines, s'inscrit dans une évolution plus générale de la société et de la place que les professionnels de santé y occupent. Ce rapport dresse d'abord un état des lieux de la répartition des professionnels de santé sur le territoire français, puis analyse les raisons de cette inégale répartition. Il propose ensuite une panoplie de mesures incitatives s'adaptant à la diversité des situations locales.

Drouais, P. L. (2015). La place et le rôle de la Médecine générale dans le système de santé. Paris Collège de la Médecine Générale **:** 91, tab., graph., fig.

Ce rapport rassemble les conclusions des travaux réalisés à la demande de Madame la Ministre des Affaires sociales, de la Santé´ et des Droits des femmes , sur la place de la médecine générale dans le système de santé. A l'instar de beaucoup de pays européens, le système de santé français doit se recentrer sur les soins de santé primaires. La hiérarchisation effective des recours médicaux nécessite de placer la Médecine générale comme la première étape du parcours de santé du patient, à travers un renforcement du rôle du médecin traitant. Le médecin généraliste doit être le premier contact du patient avec le système de santé et assurer une coordination des soins efficace. Pour remplir ce rôle, la Médecine générale doit disposer des moyens appropriés, tant sur le plan budgétaire qu'organisationnel. Ce rapport propose des recommandations à ce sujet, et notamment des mesures à rajouter au projet de loi santé 2015.

Dumontet, M., et al. (2016). "Comment les médecins choisissent-ils leur lieu d'exercice ?" Revue Francaise D'economie **31**(4): 221-267, tab., graph., fig.
http://www.cairn.info/revue-francaise-d-economie-2016-4-page-221.htm

À partir d'une base de données exhaustive, restreinte aux médecins généralistes installés en libéral entre 2005 et 2011, cet article étudie les déterminants du choix de leur lieu d'installation au sein d'une région, en distinguant quatre zones : banlieue, ville centre, ville isolée, rurale. Si les variables individuelles influencent relativement peu le choix d'une zone, les caractéristiques de l'offre et de la demande locale de soins, les dispositifs d'exonérations fiscales éventuellement offerts et les équipements disponibles dans chaque zone, expliquent significativement leur choix. Ces résultats sont mobilisés pour simuler l'impact de trois mesures visant à augmenter le nombre de généralistes s'installant en zone rurale.

Dumontet, M. et Chevillard, G. (2020). Remédier aux déserts médicaux, Paris : Editions rue d'Ulm
https://www.presses.ens.fr/575-a-paraitre-remedier-aux-deserts-medicaux.html

Depuis le début des années 2000, l'expression de « déserts médicaux », régulièrement utilisée par les médias et nos gouvernements successifs, décrit des situations où les populations font face à des difficultés d'accès aux soins (délai d'attente pour un rendez-vous, nombre insuffisant de médecins traitants disponibles…). Ces situations sont la conséquence, notamment, d'une raréfaction globale de l'offre de soins, plus marquée chez les médecins généralistes. Comment en est-on arrivé là ? Pourquoi les outils de régulation de l'offre de soins ont-ils échoué dans leur objectif : adapter cette offre aux besoins de la population ? Tous les territoires ne sont pas touchés de la même manière par ce phénomène de raréfaction. Les pouvoirs publics ont-ils mis en place ces deux dernières décennies des solutions pour améliorer l'accessibilité aux soins – et lesquelles ? (résumé d'auteur).

FNMF (2020). Accès territorial aux soins : les inégalités ne sont pas définitives. Paris FNMF**:** 46.
https://placedelasante.mutualite.fr/observatoire2020-acces-territorial-aux-soins-les-inegalites-ne-sont-pas-definitives/

La quatrième édition de l'Observatoire-Place de la Santé est consacrée à l'accès territorial aux soins. Cette étude comporte une analyse à partir de différentes sources de données permettant une mise en perspective ainsi qu'une enquête réalisée auprès du grand public et des entretiens avec des professionnels de santé. Elle vise à démontrer que, sans mesures fortes sur l'organisation des soins, des pouvoirs publics ou par les professions de santé, l'accroissement des inégalités est inéluctable.

Fromentin, V. (éd.). (2017). "La désertification médicale : mythes et réalités." Lettre de Galilée (La)(H.S. N° 2): 42, tab., graph., fig.

Si le phénomène de désertification médicale est souvent évoqué dans la presse régionale comme nationale, quels sont les réels chiffres de la démographie médicale ? Manque-t-on vraiment de professionnels de santé ? Comment l'État a-t-il appréhendé le phénomène ? Au-delà des statistiques, comment s'est-il largement fourvoyé dans sa politique en faveur de la médecine de proximité ? Après un historique sur la notion de "désert médical", ce cahier spécial de Galilée tente de répondre à ces questions.

Gao, F., et al. (2016). "Assessment of the spatial accessibility to health professionals at French census block level." Int J Equity Health **15**(1): 125.

BACKGROUND: The evaluation of geographical healthcare accessibility in residential areas provides crucial information to public policy. Traditional methods - such as Physician Population Ratios (PPR) or shortest travel time - offer only a one-dimensional view of accessibility. This paper developed an improved indicator: the Index of Spatial Accessibility (ISA) to measure geographical healthcare accessibility at the smallest available infra-urban level, that is, the Ilot Regroupe pour des Indicateurs Statistiques. METHODS: This study was carried out in the department of Nord, France. Healthcare professionals are geolocalized using postal addresses available on the French state health insurance website. ISA is derived from an Enhanced Two-Step Floating Catchment Area (E2FCA). We have constructed a catchment for each healthcare provider, by taking into account residential building centroids, car travel time as calculated by Google Maps and the edge effect. Principal Component Analyses (PCA) were used to build a composite ISA to describe the global accessibility of different kinds of health professionals. RESULTS: We applied our method to studying geographical healthcare accessibility for pregnant women, by selecting three types of healthcare provider: general practitioners, gynecologists and midwives. A total of 3587 healthcare providers are potentially able to provide care for inhabitants of the department of Nord. On average there are 92 general practitioners, 22 midwives and 21 gynecologists per 100,000 residents. The composite ISA for the three types of healthcare provider is 39 per 100,000 residents. A comparative analysis between ISA and physician-population ratios indicates that ISA represents a more even distribution whereas the physician-population ratios show an 'all-or-nothing' approach. CONCLUSION: ISA is a multidimensional and improved measure, which combines the volume of services relative to population size with the proximity of services relative to the population's location, available at the smallest feasible geographical scale. It could guide policy makers towards highlighting critical areas in need of more healthcare providers, and these areas should be earmarked for further knowledge-based policy making.

Garot, G. (2021). Rapport sur la proposition de loi d'urgence contre la désertification médicale. Paris Assemblée Nationale**:** 69.
https://www.assemblee-nationale.fr/dyn/15/rapports/cion-soc/l15b4895_rapport-fond.pdf

De nombreuses publications officielles font état de la raréfaction de l'offre de soins en France. La direction de la recherche, des études, de l'évaluation et des statistiques (DREES) du ministère des solidarités et de la santé a ainsi publié en mars 2021 un état des lieux de la démographie médicale (6). En 2021, la France compte 214 000 médecins de moins de 70 ans en activité. En 2016, ils étaient 216 000. Les inégalités territoriales ne sont pas spécifiques à la France, mais sont présentes dans tous les pays, à des degrés divers. Ainsi, partout, l'accès aux services de santé est plus difficile à assurer dans certains territoires, tels que les zones rurales, notamment éloignées ou isolées, ou les zones urbaines défavorisées. Le présent rapport vise à dresser un bilan de l'état de la démographie médicale en France (I), de sa répartition sur le territoire (II) et des mesures déjà engagées (III), afin de déterminer en quoi une action complémentaire plus volontariste s'avère indispensable pour endiguer ce problème central de la désertification médicale.

Garot, G. (2019). Mesures d'urgence sur la désertification médicale. Paris Assemblée Nationale**:** 2 vol. (63 +31).
http://www.assemblee-nationale.fr/dyn/15/dossiers/mesures_urgence_desertification_medicale

Il y a tout juste une année, l'Assemblée nationale examinait une proposition de loi portant sur la lutte contre les déserts médicaux. Inscrit à l'ordre du jour par le groupe Nouvelle gauche, rejeté par la majorité parlementaire, le texte portait notamment sur la mise en place d'un mécanisme de limitation du conventionnement avec l'assurance maladie dans les zones les plus largement dotées en médecins - généralistes comme spécialistes. Deux arguments étaient alors avancés à l'appui du rejet : disposer de davantage de temps pour appliquer les mesures incitatives prévues par la convention médicale de 2016, attendre le plan santé dont on annonçait la sortie imminente et qui comportait un volet d'accès aux soins. Un an plus tard, le contexte doit alerter la représentation nationale, car le problème

d'inégalités d'accès aux soins persiste et s'accroît. Alors que le projet d'organisation et de transformation du système de santé a été dévoilé en février 2019, ce rapport présente de nouvelles mesures pour lutter contre la désertification médicale en France.

Garot, G. (2018). Rapport sur la proposition de loi visant à lutter contre la désertification médicale. Paris Sénat**:** 79.
http://www.assemblee-nationale.fr/15/rapports/r0543.asp

Ce rapport de la Commission des affaires sociales du Sénat accompagne une proposition de loi visant à remédier à la désertification médicale dans certains territoires français. Les mesures proposées sont les suivantes : le conventionnement territorial, le tiers payant intégral dans les centres et les maisons de santé.

Gauchet, J., Andriantsehenoharinala, L. et Colle, S. (2019). "Cherche médecin désespérément." Pratiques : Les Cahiers De La Medecine Utopique(87): 101.

Les déserts médicaux s'étendent, la médecine libérale est en crise, les hôpitaux sont étranglés. Comment les soignants peuvent-ils garder le sens de leurs métiers ? Comment répondre aux besoins de la population ? Ce numéro spécial de la revue Pratiques tente de répondre à ces questions.

Genest, J. J. et Darnaud, M. (2020). Proposition de loi visant à favoriser l'installation de médecins dans les déserts médicaux, Paris : Sénat
http://www.senat.fr/leg/exposes-des-motifs/ppl19-356-expose.html

En 2020, six millions de Français vivent dans ce que l'on peut nommer sans exagération un « désert médical ». Ils doivent parcourir des distances inacceptables pour avoir accès aux soins et patienter souvent des mois entiers pour consulter un spécialiste. Bien qu'ils cotisent comme l'ensemble des assurés sociaux, ces citoyens vivent une véritable rupture d'égalité, exclus de fait du principe d'universalité de la Sécurité sociale. Si cette disparité n'est pas récente, elle tend à s'aggraver. Le rapport sénatorial intitulé « Déserts médicaux : agir vraiment », présenté le mardi 5 février 2013 par M. Hervé Maurey, pointait déjà ce problème. Cette inégalité dans la répartition territoriale de l'offre de soins s'illustre par des écarts sensibles entre les différents départements, et est encore plus marquée au niveau infradépartemental. À cette échelle, les zones rurales sont les plus concernées par le manque de médecins. Les perspectives sont d'autant plus sombres que le nombre de généralistes âgés de moins de quarante ans y est bien trop faible, comme le confirment les observations récentes de la direction de la recherche, des études, de l'évaluation et des statistiques (Dress) du ministère de la santé. Dans ces conditions, on doit s'attendre à une très forte dégradation de l'offre de soins libérale dans les territoires ruraux, s'ajoutant à une situation déjà tendue à l'extrême. Celle-ci ne pourra être résorbée par le seul abandon du numerus clausus dans les études de médecine à compter de la rentrée 2020, d'autant plus que ses premiers effets ne seront pas perceptibles avant l'achèvement de la formation des étudiants, soit l'horizon 2030. C'est pourquoi, afin de répondre au besoin de mesures à effets rapides, l'article unique de la présente proposition de loi propose d'élargir le dispositif prévu par la loi du 24 juillet 2019 pour certains territoires ultra-marins à toutes les zones concernées. Il permettrait ainsi, dans le cadre et les garanties strictement définies par le texte précité, l'installation de praticiens issus de pays ne figurant pas parmi les critères définis à l'article L. 4111-1 du code de la santé publique, et dans les zones sous tension déjà délimitées par les agences régionales de santé. Tandis que de nombreuses régions françaises sont victimes d'une forte pénurie de praticiens, des pays dont la qualité de la médecine est unanimement reconnue possèdent une forte démographie médicale, dont bénéficient déjà d'autres États. La France ne peut plus se passer de médecins compétents en raison de règles trop rigides : la responsabilité du législateur et, en premier lieu du Sénat, dont la vocation est d'être à l'écoute des territoires en souffrance, est donc d'adopter des mesures temporaires d'urgence pour faciliter l'installation de nouveaux médecins.

Guichet, M. C. (2005). La France des proximités. Présentation du programme d'action aux parlementaires, Paris : MSSPS

Le programme d'action intitulé "La France des proximités" vise à améliorer la vie quotidienne des français dans trois domaines : l'accès aux soins en zone rurale, les gardes d'enfants et les personnes âgées. Bien que la plupart des mesures annoncées sont cependant déjà connues ou sont la déclinaison de plans récents (relance des hôpitaux locaux, aide aux personnes âgées dépendantes, plan Borloo de développement des services à la personne), la garantie de plus d'équité dans l'accès aux services de santé passera donc par le renforcement de la place des hôpitaux locaux afin d'en faire les outils privilégiés de la lutte contre la désertification médicale. L'aide aux familles est apportée par le développement des différents modes de garde d'enfants pour mieux concilier vie professionnelle et personnelle. Enfin, l'amélioration du quotidien des personnes âgées est prévue par les mesures du plan "Vieillesse et Solidarité". Trois axes stratégiques seront privilégiés : professionnaliser le secteur (l'Etat s'engage à participer financièrement à la formation de 30.000 aides-soignantes et de 30.000 aides à domicile en trois ans avec le soutien de la CNSA), développer de nouveaux services pour favoriser le maintien à domicile et mettre en place la "Carte Autonomie", afin de simplifier et alléger le paiement des services à domicile.

Hassenteufel, P., Schweyer, F.-X., Gerlinger, T., et al. (2020). "Les « déserts médicaux » comme leviers de la réorganisation des soins primaires, une comparaison entre la France et l'Allemagne." Revue Francaise Des Affaires Sociales(1): 33-56.
https://www.cairn.info/revue-francaise-des-affaires-sociales-2020-1-page-33.htm

Partant du constat de l'importance prise par l'enjeu des pénuries territoriales de soins primaires, cet article cherche à répondre à deux questions : comment expliquer la saillance de cet enjeu ? Quel est le lien entre ce manque et la réorganisation des soins primaires ? Pour y répondre, l'accent est mis sur les acteurs jouant un rôle clé dans ces processus permettant de comprendre la mise à l'agenda de la réorganisation des soins primaires en recourant à une comparaison entre la France et l'Allemagne. Dans les deux pays, on observe un retournement du discours sur la démographie médicale au début des années 2000 et une mise en avant de l'enjeu de déficits territoriaux en médecins sur lesquels portent de façon croissante les politiques de santé. Les instruments mobilisés pour garantir une offre de soins dans les territoires défavorisés sont assez semblables et diversifiés. Ils concernent principalement le zonage, la formation en médecine générale et les incitations financières. Cependant, au niveau de l'analyse des interactions entre les acteurs, des transformations plus significatives peuvent être mises en avant en France, avec, d'une part, l'affirmation de nouveaux acteurs locaux (les ARS et les collectivités territoriales) contribuant à une territorialisation des soins primaires et, d'autre part, le développement du travail pluriprofessionnel dans le cadre de nouveaux modes d'organisation des soins primaires portés par des « entrepreneurs médicaux ».

Hubert, E. (2010). Rapport de la Mission de concertation sur la médecine de proximité. Paris La documentation française**:** 186.
http://www.ladocumentationfrancaise.fr/rapports-publics/104000622/index.shtml

Mme Elisabeth Hubert, ancien ministre, a été chargée par le Président de la République d'une mission portant sur la médecine de proximité, autour de trois objectifs : relancer le dialogue avec les médecins libéraux, permettre un très large échange avec les professionnels concernés et apporter des réponses aux évolutions structurelles que connait la médecine ambulatoire depuis de nombreuses années. Sur la base de nombreuses rencontres et de déplacements sur le terrain, l'auteur présente un état des lieux des conditions d'exercice de la médecine de proximité, et propose un ensemble de mesures : simplification des conditions d'exercice, modernisation des systèmes d'information, appui à l'exercice regroupé des professionnels, valorisation de la formation initiale de médecine générale, aide à l'installation dans les zones sous-médicalisées.

Institut Montaigne (2013). Accès aux soins : en finir avec la fracture territoriale. Paris Institut Montaigne**:** 73 , tabl., fig.

Très onéreux, d'une grande complexité institutionnelle et administrative, le système de soins français pèche également par l'archaïsme de son organisation, caractérisé par de forts cloisonnements entre ville et hôpital comme entre professionnels de santé. Au-delà des problèmes évidents de répartition

sur le territoire des professionnels de santé, la question est sans doute plutôt celle du modèle d'organisation des soins en France, qui ne correspond plus aux exigences sociales, démographiques et technologiques de notre pays. Face à ces défis et dans un contexte de finances publiques contraint, comment adapter notre système de santé ? C'est vers une organisation décloisonnée, régionalisée, construite autour des besoins des patients qu'il faut s'orienter. Le système de santé doit également s'adapter aux exigences des nouvelles générations de professionnels de santé et leur offrir les moyens d'exercer leur métier de façon regroupée, en bénéficiant de l'apport des nouvelles technologies.

Isaac-Sibille, C. (2021). L'organisation des professions de santé : quelle vision dans dix ans et comment y parvenir ? Paris Assemblée Nationale**:** 98.
https://www.assemblee-nationale.fr/dyn/15/rapports/cion-soc/l15b4319_rapport-information.pdf

La présente mission d'information émane d'une profonde volonté, partagée par l'ensemble des acteurs, de faire évoluer l'organisation du système de santé français, avec l'objectif d'améliorer l'accès aux soins et d'enrichir les missions et les carrières des professionnels paramédicaux. Cette volonté est aussi partagée sur de nombreux bancs de l'Assemblée nationale mais peine à se concrétiser. Récemment, les réflexions se sont concentrées sur l'opportunité ou non de créer une profession de santé intermédiaire pour apporter une réponse aux tensions portant sur la démographie médicale et aux besoins croissants en personnels médicaux hospitaliers.

ISNAR-IMG (2022). Propositions de l'ISNAR-IMG pour les élections présidentielles. Lyon ISNAR-IMG**:** 18.
https://www.isnar-img.com/wp-content/uploads/Elections-presidentielles-2022-Propositions-ISNAR-IMG.pdf

À un mois de l'élection présidentielle, les internes de médecine générale placent l'accès aux soins comme l'une de leurs priorités. Une semaine après son congrès annuel à Tours, l'Isnar-IMG (Intersyndicale nationale autonome représentative des internes de médecine générale) détaille une cinquantaine de propositions à destination des candidats. Loin des prétendues « recettes miracles », les futurs généralistes prennent à contre-pied les solutions avancées par la plupart des candidats, oscillant entre coercition à installation et augmentation considérable du nombre de praticiens formés. Ils demandent par exemple la gratuité des assistants médicaux dans les zones sous-denses et la fin des certificats inutiles.

Jourdan, J. R., Viossat, L. C., Zantman, F., et al. (2020). La filière visuelle : modes d'exercice, pratiques professionnelles et formation. Paris Igas**:** 2vol. (109.+149).
http://www.igas.gouv.fr/spip.php?article793

Faisant suite à une série de mesures décidées depuis une vingtaine d'années, le rapport conjoint de l'IGAS et de l'IGéSR, élaboré à la demande des ministres de la santé et de l'enseignement supérieur, énonce 28 nouvelles propositions pragmatiques visant à raccourcir, à l'horizon de deux ou trois ans, les délais d'accès à la prescription de verres correcteurs et à moderniser les formations au niveau de la licence et du master, en cohérence avec l'évolution des métiers.

Jumel, S. (2021). Rapport pour une santé accessible à tous et contre la désertification médicale. Paris Assemblée Nationale**:** 69.
https://www.assemblee-nationale.fr/dyn/15/rapports/cion-soc/l15b4895_rapport-fond.pdf

Selon les différentes études disponibles, il est établi que 11,6 % de la population française vit dans une zone sous-dotée en médecins généralistes (1). Certaines analyses considèrent que dix millions de Français vivent à l'heure actuelle dans une zone dans laquelle l'accès aux soins est de qualité inférieure à la moyenne nationale (2). Un même nombre de Français vit à plus de 30 minutes d'un service d'urgence. L'image d'Épinal selon laquelle un désert médical serait une zone rurale, isolée et dépeuplée est donc désormais totalement dépassée : une grande partie du territoire français, y compris au coeur des métropoles, est concernée par ce phénomène. L'accès au système de soins est de ce fait devenu une préoccupation majeure des Français : cette question s'est spontanément imposée et a été largement évoquée lors du Grand débat national en 2019, dans les cahiers citoyens, les contributions et les réunions, alors qu'elle ne figurait pas dans les sujets et thèmes proposés par le Gouvernement. L'objectif

de la proposition de loi soumise par le groupe de la Gauche démocrate et républicaine (GDR) vise donc à formuler des propositions opérationnelles, sur le fondement des données issues de nombreux rapports et analyses, pour aller à l'encontre de ce phénomène et garantir rapidement à tous nos concitoyens un accès égalitaire aux soins.

Laur, A. (2015). "La liberté d'installation des médecins, responsable ou bouc-émissaire de la désertification médicale ?" Medecine : De La Medecine Factuelle a Nos Pratiques **11**(10): 472-476.

La liberté d'installation des médecins a été maintes fois menacée de restriction au cours des réformes sur la santé ces 30 dernières années, le but officiel étant de lutter contre la désertification médicale. Toutefois, aucune réforme n'a remis en cause cette liberté fondamentale. Entre mesures incitatives et menaces de mesures coercitives, la liberté d'installation du corps médical reste un problème sensible sujet à de nombreux conflits entre les médecins et l'État. Aucune solution concrète n'a été trouvée pour faire face aux zones sous-médicalisées. L'article s'intéressera à analyser les mesures envisagées et les solutions envisageables pour réguler ce principe déontologique fondamental, et l'impact que cela aura sur le devenir de la Sécurité sociale.

Leca, A., et al. (2014). "Les déserts médicaux." Cahiers De Droit De La Sante (Les) : Juridiques, Historiques Et Prospectifs(19): 190, tab., graph., fig., carte.

Alors que la France ne manque pas de médecins, ayant même une densité médicale supérieure à celle de la plupart de ses voisins, elle fait face à un phénomène destructeur de son système de santé tant revendiqué : les déserts médicaux. Les statistiques, mais surtout l'examen de la démographie médicale viennent enrichir ce bouquet de réflexions pour établir un constat alarmant : les campagnes et les banlieues sont délaissées par les praticiens privés au profit des grands centres-villes de France. Dans un tel contexte, les auteurs mettent en avant une question : la liberté d'installation de ces praticiens ne doit-elle pas être remise en cause quand, souvent, les petites communes ne se retrouvent qu'avec un seul prescripteur dans les meilleurs cas ? Cet ouvrage documenté se veut être le reflet des questions qui se posent aujourd'hui sur le sujet en présentant un modèle de comparaison éloquent : le National Health Service de l'Angleterre qui favorise grandement l'implication des pouvoirs publics dans l'offre de soins (4e de couverture).

Legmann, M. (2010). Définition d'un nouveau modèle de la médecine libérale. Paris La documentation Française**:** 46 , graph., annexes.
http://www.ladocumentationfrancaise.fr/rapports-publics/104000184/index.shtml

Le Docteur Michel Legmann, Président du Conseil national de l'Ordre des médecins, a été chargé par le Président de la République de mener une réflexion concernant la définition d'un nouveau modèle de la médecine libérale qui prenne en compte les aspirations des futurs médecins et permette de répondre de façon plus efficiente à la demande de soins de la population. La mission présente un état des lieux de l'exercice de la médecine en France qui confirme la crise profonde que connaît la médecine libérale : vieillissement des médecins en exercice, manque d'attractivité de l'activité libérale, baisse inéluctable des effectifs médicaux dans les dix prochaines années compte tenu de l'évolution à la baisse du numerus clausus de 1972 à 1999, etc. Sur cette base, la mission propose un certain nombre de mesures qui s'articulent autour de trois axes : la formation, initiale et continue, l'installation et les conditions d'exercice.

Legmann, M. et Romestaing, P. (2011). La démographie médicale déclinée à l'échelle des bassins de vie. Situation au 1er janvier 2011. Paris CNOM**:** 18, tabl., fig., cartes.

Dans sa 2e édition des Atlas régionaux, l'Ordre national des Médecins offre une analyse fine des données démographiques à l'échelle des bassins de vie. Elle constitue un véritable outil de pilotage pour les élus ordinaux et les décideurs locaux dans leur politique d'accès aux soins. L'analyse des flux migratoires permet d'identifier les régions qui conservent le mieux les médecins qu'elles ont formés, et de mesurer leur attractivité. Cette année, les Atlas régionaux distinguent, pour chaque spécialité, le mode d'exercice des médecins en exercice régulier ainsi que le mode d'exercice des médecins

nouvellement inscrits permettant une évolution prévisible à court terme. Ainsi, on peut observer que moins d'un médecin sur dix nouvellement inscrit au tableau de l'Ordre se tourne vers une activité libérale.

Levy, D. et Allemand, H. (2005). "L'évolution de la densité médicale dans les communes des départements ruraux depuis 60 ans." Courrier Des Statistiques(116): 7-8, 2 tabl., 1 graph.
http://www.insee.fr/fr/ffc/docs_ffc/cs116c.pdf

Les auteurs s'intéressent, dans cet article, à l'évolution passée de la démographie médicale dans les départements ruraux. Ils observent que la densité médicale a augmenté, y compris, le plus souvent, au niveau communal, à cause parfois d'une baisse de la population.

Longeot, J. F. (2019). Projet de loi relatif à l'organisation et à la transformation du système de santé : Avis de la Commission de l'aménagement du territoire et du développement durable. Paris Sénat**:** 137.
http://www.senat.fr/rap/a18-515/a18-515.html

Pour lutter contre les déserts médicaux, la commission de l'aménagement du territoire, saisie pour avis, a proposé un dispositif prévoyant un stage dans les zones sous-denses durant les études de médecine et salue l'adoption par le Sénat d'une disposition instaurant une année de pratique ambulatoire dans le troisième cycle en priorité dans ces zones.

Lucas-Gabrielli, V. et Chevillard, G. (2018). "Déserts médicaux et accessibilité aux soins : de quoi parle-t-on ?" Medecine/Sciences **34**(6-7): 599-603.
www.medecinesciences.org/fr/

L'accessibilité aux soins des français apparaît menacée par l'existence ou l'apparition d'espaces caractérisés par un manque de soignants souvent appelés « déserts médicaux ». Ces espaces renvoient en fait à des réalités multiples relatives à la faiblesse de l'offre médicale disponible couplée à l'enclavement des territoires et à l'importance des besoins de soins. Nous proposons ici d'exposer les différentes manières de mesurer l'accessibilité aux médecins généralistes libéraux ou de qualifier les espaces avec des inadéquations entre offre et besoins de soins afin de montrer la confusion que peut générer ce concept, ainsi que les enjeux pour les pouvoirs publics quand il s'agit de définir des mesures pour y faire face (résumé d'auteur).

Lucas-Gabrielli, V. et Mangeney, C. (2019). L'accessibilité aux médecins généralistes en Île-de-France : méthodologie de mesures des inégalités infra-communales. Document de travail Irdes ; 80. Paris Irdes**:** 110 , tabl., graph.
https://www.irdes.fr/recherche/documents-de-travail/080-l-accessibilite-aux-medecins-generalistes-en-ile-de-france-methodologie-de-mesures-des-inegalites-infra-communales.pdf

Dans un contexte d'inégale répartition de l'offre de soins, l'un des défis majeurs des politiques de santé des pays développés consiste à garantir à la population une égale accessibilité aux soins sur leur territoire. Evaluer ces inégalités d'accessibilité devient alors un enjeu. Depuis quelques années de nouvelles méthodes font objet d'une convergence d'intérêt dans la littérature géographique internationale. Elles se sont imposées en France à travers l'indicateur d'Accessibilité potentielle localisée (APL) construit par la Drees et l'Irdes. Ce dernier sert de socle à la définition des zonages déficitaires en médecins généralistes institués en 2017-2018 dans l'ensemble des régions françaises. Pour améliorer encore la mesure, la mobilisation de nouvelles données volumineuses (« big data ») sur la région Île-de-France montre les impacts de différentes évolutions de l'indicateur. La réduction de l'échelle géographique d'observation, de la commune à la maille de 200 mètres, met en exergue des disparités infra-communales importantes. La prise en compte des interactions entre l'offre et la demande à l'échelle régionale est la seconde évolution qui modifie le plus les niveaux d'accessibilité mesurés. L'intégration de la dimension sociale des besoins et des pratiques de mobilité différenciées (voiture, transports en commun…) a des impacts plus locaux. Enfin, la mise en contexte plus globale de l'indicateur, notamment en tenant compte des offres médicales alternatives en spécialistes de premier recours, conduit à apporter une vision des équilibres infra-régionaux très sensiblement

modifiée. Les résultats sont présentés sous forme de scénarios comparant l'effet de chacune des hypothèses introduites. Des séries de cartes permettent également d'en avoir une lecture spatiale (résumé d'auteur).

Lucas-Gabrielli, V., et al. (2011). Les distances d'accès aux soins en France métropolitaine au 1er janvier 2007. 2 volumes avec annexes méthodologiques. Rapport Irdes ; 1838-1839. Paris IRDES**:** 124 + 137 ,graph., tabl., ann.
http://www.irdes.fr/Publications/Rapports2011/rap1838.pdf
http://www.irdes.fr/Publications/Rapports2011/rap1839.pdf

La question de l'accès aux soins médicaux est devenue centrale dans le contexte actuel de fortes mutations du monde hospitalier et de réduction à venir des effectifs de médecins sur le territoire. Cette étude s'intéresse à l'accessibilité spatiale, mesurée au 1er janvier 2007, au regard des distances et temps d'accès aux soins les plus proches en ville et à l'hôpital. Pour les soins hospitaliers, une méthodologie novatrice est proposée pour le repérage et la géolocalisation des principales spécialités. Le temps d'accès aux soins est globalement satisfaisant : 95 % de la population française a accès à des soins de proximité en moins de quinze minutes. De même, la plupart des médecins spécialistes libéraux et les équipements médicaux les plus courants sont accessibles en moyenne à moins de 20 minutes par la route. Concernant les soins hospitaliers courants, 95 % de la population française peut y accéder en moins de 45 minutes, les trois quarts en moins de 25 minutes. Cependant, des inégalités d'accès persistent tant pour les spécialités les plus courantes que les plus rares. Les régions rurales, à faible densité de population, cumulent l'éloignement des soins de proximité et de la plupart des soins spécialisés. Depuis 1990, la distance moyenne d'accès aux soins a diminué pour certains spécialistes, notamment les urologues, mais a augmenté pour d'autres, en particulier les pédiatres.

Mangeney, C. et Gremy, I. (2018). Les déserts médicaux. De quoi parle-t-on ? Quels leviers d'action ? Paris ORSIF**:** 130 , tab., fig., cartes.
http://www.ors-idf.org/index.php/fr/publications/143-offre-de-soins2/869-les-deserts-medicaux-de-quoi-parle-t-on-quels-leviers-d-action

La question de l'accessibilité aux soins ambulatoires de premier recours occupe aujourd'hui les puissances publiques françaises et préoccupe les citoyens. Preuve en est le nombre d'études, rapports officiels, projets de lois, ou colloques organisés à ce sujet depuis quelques années. Ce rapport vise à proposer une synthèse des éléments de diagnostic sur la situation francilienne, mais aussi des différents facteurs qui conduisent à la situation de pénurie actuelle que connaissent certains territoires et des mesures correctrices qui sont mises en oeuvre par les puissances publiques.

Mangeney, C., et al. (2011). La mesure de l'accessibilité aux médecins de premier recours en Île-de-France. Phase 1. Paris Institut d'Aménagement et d'Urbanisme Ile-de-France.**:** 41 , tabl., cartes.

L'objet de l'étude consiste à mesurer l'accessibilité des Franciliens à un bouquet d'offre de médecins de premier recours, à savoir les généralistes (omnipraticiens) libéraux, les gynécologues, pédiatres, ophtalmologues et dentistes libéraux, les centres de santé médicaux, dentaires ou polyvalents. La présente étude tentera d'apporter un éclairage à la question de l'équité d'accès aux médecins de premier recours, à partir de la mise en comparaison de deux informations spatialisées : la répartition de la population sur le territoire francilien d'une part, la répartition des médecins sur ce même territoire d'autre part. L'idée étant de mettre en lumière le « panel » de médecins auquel ont potentiellement accès les différents types de populations (caractérisés par l'âge, les niveaux de revenus, la densité urbaine de la commune, les caractéristiques du quartier). Ces équipements et services étant des services de proximité, une méthodologie spécifique a dû être mise en œuvre pour construire une matrice d'informations à un niveau géographique fin. Les résultats de cette étude montrent que les inégalités d'accès reposent largement sur des facteurs associés aux niveaux de centralité et de densité urbaine et dans une moindre mesure sur des facteurs associés aux caractéristiques sociales. Ces résultats statistiques seront confrontés aux réalités et aux ressentis de terrain dans une seconde phase de l'étude, menée conjointement par l'IAU et l'ORS.

Maurey, H. et Longeot, J. F. (2020). Rapport d'information sur les déserts médicaux. Paris Sénat**:** 85.

http://www.senat.fr/rap/r19-282/r19-282.html

Dix ans après la loi Bachelot dite « HPST » et malgré l'accélération du rythme d'adoption des lois et plans « Santé », les politiques mises en place pour lutter contre les inégalités territoriales d'accès aux soins demeurent manifestement insuffisantes. Face à l'évidence, les gouvernements successifs continuent de repousser les solutions volontaristes qui leur sont proposées. Depuis sa création, la commission de l'aménagement du territoire et du développement durable du Sénat porte une attention constante à ce sujet. Si elle se réjouit que des avancées aient eu lieu (télémédecine, réforme des études de santé, partages de compétences entre professionnels de santé) dans le cadre de la récente loi du 26 juillet 2019 relative à l'organisation et à la transformation du système de santé, elle considère que tout n'a pas été tenté. Dès lors, elle recommande : 1. d'avancer sur le chemin d'une troisième voie, entre incitation financière sans contrepartie et coercition à l'installation des médecins, de régulation progressive des installations de médecins, pour rééquilibrer l'offre médicale dans le pays au bénéfice des territoires ruraux les plus fragiles ; 2. de mieux adapter l'organisation du système de soins à la réalité des territoires, en renforçant l'association des collectivités territoriales à la politique de santé et en activant l'ensemble des leviers susceptibles de libérer du temps médical dans les territoires.

Maurey, H. r. et Fichet, J. L. (2013). Rapport d'information sur la présence médicale sur l'ensemble du territoire. Paris Sénat**:** 133 , ann.
http://www.senat.fr/rap/r12-335/r12-3351.pdf

Réalisé dans le cadre de la commission du développement durable, qui a notamment en charge les questions d'aménagement du territoire, ce rapport d'information du Sénat sur la présence médicale sur l'ensemble du territoire fait le constat d'une situation inacceptable et qui ne va pas en s'améliorant - difficultés dans l'accès aux soins, inégalités dans la répartition territoriale de l'offre de soins et baisse significative de la démographie médicale. Les sénateurs proposent plusieurs mesures radicales pour lutter contre le fléau des déserts médicaux. Ils évoquent notamment une extension aux médecins du conventionnement sélectif en fonction de la nature des zones d'installation ainsi que l'obligation pour les spécialistes, à la fin de leurs études, d'exercer pendant deux ans dans les hôpitaux sous-dotés. Ils ne croient plus aux mesures incitatives, qu'ils jugent opaques, complexes et inefficaces. Ils souhaitent flécher l'installation des professionnels de santé vers des territoires délaissés, procédé qui a déjà été appliqué aux infirmiers en 2008 avec de bons résultats (un bond des installations de 33 % dans les déserts médicaux en trois ans). Mais tous les gouvernements ont reculé devant le poids électoral des médecins et les grèves des internes. Parmi les autres recommandations retenues : la nécessité d'intervenir dès à présent auprès des étudiants, afin de les prévenir que ce système pourrait être généralisé si les déserts médicaux s'étendent d'ici à la fin de la législature ; régionaliser le numerus clausus en fonction des besoins des territoires, alors qu'à l'heure actuelle ce mécanisme ne définit les effectifs d'étudiants en médecine qu'au niveau national. Les autres propositions du groupe de travail sont plus consensuelles. Elles consistent notamment à encourager le travail en équipe et la coopération entre professionnels de santé, les nouvelles formes d'exercice, les transferts d'actes entre professions de santé, la télémédecine, l'allongement de la durée d'activité des médecins en exonérant les retraités actifs du paiement des cotisations d'assurance vieillesse, ou encore à réformer les études de médecine et à créer au niveau départemental une commission de la démographie médicale.

Mesnier, T. (2018). Assurer le premier accès aux soins : organiser les soins non programmés dans les territoires. Paris Ministère chargé de la santé **:** 181.
https://solidarites-sante.gouv.fr/ministere/documentation-et-publications-officielles/rapports/sante/article/rapport-assurer-le-premier-acces-aux-soins-organiser-les-soins-non-programmes

A la demande du ministre des solidarités et de la santé, la mission avait pour but de dresser un diagnostic des organisations de prise en charge des soins non programmés – définis comme exprimant une demande de réponse en 24 heures à une urgence ressentie relevant prioritairement de la médecine de ville, de recueillir les attentes des usagers et des professionnels de santé, de recenser les expériences et stratégies des ARS, d'identifier les freins à l'accueil de cette demande, et de proposer

les éléments que pourrait intégrer un cahier des charges national afin de définir les modalités minimales de fonctionnement et de portages de structures d'accueil des soins non programmés. Il fait le constat unanimement partagé du besoin pressant de structuration de la réponse à la demande de soins non programmés par les acteurs de médecine ambulatoire, pour éviter que celle-ci ne se déporte par défaut sur les urgences hospitalières et n'en altère le bon fonctionnement.

Millien, C., Chaput, H. et Cavillon, M. (2018). La moitié des rendez-vous sont obtenus en 2 jours chez le généraliste, en 52 jours chez l'ophtalmologiste
https://drees.solidarites-sante.gouv.fr/etudes-et-statistiques/publications/etudes-et-resultats/article/la-moitie-des-rendez-vous-sont-obtenus-en-2-jours-chez-le-generaliste-en-52-11887

Un rendez-vous sur deux avec un médecin généraliste est obtenu en moins de deux jours, selon l'enquête sur les délais d'attente en matière d'accès aux soins réalisée par la DREES, auprès de 40 000 personnes. Pour certaines spécialités médicales, ces délais d'attente sont de plus de deux mois. C'est en ophtalmologie, dermatologie, cardiologie, gynécologie et rhumatologie qu'ils sont les plus importants. Toutefois, les délais sont bien moindres, quel que soit le professionnel contacté, lorsque la demande de rendez-vous est liée à l'apparition ou à l'aggravation de symptômes. Ainsi, chez le médecin généraliste, la moitié des prises de contact aboutissent à un rendez-vous dans la journée en cas d'apparition ou d'aggravation de symptômes, contre 6 jours pour un contrôle périodique. Les temps d'attente sont plus longs dans les communes où l'accessibilité géographique aux professionnels de santé est faible, notamment dans les petits et moyens pôles et dans les communes hors influence des pôles. Les délais sont jugés corrects ou rapides pour huit demandes de rendez-vous sur dix, sauf dans les spécialités médicales pour lesquelles ils sont les plus longs. La quasi-totalité des prises de contact se concrétisent par l'obtention d'un rendez-vous. Toutefois, les personnes qui ne réussissent pas à en obtenir un, cherchent en majorité à contacter un autre professionnel. Elles se reportent assez peu vers les urgences hospitalières.

Mouiller, P., Schillinger, P. et Gatel, F. p. (2021). Les collectivités à l'épreuve des déserts médicaux : rapport d'information. Paris Sénat**:** 49.
http://www.senat.fr/espace_presse/actualites/202110/les_collectivites_a_lepreuve_des_deserts_medicaux_linnovation_territoriale_en_action.html

Trop de Français éprouvent des difficultés d'accès aux soins, en raison notamment de délais d'attente trop longs ou de distances trop importantes à parcourir. Cette situation concerne non seulement les espaces ruraux mais aussi certaines villes moyennes ou des zones périurbaines. Confrontés à la désertification médicale, qui se dégrade d'année en année, les élus, interpellés en permanence sur ces sujets, sont inquiets, voire en colère. Pourquoi l'État, à qui incombe, selon les textes, la responsabilité exclusive de la politique de la santé, éprouve-t-il autant de difficultés à réduire les inégalités territoriales d'accès aux soins ? Les agences régionales de santé, créées en 2009, ont-elles permis d'agir plus efficacement dans ce domaine ? Quel rôle les élus locaux peuvent-il jouer pour contribuer à améliorer l'offre de soins sur leurs territoires ? Quelles sont les bonnes pratiques locales ? Quel est le bon échelon local pour agir efficacement, en application du principe de subsidiarité ? Le rapport de Philippe Mouiller et Patricia Schillinger répond à l'ensemble de ces interrogations et formule des recommandations propres à encourager les initiatives locales en matière d'accès aux soins et à supprimer ou limiter certaines entraves à leur expression.

Morel-A-L'Huissier, P. (2011). Proposition de loi tendant à prévoir une année de stage obligatoire des étudiants en médecine dans les zones à sous densité médicale, Paris : Assemblée Nationale
http://www.assemblee-nationale.fr/13/pdf/propositions/pion3580.pdf

Oliveau, S. et Doignon, Y. (2016). "La diagonale se vide ? Analyse spatiale exploratoire des décroissances démographiques en France métropolitaine depuis 50 ans." Cybergeo : Revue européenne de géographie / European journal of geography(763).
https://hal.archives-ouvertes.fr/hal-01260159

Cet article souhaite attirer l'attention du lecteur sur les résultats des derniers recensements français et sur les distorsions qui perdurent entre espace et population en termes de dynamiques de peuplement. Une exploration détaillée de plusieurs niveaux géographiques (du département à la commune) montre des espaces dont les dynamiques démographiques s'opposent. Ces dynamiques ne répondent pas aux idées reçues et que l'on retrouve assez répandues, même dans le monde scientifique. Au-delà d'une empreinte encore visible et mesurable, la « diagonale du vide » n'a pas partout fini de se vider. Sa géographie est cependant variée, et ne peut être appréciée qu'avec un regard minutieux et départi d'a priori. C'est ce que nous avons tenté de faire en nous appuyant sur une cartographie fine et des mesures de structure spatiale. Celles-ci mettent en évidence une France dont certains espaces semblent délaissés par les hommes.

ONDPS (2021). La sage-femme, le généraliste et le gynécologue : les enjeux des relations entre des métiers en tension. Paris ONDPS**:** 222.
https://solidarites-sante.gouv.fr/IONDPS (2021). MG/pdf/rapport_ondps_labers_la_sage-femme_le_generaliste_et_le_gynecologue.pdf

En 2017, l'ONDPS a reçu la mission, de la part de la ministre de la santé Agnès Buzyn, de lancer une étude sur la prise en charge de la santé sexuelle et reproductive des femmes. L'une des particularités de cette prise en charge tient à la pluralité des acteurs : sages-femmes, médecins généralistes, gynécologues médicaux et obstétriciens. Les compétences de chacun sont pour partie bien différentes mais aussi pour partie communes et qui, de ce fait, se superposent. L'intensité des tensions entre professionnels soulève la question des formes de coopérations possibles. C'est dans cet objectif que l'ONDPS a confié au Laboratoire d'études et de recherche en sociologie (LABERS), une étude sur les relations entre ces différents professionnels, à partir des enseignements de l'histoire et de l'analyse sociologique. Ce rapport présente le résultat de leur étude et vise à mieux appréhender les pratiques de coopération, de délégation, les habitudes de travail mais aussi les résistances à cette coopération.

ONDPSs (2021). Conférence nationale du 26 mars 2021 - Rapports et propositions - Objectifs pluriannuels de professionnels de santé à former. Paris ONDPS**:** 119.
https://solidarites-sante.gouv.fr/ministere/acteurs/instances-rattachees/article/demographie-objectifs-nationaux-pluriannuels

Après cinquante ans de régulation par le numerus clausus, l'offre de santé sera désormais déterminée par l'expression des besoins des territoires et l'expertise de nombreux acteurs réunis au sein de la conférence nationale. En effet depuis 2020, les objectifs nationaux pluriannuels de professionnels de santé à former se substituent au numerus clausus. Plus souples, concertés avec les régions, ils visent à mieux répondre aux besoins de santé. À la demande de Monsieur Olivier Véran, ministre des Solidarités et de la Santé, l'Observatoire national de la démographie des professions de santé (ONDPS) a conduit les travaux préparatoires de la première conférence nationale. L'approche a consisté à essayer de prendre en compte des éléments démographiques et non démographiques pour estimer au mieux la ressource humaine nécessaire pour répondre aux besoins de santé à échéance 2030-2040. Ce rapport présente une synthèse des travaux de la concertation régionale, organisée avec les agences régionales de santé et de la concertation nationale menée par l'ONDPS qui ont conduit à proposer des objectifs nationaux pluriannuels de professionnels de santé à former aux ministres des Solidarités et de la Santé et de l'Enseignement Supérieur, de la Recherche et de l'Innovation.

Ortiz, J. P. et Raynaud, J. (2011). Les obstacles de l'accès aux soins en Languedoc-Roussillon : présentation synthétique des résultats de l'enquête réalisée auprès de 1006 personnes en juin 2011. Montpellier URPS**:** 34 , tabl., graph., fig.

L'Union régionale des professions de santé (URPS) du Languedoc-Roussillon a réalisé une enquête téléphonique en collaboration avec le CSA auprès de 1006 habitants sur les obstacles de l'accès aux soins en Languedoc-Roussillon. Les résultats montrent que la principale difficulté pour consulter un médecin généraliste est le temps d'attente en cabinet (15 %). En ce qui concerne les médecins spécialistes la principale difficulté pour consulter est le délai d'obtention d'un rendez-vous. 11,8% de la population a déclaré avoir renoncé au moins une fois à consulter un médecin généraliste. Ce chiffre

s'élève à 23,7% pour un médecin spécialiste. Les 3 spécialités où le renoncement a été le plus fort sont l'ophtalmologie, la dermatologie et la gynéco-obstétrique.

Picheral, H. et Vigneron, E. (1996). "La mobilité des médecins en France : du lieu de formation au lieu d'exercice." Espace Populations Societes **14**(1): 45-54.

Les mouvements migratoires des médecins en France sont relativement faibles en raison de l'attachement bien connu de ces derniers à leur faculté d'origine. Pour autant ils sont révélateurs de disparités géographiques de comportements, notamment entre le Nord et le Nord-Est et le Sud du pays. Sur la base d'une matrice croisant la faculté de thèse et le lieu d'exercice de quelque 170 000 médecins l'étude permet de révéler ces disparités au moyen d'une méthodologie d'étude des flux et de leur modélisation.

Pilorget, A. (2010). Inégalités de répartition des médecins généralistes sur le territoire, quelles solutions ? Rennes Université de Rennes 1, Université de Rennes 1. Faculté de Médecine. Rennes. FRA. **Thèse ; Doctorat en médecine.:** 122.

Pla, A. (2018). "Un médecin libéral sur dix en activité cumule emploi et retraite." Etudes Et Resultats(1097): 4. https://drees.solidarites-sante.gouv.fr/IMG/pdf/er1097.pdf

Au 1er janvier 2018, près de 10 % des médecins libéraux ou ayant une activité mixte exercent dans le cadre du dispositif cumul emploi-retraite, soit un peu plus de 12 000 médecins. Le nombre de bénéficiaires du dispositif s'est fortement accru ces dernières années. Les spécialistes conventionnés en secteur 2, et notamment les psychiatres, y ont davantage recours que les généralistes ou les spécialistes de secteur 1. Au-delà de 65 ans, près de 70 % des médecins encore en activité sont des cumulants. La cessation d'exercice définitive de ces bénéficiaires intervient en moyenne à 69,5 ans, après avoir cumulé revenu d'activité et pension de retraite pendant près de quatre ans. Leurs revenus sont quasiment au même niveau que ceux des actifs non cumulants. La croissance du dispositif d'année en année entraîne un recul progressif de l'âge de fin d'activité des médecins libéraux, qui atteint en moyenne 67 ans en 2017. Néanmoins, les différences d'âge à la cessation d'exercice se maintiennent entre hommes et femmes, généralistes et spécialistes. La fin d'activité intervient plus tardivement pour les spécialistes dans les zones où ils sont nombreux à exercer, ainsi que pour les généralistes dans les zones peu denses. Paris se démarque particulièrement

Raynaud, J. et Bailly, A. (2015). Inégalités d'accès aux soins : acteurs de santé et territoires, Paris : FBMF ; Paris : Economica

L'accès aux soins est devenu l'une des priorités majeures des Français. Souvent étudié à travers la distance géographique ou les difficultés financières, ce concept relève pourtant de multiples dimensions. La prise en compte des perceptions des acteurs de santé est essentielle pour que les décisions politiques soient en adéquation avec le vécu des acteurs. Ainsi, l'ouvrage présente les concepts et les outils nécessaires pour analyser les perceptions des patients (difficultés pour obtenir une consultation) et des médecins (conditions de travail et solutions pour améliorer l'accès aux soins) afin d'identifier les territoires sur lesquels l'offre de soins est insuffisante. D'autre part, le regroupement pluriprofessionnel et la télémédecine sont étudiés pour déterminer les conditions favorables pour le développement d'une offre de soins durable et de qualité sur les territoires grâce à la coopération entre professionnels de santé. L'auteur replace ainsi la géographie au centre d'une réflexion globale et pluridisciplinaire, intégrant l'aménagement du territoire, la sociologie, l'analyse des politiques de santé et l'organisation des professionnels de santé.

Rican, S., et al. (2016). Les marges sanitaires, recompositions et gestions locales. La France des marges., Paris : Armand Colin**:** 126-144.

Les inégalités de santé constituent un éclairage cru des inégalités de développement local et des déséquilibres territoriaux. Malgré des progrès sanitaires continus depuis la fin de la seconde guerre mondiale, le maintien d'écarts importants en matière d'états de santé de la population, observable à

différentes échelles, révèle des degrés et des formes d'arrimage variés des territoires dans le système de développement économique et urbain de la société française. Le suivi de ces inégalités sur le long terme offre l'occasion de revisiter la manière dont les marginalités spatiales se composent et recomposent au sein de l'espace français, au rythme des modalités régionales de développement économique et des phases de transformations urbaines (résumé d'auteur).

Rojouan, B. (2022). Rapport d'information fait au nom de la commission de l'aménagement du territoire et du développement durable. Paris Sénat.
https://www.senat.fr/notice-rapport/2021/r21-589-notice.html

Garantir à chacun, quel que soit son lieu de résidence, l'accès aux soins nécessités par son état de santé : telle est la ligne directrice que s'est fixée la commission de l'aménagement du territoire et du développement durable dans cette nouvelle contribution à la résorption des « déserts médicaux », après deux précédents rapports d'information, en 2013 et en 2020. Malgré les mises en garde et faute d'avoir mis en œuvre les recommandations anciennes et récurrentes de la commission, les inégalités territoriales d'accès aux soins continuent de se creuser et une partie croissante de la population éprouve de grandes difficultés à organiser son parcours de soins dans de bonnes conditions : renoncements aux soins, délais d'attente et nombre de Français sans médecin traitant obligent, en effet, à envisager des solutions innovantes pour réduire de toute urgence les fractures médicales entre les territoires. Sur proposition du rapporteur Bruno Rojouan, la commission recommande, à l'unanimité, une combinaison ambitieuse et pragmatique de mesures d'équilibrage territorial de l'offre de soins, libératrices de temps médical et d'accroissement du nombre de professionnels de santé formés, en associant les collectivités territoriales qui sont en première ligne.

Rousset, G. (2012). "La lutte contre les « déserts médicaux » depuis la loi HPST : entre désillusions et espoirs nouveaux." Revue De Droit Sanitaire Et Social(6): 1061-.

La lutte contre les « déserts médicaux » a été marquée par la loi HPST. Pourtant, plus de trois ans après son entrée en vigueur, un rapide bilan montre une efficacité plus que limitée des principaux dispositifs qu'elle a adopté en la matière : le contrat d'engagement de service public est encore peu appliqué, tandis que le contrat santé solidarité a été vidé de sa substance. Dans ce contexte, il se révèle opportun d'analyser les conventions signées entre l'Assurance maladie et les syndicats de multiples professions de santé, lesquelles ont recours de manière variable à des dispositifs d'incitation mais aussi de coercition.

Roux, A. et Roques, V. (2015). "Liberté d'installation : Entre totem et tabou." Gestions Hospitalieres(549): 478-481.

[BDSP. Notice produite par EHESP lR0xEGk7. Diffusion soumise à autorisation]. Longtemps tabou, l'idée d'un encadrement de la liberté d'installation des médecins fait aujourd'hui son chemin. Déserts médicaux, inégalités territoriales dans l'accès aux soins, réduction annoncée du nombre de médecins généralistes. Nombreux sont ceux qui jugent désormais nécessaire un aménagement de la liberté d'installation des médecins pour organiser au mieux l'accès aux soins. Parmi eux, Michel Legmann, alors président du Conseil national de l'ordre des médecins (Cnom), n'hésitait pas en 2012 à appeler de ses voeux une régulation, résumant : "Il faut prendre ses responsabilités". État des lieux d'un sujet sensible. (Introd.).

Salem, G., et al. (2013). "Déserts médicaux : où est le problème ?" Pratiques : Les Cahiers De La Medecine Utopique(60): 1-82.

Saint-Andre, J. P. (2018). Suppression du Numerus clausus et de la PACES : Refonte du premier cycle des études de santé pour les métiers médicaux. Paris Ministère chargé de la santé **:** 22 , fig.+annexes.
https://www.enseignementsup-recherche.gouv.fr/cid146432/suppression-de-la-paces-les-nouvelles-modalites-d-etudes-de-sante-publiees.html

Le professeur Jean-Paul Saint-André a remis son rapport sur la refonte du premier cycle des études de santé à Frédérique Vidal, ministre de l'enseignement supérieur, de la recherche et de liInnovation et Agnès Buzyn, ministre des solidarités et de la santé. Sur la base des propositions contenues dans ce rapport, les ministres annonceront, dans le courant du mois de janvier 2019, les axes de la réforme du premier cycle des études de santé, ainsi que les modalités de poursuite de la concertation. Les travaux du groupe de travail appellent à "sortir d'un modèle unique d'entrée dans les études de santé". Deux modes d'accès seraient mis en place, le premier via un "portail santé", accessible sur ParcourSup ; le second reprendrait les expérimentations conduites dans seize universités depuis 2014

Saliba, M. L., et al. (2013). "[Professional practices and perceptions about job retention systems for the chronically ill: a qualitative study in south-eastern France]." Rev Epidemiol Sante Publique **61**(2): 172-179.

BACKGROUND: Continued employment of people with health problems that reduce their ability to work is a major social issue. The French measures to optimize job retention are characterized by a multiplicity of participants, and their efficacy depends largely on the capacity of these different participants to work together. The objective of this study was to document the perceived role, attitudes and practices of participants involved in these job retention measures and of general practitioners, as well as their difficulties in this domain. METHODS: In 2009, 15 semi-directive interviews were conducted in the region of Provence-Alpes-Cote d'Azur (PACA) of occupational physicians, general practitioners, and other participants involved in the occupational reclassification of workers no longer completely fit for their job. The data collected were analyzed from a thematic perspective. RESULTS: The different groups of professionals questioned agreed on the primacy of the role of the occupational physician, on the importance of early consideration of each worker's case, and on the need to work together as partners to optimize the prospects of job retention. This study nonetheless showed numerous communication difficulties between the various professionals: although informal exchanges have developed over time, the efficacy of the system seems to be limited by a lack of clarity about the role of each institution, divergences of opinions on some key points including the role of the physicians caring for the patient, and, more largely, lack of information about the tools for job retention. CONCLUSION: The distribution of homogeneous knowledge, the development of multidisciplinary collaborative practices and the pooling of the lessons of experience between the different groups of participants are essential for the success of job retention procedures.

Savignat, P. (2013). "Déserts médicaux, vieillissement et politiques publiques : des choix qui restent à faire." Gerontologie Et Societe(146): 143-152.

[BDSP. Notice produite par FNG mrR0xn7n. Diffusion soumise à autorisation]. Les problèmes posés par l'existence de déserts médicaux figurent en bonne place sur l'agenda des pouvoirs publics. Pour autant l'efficacité des mesures prises peine à produire des effets significatifs. Ceci prend un relief particulier dans les territoires ruraux car ces déserts médicaux s'inscrivent dans un contexte particulièrement marqué par des problématiques particulières du vieillissement et du développement socio-économique local. C'est dans ce cadre que des solutions durables pourront être apportées. (R.A.).

Schweyer, F.-X. (2010). Ni artisan, ni salarié. Conditions et enjeux de l'installation en médecine générale libérale. Singuliers généralistes, Presses de l'EHESP.

Setien (2016). Parcours d'installation de jeunes médecins généralistes primo-installés dans les Alpes-Maritimes entre 2008 et 2016 : rapport d'expériences et conseils aux futures générations. Nice : Université de Sofia Antipolis.
https://dumas.ccsd.cnrs.fr, A./dumas-01402344

Silhol, J., Ventelou, B. et Marbot, C. (2019). "Comportements et pratiques des médecins : exercer dans les zones les moins dotées, cela fait-il une différence ?" Revue Francaise Des Affaires Sociales(2): 215-249.

Selon les projections récentes, les effectifs de médecins libéraux diminueront de 30 % d'ici à 2027 et la densité standardisée diminuerait jusqu'en 2023, créant des poches de sous-densité relativement nombreuses sur le territoire français métropolitain. L'article s'intéresse aux ajustements que les

médecins généralistes de ville mettent en œuvre lorsque, sur leur territoire, ils sont d'ores et déjà confrontés à cette raréfaction. Les données utilisées sont celles du troisième panel des médecins généralistes enrichies d'indicateurs fournis par la CNAMTS. Nous nous sommes appuyés sur l'indicateur d'accessibilité potentielle localisé, développé par l'IRDES et la DREES, pour définir les zones les moins dotées en généralistes. En comparant les comportements des généralistes exerçant dans les zones les moins dotées à leurs homologues des zones mieux dotées, il est apparu d'abord que le planning d'activité du médecin tend à s'intensifier plutôt qu'à s'allonger. Nos données semblent en effet montrer que les rythmes de consultation dans les zones les moins dotées sont plus élevés, alors que le temps de travail global des généralistes s'avère quant à lui peu réactif à la densité en médecins alentour. On note aussi quelques différences statistiquement significatives sur les pratiques médicales : usage accru de certains médicaments, moins de renvoi vers des soins paramédicaux, suivis gynécologique probablement un peu moins réguliers, etc. Cependant, il semble que les différences ne sont pas statistiquement significatives pour les indicateurs de qualité des pratiques rattachés au dispositif de rémunération sur objectifs de santé publique (ROSP).

Veran, O. (2013). "Des bacs à sable aux déserts médicaux : construction sociale d'un problème public." Seve : Les Tribunes De La Sante(39): 77-85.

La problématique de l'accessibilité aux soins de premier recours, qui n'est pas nouvelle dans les faits, a émergé sur l'agenda public à la faveur de la réduction de l'offre de soins, au début des années 2000. Missions, commissions, projets de loi, articles de presse, reportages : les déserts médicaux font depuis l'objet d'une forte publicisation. Pointée du doigt, l'inégale répartition des médecins généralistes sur le territoire mobilise fortement les experts. Sans nier l'existence d'authentiques zones sous-dotées, et sans en relativiser l'impact pour les populations concernées, les études, bien que relativement affinées, peinent pourtant à décrire une réalité qui colle au vécu des usagers, élus et professionnels du soin, dans les territoires concernés. Cet article vise à mettre en exergue ce décalage et à en comprendre les enjeux sociologiques, étape de clarification indispensable avant toute nouvelle réforme (résumé de l'éditeur).

Vergier, N. et Chaput, H. (2017). "Déserts médicaux : comment les définir ? Comment les mesurer ?" Dossiers De La Drees (Les)(17): 63.
http://drees.solidarites-sante.gouv.fr/etudes-et-statistiques/publications/les-dossiers-de-la-drees/article/deserts-medicaux-comment-les-definir-comment-les-mesurer

[BDSP. Notice produite par MIN-SANTE rEC9oR0x. Diffusion soumise à autorisation]. Les vifs débats actuels sur l'accès aux soins, cristallisés autour de la notion de "déserts médicaux", posent une question centrale de mesure et de définition de termes communs. Ce dossier rassemble les éléments chiffrés disponibles et vise à poser quelques jalons dans la recherche de définitions partagées rendant possible l'objectivation.

Vigier, J. P. (2018). Rapport sur l'égal accès aux soins des Français sur l'ensemble du territoire et sur l'efficacité des politiques publiques mises en oeuvre pour lutter contre la désertification médicale en milieu rural et urbain. Tomes I et II. Paris Assemblée Nationale**:** 2 vol. (237, 565).
http://www.assemblee-nationale.fr/15/pdf/rap-enq/r1185-t1.pdf
http://www.assemblee-nationale.fr/15/pdf/rap-enq/r1185-t2.pdf

Ce rapport, fruit de plus de 30 auditions et d' une centaine de personnes interrogées expose 25 propositions pour lutter contre la désertification médicale, dont uneéforme des études médicales, un nouveau maillage territorial et la simplification administrative.

Vigier, P. (2012). Proposition de loi visant à garantir un accès aux soins égal sur l'ensemble du territoire. Rapport de l'Assemblée Nationale ; 401. Paris Assemblée nationale**:** 132.
http://www.assemblee-nationale.fr/14/pdf/rapports/r0401.pdf

Ce rapport présente la proposition de loi de Philippe Vigier, député UDI d'Eure-et-Loir, sur l'égalité d'accès aux soins sur l'ensemble du territoire. Cette proposition de loi a été examinée par l'Assemblée

nationale en séance publique et écartée par les députés comme elle avait déjà été rejetée en janvier 2012. Les principales dispositions du texte sont : un numerus clausus déterminé en fonction des besoins de santé de la population sur l'ensemble du territoire, l'obligation pour les étudiants de troisième année du troisième cycle des études médicales d'effectuer un stage d'au moins douze mois dans les zones déficitaires en matière d'offre de soins, la substitution de l?examen national classant par un internat régional, l'allègement des charges sociales des médecins en cas de cumul emploi-retraite dans les zones sous-dotées, à partir de 2020, obligation d'installation dans les zones sous-dotées des nouveaux médecins souhaitant exercer à titre libéral et développement de la télémédecine. Ce rapport propose également, en annexe, un panorama des aides à l'installation des professionnels de santé. Présenté sous forme de tableaux synoptiques, ce document témoigne de la complexité et - surtout - de l'enchevêtrement des dispositifs et des acteurs (Etat, collectivités territoriales et Assurance maladie).

Vigier, P. (2018). Rapport fait au nom de la commission des affaires sociales sur la proposition de loi visant à garantir un accès égal pour tous sur l'ensemble du territoire. Paris : Assemblée nationale **:** 18p. http://www.assemblee-nationale.fr/15/rapports/r0733.asp

Vigneron, E. (2012). "Inégalités de santé, inégalités de soins dans les territoires français." Bulletin De L'academie Nationale De Medecine **196**(4-5): 939-952.

Au cours de histoire, l'approche territoriale des questions de santé a occupé une place importante. Souvent conduite par les médecins eux-mêmes sous la forme d'observations, cette approche s'est progressivement effacée au cours du XXe siècle en raison du progrès clinique et en dépit de la poursuite de travaux de recherche. Pourtant, les inégalités territoriales de santé se sont maintenues et récemment approfondies en relation avec la crise sociale et économique. Cette situation est d'autant plus sensible en France, que l'égalité de traitement est la règle sur laquelle repose l'organisation du système de santé. La distance d'accès est un facteur important du renoncement aux soins. La concentration de la population dans les grandes aires urbaines et péri-urbaines implique d'apporter des solutions à la prise en charge de ceux qui en demeurent éloigner, géographiquement ou socialement. Le système de santé a pour justification d'aider ainsi la médecine à mieux s'exercer au profit de tous et d'abord de ceux qui en ont le plus besoin.

Vigneron, E. et Haas, S. (2012). Les clefs de l'accès aux soins : Inégalités sociales et territoriales. Paris Fehap**:** 36 , carte.

Cette étude consacrée aux difficultés d'accès aux soins en France part du constat que de nombreux Français sont quotidiennement confrontés à de réels problèmes d'accès aux différents soins et services : éloignement, horaires, délais, listes d'attente, honoraires et restes à charge élevés. Ce travail pose la question cruciale de l'égalité entre les territoires, souvent liée aux disparités économiques, qui entraînent des difficultés d'accessibilité financière, temporelle, culturelle et linguistique. Il s'inscrit pleinement dans les propositions de la Fédération des Etablissements Hospitaliers & d'Aide à la Personne (FEHAP), adressées aux candidats à l'élection présidentielle de 2012, visant notamment à résorber les déserts médicaux et à permettre à tous un accès aux soins de qualité.

White, J. (2015). "Is organizational complexity the way to improve medical care? Unscientific reflections from going to the doctor in Cleveland and Paris." J Health Serv Res Policy **20**(2): 126-128.

Conventional wisdom suggests that health care will provide better value if physicians are replaced by other caregivers and care is provided less in "silos" and more in "integrated" organizations. By this standard French care appears backwards compared to American care. Yet that does not seem to make US care more efficient or effective. This perspective reviews some differences in practice and suggests why the conventional wisdom should be tested with research.

Études internationales

- ✓ *Voir aussi les publications de l'OMS – Observatoire européen sur les systèmes et les politiques de santé pour connaître l'organisation des soins ambulatoires dans les pays de l'Union européenne : HIT – Health Systems Reviews*

Abelsen, B. et Olsen, J. A. (2012). "Does an activity based remuneration system attract young doctors to general practice?" BMC Health Serv Res **12**: 68.

> BACKGROUND: The use of increasingly complex payment schemes in primary care may represent a barrier to recruiting general practitioners (GP). The existing Norwegian remuneration system is fully activity based - 2/3 fee-for-service and 1/3 capitation. Given that the system has been designed and revised in close collaborations with the medical association, it is likely to correspond - at least to some degree - with the preferences of current GPs (men in majority). The objective of this paper was to study which preferences that young doctors (women in majority), who are the potential entrants to general practice have for activity based vs. salary based payment systems. METHODS: In November-December 2010 all last year medical students and all interns in Norway (n = 1.562) were invited to participate in an online survey. The respondents were asked their opinion on systems of remuneration for GPs; inclination to work as a GP; risk attitude; income preferences; work pace tolerance. The data was analysed using one-way ANOVA and multinomial logistic regression analysis. RESULTS: A total of 831 (53%) responded. Nearly half the sample (47%) did not consider the remuneration system to be important for their inclination to work as GP; 36% considered the current system to make general practice more attractive, while 17% considered it to make general practice less attractive. Those who are attracted by the existing system were men and those who think high income is important, while those who are deterred by the system are risk averse and less happy with a high work pace. On the question of preferred remuneration system, half the sample preferred a mix of salary and activity based remuneration (the median respondent would prefer a 50/50 mix). Only 20% preferred a fully activity based system like the existing one. A salary system was preferred by women, and those less concerned with high income, while a fully activity based system was preferred by men, and those happy with a high work pace. CONCLUSIONS: Given a concern about low recruitment to general practice in Norway, and the fact that an increasing share of medical students is women, we were interested in the extent to which the current Norwegian remuneration system correspond with the preferences of potential GPs. This study suggests that an existing remuneration mechanism has a selection effect on who would like to become a GP. Those most attracted are income motivated men. Those deterred are risk averse, and less happy with a high work pace. More research is needed on the extent to which experienced GPs differ along the questions we asked potential GPs, as well as studying the relative importance of other attributes than payment schemes.

Adler, G. et van den Knesebeck, J. H. (2011). "[Shortage and need of physicians in Germany? Questions addressed to health services research]." Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz **54**(2): 228-237.

> The problem of shortage of physicians has been discussed controversially in Germany for years, and the different positions of the interest groups involved have not been resolved. The question of the present and anticipated future requirement of physicians is central for an appropriate and necessary medical care of the population. In the analysis, supply and demand of medical care have to be distinguished. Relatively reliable data do exist for the supply of physicians; however, the changing number of working hours that male and--in particular female--physicians are willing to contribute should be taken into consideration. Reliable data for the future demand are presently not available. Several variables (e.g., demography, disease spectrum of an aging society, medical progress, the changing rules of working hours, and the shift of medical care between hospital and practice care) depend on future developments. Considering the existing serious indicators of a growing shortage of physicians, it is recommended to put more effort into the scientific investigation of these factors. More profound data should improve the basis for decisions in health and education politics.

Arifkhanova, A. (2018). The Impact of Nurse Practitioner Scope-of-Practice Regulations in Primary Care. Dissertations. Santa Monica Rand Corporation**:** xvii+220 , tabl., fig. https://www.rand.org/pubs/rgs_dissertations/RGSD396.html

The costs of primary care have been rising and access to it may become limited because of a possible shortage in primary care physicians. Some state governments have addressed this issue by allowing Advanced Practice Registered Nurses (APRNs) to serve the population without the supervision of physicians. About half of the states permit nurse practitioners (NPs) to practice and/or prescribe drugs without physician supervision or collaboration. NPs in primary care charge lower prices than physicians and provide satisfactory quality of care, supported by existent literature. Moreover, increasing the number of NPs could alleviate access problems from a low supply of physicians. NP scope-of-practice (SOP) regulations have been changing in many states. The dissertation focuses on access to health care and addresses three research questions: what is the impact of NP SOP regulations on NP employment, access to primary health care in areas characterized by a relatively low supply of primary care physicians, and how does the Center for Medicaid and Medicare Innovation's Comprehensive Primary Care Initiative affect the use of NPs given state SOP regulations?

Baeten, R., Spasova, S., Vanhercke, B., et al. (2018). Inequalities in access to healthcare. A study of national policies 2018. Bruxelles Commission européenne**:** 69, fig., annexes.

This report describes the main features of health systems enabling access, analyses the main challenges in inequalities in access to healthcare identified in the 35 European countries and how they are tackled, and briefly discusses the indicators available at national and European level to measure access to healthcare. Health systems in Europe face the challenge of ageing populations and increasing demand, which can also result from non-demographic factors such as the emergence of new (often expensive) treatments. In some European countries, costs and waiting time remain important barriers to accessing healthcare. Against a background of rising demand for healthcare resources, and public budgets which are often under pressure, ensuring universal and timely access to high quality healthcare — whilst also guaranteeing the financial sustainability of health systems — is a challenge which requires increased efforts to improve the efficiency and effectiveness of health systems.

Bas-Theron, F. et Flamant, P. (2002). Le système de santé et d'assurance maladie en Allemagne : actions concernant la qualité des soins et la régulation des dépenses en ambulatoire. Paris IGAS**:** 73 , ann.

Le présent rapport s'inscrit dans la démarche d'administration comparée initiée par l'IGAS relative aux dispositifs d'encadrement des médecins exerçant en ambulatoire évalués sous le double prisme de la qualité des soins et de la maîtrise des coûts. Il constitue une synthèse des observations effectuées par la mission en Allemagne. Ce pays offre un cadre intéressant d'analyse comparée pour deux raisons : l'organisation du système de santé y présente des similitudes institutionnelles notables avec la France : existence d'une médecine libérale, couverture assurantielle financée sur une base professionnelle et gérée par des caisses? Par ailleurs, en raison de la part importante des dépenses de santé dans le PIB, les gouvernements successifs ont engagé depuis une quinzaine d'années de nombreuses réformes, avec l'objectif de maintenir les grands équilibres macro-économiques et de maîtriser les coûts.

Bilodeau, H. et Leduc, N. (2003). "Recension des principaux facteurs d'attraction, d'installation et de maintien des médecins en régions éloignées." Cahiers De Sociologie Et De Demographie Medicales **43**(3): 485-504.

[BDSP. Notice produite par ORSMIP Gx2R0xg4. Diffusion soumise à autorisation]. Une meilleure compréhension de l'apport de chacun des facteurs à l'étude de l'attraction, de l'installation et du maintien des médecins dans un lieu de pratique est nécessaire à l'identification de pistes à développer et éventuellement à la mise en oeuvre d'interventions mieux ciblées pour améliorer la répartition géographique des effectifs médicaux. Cet article vise donc à identifier les principaux facteurs investigués aux cours des dix dernières années en Australie, au Canada et aux Etats-Unis et faire le point sur leur contribution afin d'expliquer les choix de lieu de pratique des médecins. La méthode utilisée est le recensement des articles scientifiques portant sur les choix d'un lieu de pratique rural ou urbain depuis 1990 à l'aide de deux moteurs de recherche (MEDline et Current Contents) ainsi que des citations dans les articles identifiés. Cette démarche a permis de constater que très peu d'études ont examiné les effets des mesures incitatives visant à favoriser l'installation des médecins en régions éloignées. Les effets des diverses mesures telles que la formation en régions, le soutien financier

(bourses, primes ...) et le ressourcement ou l'accès à la formation médicale continue nécessitent des études plus approfondies afin de dégager une représentation plus claire de leur influence sur l'ensemble du processus décisionnel des médecins déjà établis et des futurs médecins pour qui le choix d'un lieu de pratique reste à venir. (extrait du texte).

Biscaia, A., et al. (2007). "The State of the Health Workforce in Portugal." Cahiers De Sociologie Et De Demographie Medicales **47**(3): 259-273.

[BDSP. Notice produite par OBRESA mR0xc9n0. Diffusion soumise … autorisatio- n]. Cet article discute l',volution de la main d'oeuvre sanitaire au Portugal depuis quarante ans. Les travailleurs de la sant, repr,sentent aujourd'hui 3,76% de la main-d'oeuvre totale. Tous les groupes professionne- ls ont cru significativement depuis 1960. La croissance a ,t, continue pour les m,decins et les infirmiers pris globalement. Les m,decins g,n,ralistes ont toutefois vu leur croissance diminuer … partir de la fin des ann,es 1970. Le nombre de m,decins par 1 000 habitants est sup,rieur … la moyenne europ,enne, mais pour les infirmiers, le Portugal a les ratios les plus faibles d'Europe. En d,fi … cela, les infirmiers, et aussi les pharmaciens, sont mieux distribu,s … travers le pays que les m,decins. Le nombre de travailleurs employ,s par le MinistŠre de la Sant, a augment, de 44,6% entre 1985 et 2004, pour atteindre 127 013 personnes, dont un nombre toujours plus ,lev, de femmes. Seulement 23,6% de ceux-ci travaillent au niveau des soins primaires. L'information sur le secteur priv, est insuffisante en d,pit de son importance croissante- . Une meilleure information sur la taille et la composition du stock de travailleurs requis pour avoir un systŠme de services performant est une question complexe qui exige un systŠme d'information ad,quat pour y r,pondre. Un tel systŠme fait encore d,faut au Portugal. (R,sum, d'auteur)

Blank, W. A. (2019). "[A Successful Strategy against the Expected Shortage of Physicians in Rural Areas]." Gesundheitswesen.

BACKGROUND: The expected shortage of physicians in rural areas of Germany calls for strategies to prevent an under-supply of care for patients living in such areas. OBJECTIVES: The innovative care project "Good Physicians are needed for the Countryside" is a multi-modal concept comprising 29 components implemented in an economically deprived area, aiming to attract young physicians to work in rural areas on a long-term basis. RESULTS: 5 physicians in training were hired during the project phase, and a further 3 after the project had ended. 2 of these now own and run one of the cooperating practices. Project components facilitating learning across generations was considered especially important;13 of 29 project components (45%) were judged to be very important by participants. CONCLUSIONS: It is possible to motivate medical doctors and their families to work in the countryside by providing targeted individual professional and personal counselling, which requires limited organizational capacity but considerable commitment of staff time.

Bodenheimer, T. S. et Smith, M. D. (2013). "Primary care: proposed solutions to the physician shortage without training more physicians." Health Aff.(Millwood.) **32**(11): 1881-1886.

The adult primary care "physician shortage" is more accurately portrayed as a gap between the adult population's demand for primary care services and the capacity of primary care, as currently delivered, to meet that demand. Given current trends, producing more adult primary care clinicians will not close the demand-capacity gap. However, primary care capacity can be greatly increased without many more clinicians: by empowering licensed personnel, including registered nurses and pharmacists, to provide more care; by creating standing orders for nonlicensed health personnel, such as medical assistants, to function as panel managers and health coaches to address many preventive and chronic care needs; by increasing the potential for more patient self-care; and by harnessing technology to add capacity

Bolduc, D., et al. (1996). "The effect of incentive policies on the practice location of doctors : a multinomial probit analysis." Journal of Labor Economics **14**(4): 703-732.

Bourgueil, Y., Durr, U., Pouvourville, G. d., et al. (2000). La régulation des professions de santé : études monographiques : Allemagne, Belgique, Etats-Unis, Pays-Bas, Québec, Royaume-Uni : rapport provisoire. Saint-Maurice ENSP**:** 250.

L'objectif de ce rapport est de comparer les mécanismes de régulation des professions de santé existants dans divers pays européens. Pour chaque pays étudié, il dresse tout d'abord un état des lieux de la démographique médicale et présente les outils de planification. Il analyse ensuite les modes de régulation mis en place agissant sur l'accès à la formation et sur le marché du travail.

Bourgueil, Y., et al. (2001). "La régulation démographique de la profession médicale en Allemagne, en Belgique, aux Etats-Unis, au Québec et au Royaume-Uni (étude monographique)." Etudes Et Resultats(120): 12 , 12 tabl., 11 enc.

Sur cinq pays étudiés, la régulation démographique des professions médicales peut se décrire selon trois modes : une « régulation administrée complète » (au Royaume-Uni et au Québec), une « régulation administrée incomplète » (en Allemagne et en Belgique), une « régulation faiblement administrée » (aux États-Unis). Ces modes de régulation reflètent la façon dont s'exerce l'intervention publique dans le système de soins (État ou caisses de Sécurité sociale) et la répartition géographique des compétences en matière de formation des étudiants. Les États-Unis régulent peu les formations et font jouer un rôle important aux Managed Care Organizations dans la gestion des professionnels de santé. En Allemagne et en Belgique, la régulation des professionnels se fait à l'installation par le biais du conventionnement avec les caisses d'assurance maladie, sachant que l'organisation fédérale ou communautaire laisse aux Länder ou aux communautés linguistiques une grande latitude dans l'aménagement des études médicales. Au Royaume-Uni et au Québec, l'intervention centrale de l'État est plus directe, tout en s'appuyant sur les avis d'instances d'ailleurs plutôt professionnelles qu'universitaires (résumé d'auteurs).

Bourgueil, Y., et al. (2006). Comment améliorer la répartition géographique des professionnels de santé ? Les enseignements de la littérature internationale et des mesures adoptées en France. Rapport Irdes. Paris Irdes**:** 69 , tabl., ann.
http://www.irdes.fr/En_ligne/Rapport/rap2006/rap1635.pdf

Les objectifs de cette étude sont de recenser les mesures publiques visant à améliorer la régulation de la répartition géographique des professionnels de santé en France ; d'analyser leurs caractéristiques (nature, évaluation, efficacité?) et de les mettre en perspective, notamment au regard de la littérature internationale. Ce rapport en présente les principaux enseignements au travers des trois parties suivantes : une revue de la littérature internationale consacrée à l'évaluation des politiques visant une meilleure répartition géographique des professionnels de santé ; un recensement et une analyse des mesures nationales visant à améliorer la régulation de la répartition géographique des professionnels de santé mises en ?uvre en France ; l'identification et l'analyse des mesures régionales et locales au moyen d'une enquête par questionnaire menée en 2005 auprès des comités régionaux de l'Observatoire national de la démographie des professions de santé et d'entretiens ciblés dans trois régions.

Buchan, J. et Calman, L. (2004). The global shortage of registered nurses: an overview of issues and actions. Genève ICN**:** 51 , 11 fig., 13 tabl.
www.icn.ch/global/shortage.pdf

Ce rapport s'intéresse en particulier aux composantes essentielles de la main-d'oeuvre de la santé : les infirmières, qui sont en première ligne de la lutte contre la maladie dans la plupart des systèmes de santé. Leur contribution est reconnue comme déterminante pour la réalisation des objectifs de développement pour la fourniture de soins sûrs et efficaces. L'analyse globale vise à identifier les problèmes politiques et pratiques, ainsi que les solutions qui devraient être mises en oeuvre par les gouvernements, les agences internationales, les employeurs, les associations professionnelles pour améliorer la disponibilité et l'utilisation de la main d'oeuvre. Les versions française et espagnole seront disponibles ultérieurement sur le site de l'ICN : www.icn.ch/global/.

Buykx, P., et al. (2010). "Systematic review of effective retention incentives for health workers in rural and remote areas: towards evidence-based policy." Aust.J Rural Health **18**(3): 102-109.

BACKGROUND: Poor retention of health workers is a significant problem in rural and remote areas, with negative consequences for both health services and patient care. OBJECTIVE: This review aimed to synthesise the available evidence regarding the effectiveness of retention strategies for health workers in rural and remote areas, with a focus on those studies relevant to Australia. DESIGN: A systematic review method was adopted. Six program evaluation articles, eight review articles and one grey literature report were identified that met study inclusion/exclusion criteria. RESULTS: While a wide range of retention strategies have been introduced in various settings to reduce unnecessary staff turnover and increase length of stay, few have been rigorously evaluated. Little evidence demonstrating the effectiveness of any specific strategy is currently available, with the possible exception of health worker obligation. Multiple factors influence length of employment, indicating that a flexible, multifaceted response to improving workforce retention is required. CONCLUSIONS: This paper proposes a comprehensive rural and remote health workforce retention framework to address factors known to contribute to avoidable turnover. The six components of the framework relate to staffing, infrastructure, remuneration, workplace organisation, professional environment, and social, family and community support. In order to ensure their effectiveness, retention strategies should be rigorously evaluated using appropriate pre- and post-intervention comparisons

Campbell, J. L., Fletcher, E., Abel, G., et al. (2019). "Policies and strategies to retain and support the return of experienced GPs in direct patient care: the ReGROUP mixed-methods study." Health Services and Delivery Research **7**(14): xxxiv+275.
https://www.journalslibrary.nihr.ac.uk/hsdr/hsdr07140/#/abstract

The UK faces a serious shortage of general practitioners (GPs). The general population is ageing and has more and more complex health needs. GP shortages are likely to put patients at risk, and the NHS urgently needs to understand why GPs leave patient care. Plans to maintain the GP workforce are under way but lack strong research evidence. As GP training takes at least 10 years, recruiting more GPs is not sufficient; retaining existing GPs is essential. The aim was to explore why GPs leave general practice and to develop policies and strategies to maintain the workforce. Six activities were carried out. First, existing research on GPs' career decisions was reviewed: four factors have a major role (workload, job dissatisfaction, work-related stress and work–life balance). Second, 3370 GPs in south-west England were surveyed to estimate how many may leave within 5 years, finding a high likelihood of leaving and low GP morale. Third, 41 GPs of those who returned the survey, and people with a specific interest in the subject, were interviewed, seeking to understand GPs' experiences. This highlighted three themes: professional identity and value of the GP role, fear and risk, and available career choices. These studies allowed the development of policies and strategies to retain the GP workforce. Fourth, a panel of experts reviewed the policies and strategies, judging those relating to supporting day-to-day running of practices and reducing work-related stress to be both appropriate and feasible. Fifth, computer models were developed to identify practices at risk of losing their GPs within 5 years and thus potentially in need of support. Finally, interested parties were asked to consider the feasibility of introducing the draft policies. Participants suggested a range of actions for policy-makers, which included the need to explore 'portfolio' roles for GPs, and the possibility of providing formal career training for key members of the primary care team, such as practice managers.

Carey, T. A., et al. (2013). "What primary health care services should residents of rural and remote Australia be able to access? A systematic review of "core" primary health care services." BMC Health Serv Res **13**: 178.

BACKGROUND: There are significant health status inequalities in Australia between those people living in rural and remote locations and people living in metropolitan centres. Since almost ninety percent of the population use some form of primary health care service annually, a logical initial step in reducing the disparity in health status is to improve access to health care by specifying those primary health care services that should be considered as "core" and therefore readily available to all Australians

regardless of where they live. A systematic review was undertaken to define these "core" services. Using the question "What primary health care services should residents of rural and remote Australia be able to access?", the objective of this paper is to delineate those primary health care core services that should be readily available to all regardless of geography. METHOD: A systematic review of peer-reviewed literature from established databases was undertaken. Relevant websites were also searched for grey literature. Key informants were accessed to identify other relevant reference material. All papers were assessed by at least two assessors according to agreed inclusion criteria. RESULTS: Data were extracted from 19 papers (7 papers from the peer-reviewed database search and 12 from other grey sources) which met the inclusion criteria. The 19 papers demonstrated substantial variability in both the number and nature of core services. Given this variation, the specification or synthesis of a universal set of core services proved to be a complex and arguably contentious task. Nonetheless, the different primary health care dimensions that should be met through the provision of core services were developed. In addition, the process of identifying core services provided important insights about the need to deliver these services in ways that are "fit-for-purpose" in widely differing geographic contexts. CONCLUSIONS: Defining a suite of core primary health care services is a difficult process. Such a suite should be fit-for-purpose, relevant to the context, and its development should be methodologically clear, appropriate, and evidence-based. The value of identifying core PHC services to both consumers and providers for service planning and monitoring and consequent health outcomes is paramount.

Carson, D. B., et al. (2015). "The 'rural pipeline' and retention of rural health professionals in Europe's northern peripheries." Health Policy **119**(12): 1550-1556.

The major advance in informing rural workforce policy internationally over the past 25 years has been the recognition of the importance of the 'rural pipeline'. The rural pipeline suggests that people with 'rural origin' (who spent some childhood years in rural areas) and/or 'rural exposure' (who do part of their professional training in rural areas) are more likely to select rural work locations. What is not known is whether the rural pipeline also increases the length of time professionals spend in rural practice throughout their careers. This paper analyses data from a survey of rural health professionals in six countries in the northern periphery of Europe in 2013 to examine the relationship between rural origin and rural exposure and the intention to remain in the current rural job or to preference rural jobs in future. Results are compared between countries, between different types of rural areas (based on accessibility to urban centres), different occupations and workers at different stages of their careers. The research concludes that overall the pipeline does impact on retention, and that both rural origin and rural exposure make a contribution. However, the relationship is not strong in all contexts, and health workforce policy should recognise that retention may in some cases be improved by recruiting beyond the pipeline.

Chevrier-Fatome, C. (2002). Le système de santé en Angleterre : actions concernant la qualité des soins et la régulation des dépenses en ambulatoire. Paris IGAS**:** 116 , ann.

Le présent rapport s'inscrit dans la démarche d'administration comparée initiée par l'IGAS relative aux dispositifs d'encadrement des médecins exerçant en ambulatoire évalués sous le double prisme de la qualité des soins et de la maîtrise des coûts. Il constitue une synthèse des observations effectuées par la mission en Angleterre. Il comprend 3 parties : données générales sur le système de santé et l'organisation de la couverture maladie ; l'organisation de l'offre médicale ambulatoire ; la régulation du coût et de la qualité des soins.

Chevrier-Fatome, C. (2002). Le système de santé et d'assurance maladie aux Pays-Bas : actions concernant la qualité des soins et la régulation des dépenses en ambulatoire. Paris IGAS**:** 69 , ann.

Le présent rapport s'inscrit dans la démarche d'administration comparée initiée par l'IGAS relative aux dispositifs d'encadrement des médecins exerçant en ambulatoire évalués sous le double prisme de la qualité des soins et de la maîtrise des coûts. Il constitue une synthèse des observations effectuées par la mission aux Pays-Bas. Ce pays offre un cadre intéressant d'analyse comparée pour trois raisons : les Pays-Bas figurent parmi les rares pays de l'OCDE à avoir réussi à stabiliser la part des dépenses de

santé dans son PIB au cours de la dernière décennie tout en conservant des taux de remboursement corrects ; le système néerlandais de santé a fait l'objet de réformes dans les années 1990 dont les principaux leviers sont l'introduction d'une concurrence régulée entre caisses d'assurance publiques, le transfert partiel des risques vers les assureurs publics et le début d'une concurrence entre fournisseurs de soins. L'organisation du système de santé présente des similitudes institutionnelles notables avec la France mais également des divergences non négligeables.

Chevrier-Fatome, C., et al. (2002). L'encadrement et le contrôle de la médecine ambulatoire : étude d'administration comparée : Allemagne, Angleterre, Etats-Unis, Pays-Bas. Paris IGAS**:** 59 , ann.

Le présent rapport compare de façon synthétique les dispositifs d'encadrement et de contrôle de la médecine ambulatoire dans quatre pays : Allemagne, Pays-Bas, Angleterre et Etats-Unis et propose, à partir des observations étrangères, des évolutions pour le système national français. Le document comprend trois parties : données générales sur le contexte de l'encadrement de la médecine ambulatoire ; les outils de régulation : constats généraux sur l'encadrement de la médecine de ville, régulation par le contrôle de l'offre et du coût des soins, régulation par l'amélioration de la qualité des pratiques professionnelles et par l'organisation ; axes de réflexion et recommandation pour faire évoluer l'encadrement de la médecine de ville en France.

Chilvers, R. et Richards, S. H. (2019). "Identifying policies and strategies for general practitioner retention in direct patient care in the United Kingdom: a RAND/UCLA appropriateness method panel study." **20**(1): 130.

BACKGROUND: The United Kingdom (UK) is experiencing a general practitioner (GP) workforce retention crisis. Research has focused on investigating why GPs intend to quit, but less is known about the acceptability and effectiveness of policies and strategies to improve GP retention. Using evidence from research and key stakeholder organisations, we generated a set of potential policies and strategies aimed at maximising GP retention and tested their appropriateness for implementation by systematically consulting with GPs. METHODS: 28 GP Partners and GPs working in national stakeholder organisations from South West England and London were purposively sampled, and asked to take part in a RAND/UCLA Appropriateness Method panel. Panellists were asked to read an evidence briefing summary, and then complete an online survey on two occasions. During each round, participants rated the appropriateness of policies and strategies aimed at improving GP retention using a nine point scale (1 'extremely inappropriate' to 9 'extremely appropriate'). Fifty-four potential policies and strategies (equating to 100 statements) were tested, focusing on factors influencing job satisfaction (e.g. well-being, workload, incentives and remuneration, flexible working, human resources systems). Ratings were analysed for panel consensus and categorised based on appropriateness ('appropriate', 'uncertain', 'inappropriate'). RESULTS: 12/28 GPs approached agreed to take part, 9/28 completed two rounds of the online survey between February and June 2018. Panellists identified 24/54 policy and strategy areas (41/100 statements) as 'appropriate'. Examples included providing GP practices 'at risk' of experiencing GP shortages with a toolkit for managing recruitment and retention, and interventions to facilitate peer support to enhance health and wellbeing, or support portfolio careers. Strategies to limit GP workload, and manage patient demand were also endorsed. CONCLUSIONS: The panel of experienced GPs identified a number of practical ways to improve GP retention through interventions that might enhance job satisfaction and work-life balance. Future research should evaluate the impact of implementing these recommendations.

Colombo, A. et Bassani, G. (2019). "[Lack of doctors, but for what System? Shortage of clinicians in Italy and Lombardy and reflections on structural constrains in training]." Ig Sanita Pubbl **75**(5): 385-402.

A lack of physicians is a major threat in many health care systems. Italy is coping with this problem, by increasing the number of residency training positions for medical graduates. Nevertheless, analysis of data and a critical review of organisational aspects of the system seem to suggest that structural changes are also needed. Eight areas are discussed: 1. The (very high) age of physicians in the country; 2. The (problematic) organisation of the health care delivery system; 3. The (uneven) distribution of residency training positions across the regions; 4. The (inadequate) mix of workforce between physicians and nurses; 5. The (biased) preferences for choosing a medical specialty; 6. The

(emblematic) case of training for Gps; 7. The (unprecedent) growth of life expectancy and comorbidity; 8. The (absence of a) plan and method for recruiting workforce in health care at national level. The authors conclude that the solution for the lack of medical specialists is less a matter of increasing the number of residency training positions and more a matter of solving some structural constraints of the system. Solutions might have to do - for instance - with the introduction of the recognition of the professional role of physicians in residency training (especially for GPs - like in UK). Another aspect to be taken in consideration is also the professional role and competencies of nurses, that could be widened.

Costa, F., Nunes, L., Sanches, F., et al. (2019). How to Attract Physicians to Underserved Areas? Policy Recommendations from a Structural Model. Charlottesville Center for Open Science**:** 41 , tabl., fig.+annexes. https://osf.io/preprints/socarxiv/hfa8s/

The lack of physicians in poorer areas is a matter of concern in developed and developing countries. This paper exploits location choices and individual characteristics of all generalist physicians who graduated in Brazil between 2001 and 2013 to study policies that aim at increasing the supply of physicians in underserved areas. We estimate physicians' locational preferences using a random coefficients discrete choice model. We find that physicians have substantial utility gains if they work close to the region they were born or from where they graduated. We show that wages and health infrastructure, though relevant, are not the main drivers of physicians' location choices. Simulations from the model indicate that quotas in medical schools for students born in underserved areas and the opening of vacancies in medical schools in deprived areas improve the spatial distribution of physicians at lower costs than financial incentives or investments in health infrastructure.

Danish, A., Blais, R. et Champagne, F. (2019). "Strategic analysis of interventions to reduce physician shortages in rural regions." Rural and Remote Health **19**(4): 5466.
http://europepmc.org/abstract/MED/31752495
https://doi.org/10.22605/RRH5466

INTRODUCTION: Physician shortages in rural regions of OECD countries has led to the development of regulatory, financial, educational and tailored interventions designed to reduce physician shortages. Studies evaluating these interventions report weak or inconclusive results. The objective of this research is to examine the strategic relevance of the interventions by identifying and prioritizing the determinants of physician shortages and analyzing the interventions based on their ability to target the determinants. METHODS:First, the determinants of physician shortages were identified and categorized using Mays et al's 2005 method for reviewing qualitative literature. Second, the determinants were prioritized based on importance, severity and solvability, using Lehmann et al's multilevel categorization of factors affecting attraction and retention. Third, the interventions were analyzed based on their ability to target the determinants through a document analysis as descriptive commentary from a policy analysis perspective. RESULTS: Three individual and 10 contextual (work, rural or international context) determinants of physician shortages were identified. Non-rural background, inadequate training and inadequate incentive structure were prioritized as level 1. Lack of professional support, poor work infrastructure and personal interests were prioritized as level 2. Poor rural infrastructure, inadequate supply planning and cultural difference were prioritized as level 3. Non-minority background, geography and climate, global migration and aging population were prioritized as level 4. Establishing rural medical schools targets the greatest number of priority determinants, followed by financial interventions targeting practicing physicians and non-traditional health services delivery strategies. Curriculum changes, professional support strategies, selective admission to medical schools, financially targeting student physicians and coercive regulatory measures follow. Community support strategies target the fewest number of determinants and trickle-down economic regulation targets none. CONCLUSION: Strategic analysis demonstrates that most interventions designed to reduce physician shortages in rural regions are strategically relevant because they address the priority determinants of physician shortages. A link is established between the determinants of physician shortages and the interventions, thereby addressing an important concern expressed in the literature. An original contribution is made to health human resources

literature by relying on established theoretical frameworks to achieve a strategic analysis of the interventions.

Danish, A., Champagne, F. et Blais, R. (2020). "Theoretical analysis of policies to improve the recruitment and retention of rural physicians." Aust J Rural Health **28**(5): 427-433.

The lack of success in resolving the shortage of rural physicians in Organisation for Economic Cooperation and Development countries has been attributed to the weakness of implemented policies. This research examines the theoretical plausibility of policies to improve the recruitment and retention of rural physicians, first, by modelling the policies; and then, by describing how they might achieve their intended outcome based on a theoretical analysis. A theory-driven method relying on published research and expert analysis is used. A conceptual model is created to represent the policies and their underlying assumptions. Then, the functional mechanism of the policies is defined. This research demonstrates that financial, educational and tailored interventions might improve rural physician recruitment and retention, but that regulatory interventions are unlikely to do this. The majority of the policies implemented in Organisation for Economic Cooperation and Development countries are therefore theoretically plausible.

Darbyshire, D., Brewster, L., Isba, R., et al. (2020). "Retention of doctors in emergency medicine: a scoping review protocol." JBI Database System Rev Implement Rep **18**(1): 154-162.

OBJECTIVE: The primary question of the review is: What is known about retention of doctors in emergency medicine? INTRODUCTION: There is a staffing crisis in emergency medicine and retention problems across healthcare. The evidence is disparate and includes healthcare research, management studies and policy documents from government and other agencies. Therefore there is a need to map the evidence on retention of emergency medicine doctors. This review is part of a wider study of the retention of doctors in emergency medicine situated in the UK. INCLUSION CRITERIA: We will identify papers relating to emergency medicine doctors at all levels, using the different terms used internationally for these practitioners. We will exclude papers relating to other healthcare professions. We aim to include papers relating to retention; to identify these our search will include terms such as turnover and exodus. The setting is focused on the emergency department; studies focusing on working in other settings, for example, a minor injuries unit, will be excluded. Studies from any country will be included; however, we are limited to those published in English. METHODS: We will search medical literature databases including MEDLINE, Embase, HMIC, PsycINFO, the Cochrane Database of Systematic Reviews, and the British Medical Journal collection. We will supplement this by searching business and management journals including Business Source Complete, ProQuest Business Database and Emerald Business and Management Journals. A structured iterative search of the gray literature will be conducted. Retrieved papers will be screened for inclusion by two reviewers. Data will be extracted and presented in tabular form and a narrative summary that align with the review's objective.

Depasquale, C. et Stange, K. (2016). Labor Supply Effects of Occupational Regulation: Evidence from the Nurse Licensure Compact. NBER Working Paper Series ; n° 22344. Cambridge NBER**:** 52 , fig., tabl., annexes. http://www.nber.org/papers/w22344

There is concern that licensure requirements impede mobility of licensed professionals to areas of high demand. Nursing has not been immune to this criticism, especially in the context of perceived nurse shortages and large expected future demand. The Nurse Licensure Compact (NLC) was introduced to solve this problem by permitting registered nurses to practice across state lines without obtaining additional licensure. We exploit the staggered adoption of the NLC to examine whether a reduction in licensure-induced barriers alters the nurse labor market. Using data on over 1.8 million nurses and other health care workers we find no evidence that the labor supply or mobility of nurses increases following the adoption of the NLC, even among the residents of counties bordering other NLC states who are potentially most affected by the NLC. This suggests that nationalizing occupational licensing will not substantially reduce labor market frictions

Dewulf, B., et al. (2013). "Accessibility to primary health care in Belgium: an evaluation of policies awarding financial assistance in shortage areas." BMC Fam Pract **14**: 122.

> BACKGROUND: In many countries, financial assistance is awarded to physicians who settle in an area that is designated as a shortage area to prevent unequal accessibility to primary health care. Today, however, policy makers use fairly simple methods to define health care accessibility, with physician-to-population ratios (PPRs) within predefined administrative boundaries being overwhelmingly favoured. Our purpose is to verify whether these simple methods are accurate enough for adequately designating medical shortage areas and explore how these perform relative to more advanced GIS-based methods. METHODS: Using a geographical information system (GIS), we conduct a nation-wide study of accessibility to primary care physicians in Belgium using four different methods: PPR, distance to closest physician, cumulative opportunity, and floating catchment area (FCA) methods. RESULTS: The official method used by policy makers in Belgium (calculating PPR per physician zone) offers only a crude representation of health care accessibility, especially because large contiguous areas (physician zones) are considered. We found substantial differences in the number and spatial distribution of medical shortage areas when applying different methods. CONCLUSIONS: The assessment of spatial health care accessibility and concomitant policy initiatives are affected by and dependent on the methodology used. The major disadvantage of PPR methods is its aggregated approach, masking subtle local variations. Some simple GIS methods overcome this issue, but have limitations in terms of conceptualisation of physician interaction and distance decay. Conceptually, the enhanced 2-step floating catchment area (E2SFCA) method, an advanced FCA method, was found to be most appropriate for supporting areal health care policies, since this method is able to calculate accessibility at a small scale (e.g., census tracts), takes interaction between physicians into account, and considers distance decay. While at present in health care research methodological differences and modifiable areal unit problems have remained largely overlooked, this manuscript shows that these aspects have a significant influence on the insights obtained. Hence, it is important for policy makers to ascertain to what extent their policy evaluations hold under different scales of analysis and when different methods are used.

Doetter, L. F. et Gotze, R. (2012). The exit behavior of doctors under conditions of increasing regulation in England and Germany - a comparative case study of service providers in most different healthcare systems. Breme University of Bremen**:** 36 , tabl.
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2110513

> The present study examines how one of the main actors and key stakeholders in healthcare systems doctors have reacted to changing regulatory environments by engaging in exit behavior in two most different systems for comparison: the English National Health Service and the German Social Health Insurance system. Our period of observation covers the early 1990s up to 2011, which represents a period of major reform for both cases. The underlying assumption tested is that within an environment of increasing regulation in which reforms adversely affect the conditions for remuneration and professional autonomy of providers, doctors will be found to progressively exit the medical profession and/or respective healthcare system. Our findings establish a strong role for regulation in conditioning the exit behavior of doctors. However, this role need not be a negative one, as we find that where regulation improves particularly the conditions for remuneration, exit decreases and supply increases. Results also point to the necessity in differentiating amongst the effects of reforms on specific doctor-groups; considering the role of gender; as well as distinguishing amongst specific forms of regulation and types of exit.

Dowell, J., et al. (2015). "Widening access to medicine may improve general practitioner recruitment in deprived and rural communities: survey of GP origins and current place of work." BMC Med Educ **15**: 165.

> BACKGROUND: Widening access to medicine in the UK is a recalcitrant problem of increasing political importance, with associated strong social justice arguments but without clear evidence of impact on service delivery. Evidence from the United States suggests that widening access may enhance care to underserved communities. Additionally, rural origin has been demonstrated to be the factor most strongly associated with rural practice. However the evidence regarding socio-economic and rural

background and subsequent practice locations in the UK has not been explored. The aim of this study was to investigate the association between general practitioners' (GPs) socio-economic and rural background at application to medical school and demographic characteristics of their current practice. METHOD: The study design was a cross-sectional email survey of general practitioners practising in Scotland. Socio-economic status of GPs at application to medical school was assessed using the self-coded National Statistics Socio-Economic Classification. UK postcode at application was used to define urban-rural location. Current practice deprivation and remoteness was measured using NHS Scotland defined measures based on registered patients' postcodes. RESULTS: A survey was sent to 2050 Scottish GPs with a valid accessible email address, with 801 (41.5 %) responding. GPs whose parents had semi-routine or routine occupations had 4.3 times the odds of working in a deprived practice compared to those with parents from managerial and professional occupations (95 % CI 1.8-10.2, p = 0.001). GPs from remote and rural Scottish backgrounds were more likely to work in remote Scottish practices, as were GPs originating from other UK countries. CONCLUSION: This study showed that childhood background is associated with the population GPs subsequently serve, implying that widening access may positively affect service delivery in addition to any social justice rationale. Longitudinal research is needed to explore this association and the impact of widening access on service delivery more broadly.

Duhamel, G. (2002). Le système de santé et d'assurance maladie américain : actions avec les médecins concernant la qualité des soins et la régulation des dépenses en ambulatoire. Paris IGAS**:** 87 , ann.

Le présent rapport s'inscrit dans la démarche d'administration comparée initiée par l'IGAS relative aux dispositifs d'encadrement des médecins exerçant en ambulatoire évalués sous le double prisme de la qualité des soins et de la maîtrise des coûts. Il constitue une synthèse des observations effectuées par la mission aux Etats-Unis. Il comprend 3 parties : données générales sur le système de santé et l'organisation de la couverture maladie ; l'organisation de l'offre médicale ambulatoire ; la régulation du coût et de la qualité des soins.

Dumont, E., et al. (2007). Physicians Multitasking and Incentives: Empirical Evidence from a Natural Experiment. CIRPEE Working Paper 07-45. Laval CIRPEE**:** 31 , tabl.
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1056141

We analyse how physicians respond to contractual changes and incentives within a multitasking environment. In 1999 the Quebec government (Canada) introduced an optimal mixed compensation system, combining a fixed per diem with a discounted (relative to the traditional fee-for-service system) fee for services provided. We combine panel survey and administrative data on Quebec physicians to evaluate the impact of this change in incentives on their practice choices. We highlight the differentiated impact of incentives on various dimensions of physician behaviour by considering a wide range of labour supply variables: time spent on seeing patients, time devoted to teaching, administrative tasks or research, as well as the volume of clinical services and average time per clinical service. Our results show that, on average, the reform induced physicians who changed from FFS to MC to reduce their volume of (billable) services by 6.15% and to reduce their hours of work spent on seeing patients by 2.57%. Their average time spent per service increased by 3.58%, suggesting a potential quality-quantity substitution. Also the reform induced these physicians to increase their time spent on teaching and administrative duties (tasks not remunerated under the fee-for-service system) by 7.9%.

Effelt, S., et al. (2012). "Assessing health care planning ? A framework-led comparison of Germany and New Zealand." Health Policy **106**(1): 1-10, tabl., graph., fig.

With markets and competition dominating much of the debate on health care reform, health care planning has received little scholarly attention in recent years. Yet in many high-income countries, governments have continued to plan some elements of their health care systems. We use a new framework for analysing health care planning organised around the dimensions of 'vision', 'governance' and 'intelligence' to assess the approach in two deliberately contrasting countries, Germany and New Zealand. METHODS: A review of the literature on health care planning in general

and specifically in Germany and New Zealand, supported by key participant interviews.R ESULTS: Planning in both countries largely reflects the different institutional arrangements of their wider health systems. Planning in Germany is fragmented, in part due to federalism and corporatism, with separate approaches in different health care sectors and regions. In contrast, New Zealand's NHS-style health system favours a more hierarchical, integrated approach, with clear lines of accountability, and central government capacity to define objectives and monitor developments. Both countries find it difficult to use planning to align demand for and supply of health care though New Zealand makes some use of population needs assessments to support this process while these are currently absent in Germany.CONCLUSIONS: While it remains challenging to compare health care systems that are institutionally very different, this new framework for analysing their approaches to planning draws attention to their advantages and disadvantages. It also generates an agenda for future research to improve our understanding of the role and effectiveness of different forms of planning versus, and in combination with, other policy tools to relating health care supply and demand.

Esandi, M. E., Antonietti, L., Ortiz, Z., et al. (2020). "[Factors and interventions that affect working conditions and environment to increase the attraction, recruitment and retention of human resources for health at the primary care level in rural, remote or underserved areas]." Rev Panam Salud Publica **44**: e112.

OBJECTIVE: To identify and systematize available empirical evidence on factors and interventions that affect working conditions and environment in order to increase the attraction, recruitment and retention of human resources for health at the primary care level in rural, remote or underserved areas. METHODS: Rapid review of reviews selected according to relevance, eligibility and inclusion criteria. The search was conducted on electronic and manual databases, including grey literature. AMSTAR I was used to assess the quality of systematic reviews and a thematic analysis for synthesis of the results. RESULTS: Sixteen reviews were included, one of which contained 14 reviews. Of the total, 20 reviews analyzed factors and 9 evaluated the effectiveness of interventions. The evidence on factors is abundant, but of limited quality. Individual, family and "previous exposure to a rural setting" factors were associated with higher recruitment; organizational and external context factors were important for human resource retention. Networking and professional support influenced recruitment and retention. Evidence on the effectiveness of interventions was limited, both in quantity and quality. The most frequently used intervention was incentives. CONCLUSIONS: Evidence on factors that are positively related to recruitment and retention of workers at the first level of care in rural, remote or underserved areas is sufficient and should be taken into account when designing interventions. Quality evidence on the effectiveness of interventions is scarce. More controlled studies with methodological rigor are needed, particularly in the Americas.

Falcetonni, H. (2019). Physician Workforce Effect on Health. Washington Board of Governors of the Federal Reserve System**:** 32.
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3493192

Cities attract both more physicians and healthier people, but whether these two facts are causally related is yet to be determined, as many variables are correlated with both the physician concentration and health outcomes. This paper uses unidentifiable claims data from New Hampshire and treatment-effects analysis to address this question and finds that access to an additional physician per 10,000 residents leads to 4.5 saved lives per 100,000 residents. Using aggregate data and an instrumental-variable approach where I use the procedures carried out across areas joint with the policy-set reimbursement fees to instrument for the number of care providers, I show that these results generalize to the US as a whole. The results are robust to many specifications, to variations in the type of care providers considered, and to variations in how the instrument is constructed.

Forgacs, I. (2002). "The required number of physicians : is it an optimal figure ?" Cahiers De Sociologie Et De Demographie Medicales **42**(2-3): 269-282.

[BDSP. Notice produite par ORSMIP CGd72R0x. Diffusion soumise … autorisatio- n]. La densit, m,dicale varie trŠs largement d'un pays … l'autre, même parmi les nations d,velopp,es. Il y a plus de 500 m,decins actifs pour 100000 habitants en Italie et moins de 200 au Royaume Uni et au Japon. La

densité médicale d'un pays n'est pas corr,l,e ni avec le PIB, ni avec la dure moyenne de vie (mais il existe une corrélation entre les deux dernières variables). Il y a une certaine corrélation entre la densité, médicale et celle des lits d'hospitalisation. Dans les pays industrialisés, il y entre 3 et 5 infirmières pour 1 médecin, mais dans les pays pauvres, il y a au maximum deux infirmières. En général, plus il y a de praticiens, plus il y a de malades. Les normes de densit, de personnel soignant sont la plupart du temps déterminés par les payeurs. Elles ne correspondent pas nécessairement aux besoins preçus par les professionnels.

Frehywot, S., et al. (2010). "Compulsory service programmes for recruiting health workers in remote and rural areas: do they work?" Bull World Health Organ(88): 364-370, tab., graph., fig.

Compulsory service programmes have been used worldwide as a way to deploy and retain a professional health workforce within countries. Other names for these programmes include ”obligatory”, ”mandatory”, ”required” and ”requisite.” All these different programme names refer to a country’s law or policy that governs the mandatory deployment and retention of a heath worker in the underserved and/or rural areas of the country for a certain period of time. This study identified three different types of compulsory service programmes in 70 countries. These programmes are all governed by some type of regulation, ranging from a parliamentary law to a policy within the ministry of health. Depending on the country, doctors, nurses, midwives and all types of professional allied health workers are required to participate in the programme. Some of the compliance-enforcement measures include withholding full registration until obligations are completed, withholding degree and salary, or imposing large fines. This paper aims to explain these programmes more clearly, to identify countries that have or had such programmes, to develop a typology for the different kinds and to discuss the programmes in the light of important issues that are related to policy concepts and implementation. As governments consider the cost of investment in health professionals’ education, the loss of health professionals to emigration and the lack of health workers in many geographic areas, they are using compulsory service requirements as a way to deploy and retain the health workforce.

Fryer, G. E., Jr., et al. (1983). "The validity of indices for rural health manpower needs assessment." Eval.Program.Plann. **6**(2): 139-142.

Population-to-practitioner ratios have long been the primary index in the designation of health manpower shortage areas. This paper documents that application of the widely used population-to-dentist index results in understatement of the need for dental health manpower in rural areas. Through the analysis of utilization data collected from a statewide health screening program in Colorado, the practice of sole reliance on the population-to-dentist indices as an indicator of need was tested. Another measure, the area-(square miles) to-dentist ratio was formulated, examined, and found to be a more useful referent of the need for additional health manpower in rural areas. Utilization of dental services in sparsely settled rural counties of Colorado was unrelated to population-to-dentist ratios. A strong, statistically significant association of utilization with land area-to-dentist ratios was found. The findings of this analysis suggest a need for reevaluation of needs assessment methodologies used in the designation of health manpower shortage areas. Indices more sensitive to consumer circumstance than to the number of health care providers available must be considered

Fryer, G. E., Jr., et al. (1999). "Multi-method assessment of access to primary medical care in rural Colorado." J Rural Health **15**(1): 113-121.

The objectives of this study include conducting an analysis of access to primary medical care in rural Colorado through simultaneous consideration of primary care physician-to-population and distance-to-nearest provider indices. Analyses examined the potential development and implications of excessively large, perhaps unmanageable patient caseloads that might result from every rural Coloradoan's exclusive use of the nearest generalist physician as a regular source of care. Using American Medical Association Physician Masterfile data for 1995 and coordinates for latitude and longitude from U.S. Census files (Census of Population and Housing, 1990), the authors calculated distance to the nearest primary care physician for residents of each of the 1,317 block groups in

Colorado's 52 rural counties. Caseloads for each generalist physician were computed assuming the population used the nearest provider for care. Straight-line mileage to primary medical care was modest for rural Coloradoans--a median distance of 2.5 miles. Almost two-thirds (65 percent) of the population resided within 5 miles, and virtually all residents (99 percent) were within 30 miles of a generalist physician. However, had everyone traveled the shortest possible distance to care, demand for service from many of the 343 primary care doctors in rural regions of the state would have been overwhelming. The results of simultaneous application of distance-to-care and provider-to-population techniques unrestricted by geographic boundaries depict access to primary medical care and corresponding consumer difficulty more fully than in previous studies. Further combination of methods of needs assessment such as those used in this analysis may better inform the future efforts of organizations mandated to address health care underservice in rural areas

GAO (2015). Comprehensive Planning by HHS Needed to Meet National Needs. Washington GAO**:** 41 ,tab.,fig. http://www.gao.gov/assets/680/674347.pdf

An adequate, well-trained, and diverse health care workforce is essential for providing access to quality health care services. The federal government—largely through HHS—funds programs to help ensure a sufficient supply and distribution of health care professionals. Some experts suggest that maintaining access to care could require an increase in the supply of providers, while others suggest access can be maintained by, among other things, greater use of technology. GAO was asked to review HHS's workforce efforts. In this report, GAO examines (1) HHS's planning efforts for ensuring an adequate supply and distribution of the nation's health care workforce and (2) the extent to which individual HHS health care workforce programs contribute to meeting national needs. GAO reviewed strategic planning documents, workforce projection reports, and other related documents obtained from HHS agencies; interviewed HHS officials; and analyzed performance measures for the largest health care workforce programs operated by HHS.

GAO (2021). Medicare: Information on the Transition to Alternative Payment Models by Providers in Rural, Health Professional Shortage, or Underserved Areas. Washington GAO**:** 41.
https://www.gao.gov/assets/gao-22-104618.pdf

To save money and improve health care quality, Medicare has been trying alternative payment models for reimbursing providers. Some models require providers to use electronic health records or to accept financial risk. That is, providers may receive rewards for meeting care quality goals, but payments could be reduced—or providers could owe money—for falling short.

Godøy, A. et Huitfeldt, I. (2020). "Regional variation in health care utilization and mortality." Journal of Health Economics **71**: 102254.
https://doi.org/10.1016/j.jhealeco.2019.102254

Geographic variation in health care utilization has raised concerns of possible inefficiencies in health care supply, as differences are often not reflected in health outcomes. Using comprehensive Norwegian microdata, we exploit cross-region migration to analyze regional variation in health care utilization. Our results indicate that place factors account for half of the difference in utilization between high and low utilization regions, while the rest reflects patient demand. We further document heterogeneous impacts of place across socioeconomic groups. Place factors account for 75% of the regional utilization difference for high school dropouts, and 40% for high school graduates; for patients with a college degree, the impact of place is negligible. We find no statistically significant association between the estimated place effects and overall mortality. However, we document a negative association between place effects and utilization-intensive causes of death such as cancer, suggesting high-supply regions may achieve modestly improved health outcomes.

Goldsmith, L. J. et Ricketts, T. C. (1999). "Proposed changes to designations of medically underserved populations and health professional shortage areas: effects on rural areas." J Rural Health **15**(1): 44-54.

This paper reports an analysis of the proposed rule to combine medically underserved population (MUP) and health professional shortage area (HPSA) designations, as published by the Bureau of Primary Health Care (BPHC) in the Federal Register on Sept. 1, 1998 (Department of Health and Human Services, 1998). The effects of the proposed rule overall and on rural communities were examined, particularly with respect to current whole county HPSA designations and eligibility for federal assistance programs. National, county-level estimates of primary care provider counts and other measures included in the proposed rule were used. Different primary care provider sources were compared; results were highly dependent on the data source and the inclusions of counts of nurse practitioners and physician assistants. The projections of losses from the proposed rule were higher than those of the BPHC, probably due to the use of different sources for provider counts. Overall, the authors projected that more than 50 percent of current whole-county HPSAs would lose designation using the proposed rule. The proportion of rural counties that lost designation was not significantly greater than the proportion of urban counties, but because there are many more rural counties, more de-designations were projected to occur in rural areas. The researchers also predicted that 58 percent of rural whole-county HPSAs with National Health Service Corps providers would lose their designation, but most rural whole-county HPSAs with Community and Migrant Health Centers or Rural Health Clinics retained their MUP designation using the proposed rule. The proposed rule likely has a larger effect on current designations than originally projected by the BPHC

Gong, G., Phillips, S. G., Hudson, C., et al. (2019). "Higher US Rural Mortality Rates Linked To Socioeconomic Status, Physician Shortages, And Lack Of Health Insurance." Health Affairs **38**(12): 2003-2010. https://doi.org/10.1377/hlthaff.2019.00722

All-cause mortality rates in rural areas have exceeded those in urban areas of the US since the 1980s, and the gap continues to widen. Yet no definitive causes of this difference are known, and within-state differences that might be amenable to state-level policy have not been explored. An analysis of 2016 state-level data indicated that rural mortality exceeded urban mortality in all but three states, with substantial variability in both rates across states. Overall, higher rural mortality at the state level can be mainly explained by three factors: socioeconomic deprivation, physician shortages, and lack of health insurance. To a certain degree, these factors reflect a state?s health policies, such as expansion of eligibility for Medicaid, health infrastructure, and socioeconomic conditions. Our findings suggest that state and federal policy efforts to address rural-urban disparities in these areas could alleviate the higher rates of all-cause mortality faced by rural US residents.

Goodfellow, A., et al. (2016). "Predictors of Primary Care Physician Practice Location in Underserved Urban or Rural Areas in the United States: A Systematic Literature Review." Acad Med **91**(9): 1313-1321.

PURPOSE: The authors conducted a systematic review of the medical literature to determine the factors most strongly associated with localizing primary care physicians (PCPs) in underserved urban or rural areas of the United States. METHOD: In November 2015, the authors searched databases (MEDLINE, ERIC, SCOPUS) and Google Scholar to identify published peer-reviewed studies that focused on PCPs and reported practice location outcomes that included U.S. underserved urban or rural areas. Studies focusing on practice intentions, nonphysicians, patient panel composition, or retention/turnover were excluded. They screened 4,130 titles and reviewed 284 full-text articles. RESULTS: Seventy-two observational or case-control studies met inclusion criteria. These were categorized into four broad themes aligned with prior literature: 19 studies focused on physician characteristics, 13 on financial factors, 20 on medical school curricula/programs, and 20 on graduate medical education (GME) programs. Studies found significant relationships between physician race/ethnicity and language and practice in underserved areas. Multiple studies demonstrated significant associations between financial factors (e.g., debt or incentives) and underserved or rural practice, independent of preexisting trainee characteristics. There was also evidence that medical school and GME programs were effective in training PCPs who locate in underserved areas. CONCLUSIONS: Both financial incentives and special training programs could be used to support trainees with the personal characteristics associated with practicing in underserved or rural areas. Expanding and replicating medical school curricula and programs proven to produce clinicians who

practice in underserved urban or rural areas should be a strategic investment for medical education and future research.

Grumbach, K., et al. (2003). "Who is caring for the underserved? A comparison of primary care physicians and nonphysician clinicians in California and Washington." Ann.Fam.Med **1**(2): 97-104.

PURPOSE: Little is known about whether different types of physician and nonphysician primary care clinicians vary in their propensity to care for underserved populations. The objective of this study was to compare the geographic distribution and patient populations of physician and nonphysician primary care clinicians. METHODS: This study was a cross-sectional analysis of 1998 administrative and survey data on primary care clinicians (family physicians, general internists, general pediatricians, nurse practitioners, physician assistants, and certified nurse-midwives) in California and Washington. For geographic analysis, main outcome measures were practice in a rural area, a vulnerable population area (communities with high proportions of minorities or low-income residents), or a health professions shortage area (HPSA). For patient population analysis, outcomes were the proportions of Medicaid, uninsured, and minority patients in the practice. RESULTS: Physician assistants ranked first or second in each state in the proportion of their members practicing in rural areas and HPSAs, and in California physician assistants also had the greatest proportion of their members working in vulnerable populations areas (P < .001). Compared with primary care physicians overall, nurse practitioners and certified nurse-midwives also tended to have a greater proportion of their members in rural areas and HPSAs (P < .001). Family physicians were much more likely than other primary care physicians to work in rural areas and HPSAs (P < .001). Compared with physicians, nonphysician clinicians in California had a substantially greater proportion of Medicaid, uninsured, and minority patients (P < .001). CONCLUSIONS: Nonphysician primary care clinicians and family physicians have a greater propensity to care for underserved populations than do primary care physicians in other specialties. Achieving a more equitable pattern of service to needy populations will require ongoing, active commitment by policy makers, educational institutions, and the professions to a mission of public service and to incentives that support and promote care to the underserved

Hines, S., Wakerman, J., Carey, T. A., et al. (2020). "Retention strategies and interventions for health workers in rural and remote areas: a systematic review protocol." JBI Database System Rev Implement Rep **18**(1): 87-96.

OBJECTIVE: The objective of the current review is to examine the association between exposure to strategies or interventions to retain health workers in rural and remote areas of high-income countries and improved retention rates. INTRODUCTION: Attracting and retaining sufficient healthcare staff to provide adequate services for residents of rural and remote areas is an international problem. High-income countries have specific challenges in staffing remote and rural areas; despite the majority of the population clustering in large cities, a significant number of communities are in rural, remote or frontier areas which may be perceived as less attractive locations in which to live and work. INCLUSION CRITERIA: The review will consider studies that include health workers in high-income countries where participants have been exposed to interventions, support measures or incentive programs to increase retention or workforce length of employment or reduce turnover for health workers in rural and remote areas. Analytical observational studies, case-control studies, analytical cross-sectional studies, descriptive observational study designs, and descriptive cross-sectional studies published from 2010 will be eligible for inclusion. METHODS: We will use the JBI methodology for reviews of risk and etiology. A range of databases will be searched. Two reviewers will screen, critically appraise eligible articles, and extract data from included studies. Data synthesis will be conducted, where feasible, with RevMan 5.3.5. A random effects model will be used to conduct meta-analyses. We will assess the certainty of the findings using the Grading of Recommendations, Assessment, Development and Evaluation (GRADE) approach.

Hole, A., et al. (2008). Fairness in primary care procurement measures of under-doctoredness : sensitivity analysis and trends. CHE Research Paper Series ; 35. York University of York**:** 31 , fig., tabl. http://www.york.ac.uk/inst/che/pdf/rp35.pdf

The White Paper Our Health, Our Care, Our Say noted concerns about geographical equity of access to general physicians (Department of Health, 2006, page 63), listed the 30 Primary Care Trusts (PCTs) with the lowest number of general physicians per head of need adjusted population, and set out policy initiatives to attract additional providers of general practice services to these PCTs. We were asked to evaluate the impact of these policies on the bottom 30 PCTs and will report in Autumn 2010. In this report we consider a number of related measurement.

Holte, J. H., et al. (2015). "The impact of pecuniary and non-pecuniary incentives for attracting young doctors to rural general practice." Soc Sci Med **128**: 1-9.
http://www.sciencedirect.com/science/article/pii/S0277953614008302

Shortages of GPs in rural areas constitute a profound health policy issue worldwide. The evidence for the effectiveness of various incentives schemes, which can be specifically implemented to boost recruitment to rural general practice, is generally considered to be poor. This paper investigates young doctors' preferences for key job attributes in general practice (GP), particularly concerning location and income, using a discrete choice experiment (DCE). The subjects were all final year medical students and interns in Norway (N = 1562), of which 831 (53%) agreed to participate in the DCE. Data was collected in November-December 2010. Policy simulations were conducted to assess the potential impact of various initiatives that can be used to attract young doctors to rural areas. Most interestingly, the simulations highlight the need to consider joint policy programs containing several incentives if the policies are to have a sufficient impact on the motivation and likelihood to work in rural areas. Furthermore, we find that increased income seem to have less impact as compared to improvements in the non-pecuniary attributes. Our results should be of interest to policy makers in countries with publicly financed GP systems that may struggle with the recruitment of GPs in rural areas.

Holst, J. (2020). "Increasing Rural Recruitment and Retention through Rural Exposure during Undergraduate Training: An Integrative Review." Int J Environ Res Public Health **17**(17).

Objectives: Ensuring nationwide access to medical care challenges health systems worldwide. Rural exposure during undergraduate medical training is promising as a means for overcoming the shortage of physicians outside urban areas, but the effectiveness is widely unknown. This integrative review assesses the effects of rural placements during undergraduate medical training on graduates' likelihood to take up rural practice. Methods: The paper presents the results of a longitudinal review of the literature published in PubMed, Embase, Google Scholar and elsewhere on the measurable effects of rural placements and internships during medical training on the number of graduates in rural practice. Results: The combined database and hand search identified 38 suitable primary studies with rather heterogeneous interventions, endpoints and results, mostly cross-sectional and control studies. The analysis of the existing evidence exhibited predominantly positive but rather weak correlations between rural placements during undergraduate medical training and later rural practice. Beyond the initial scope, the review underpinned rural upbringing to be the strongest predictor for rural practice. Conclusions: This review confirms that rural exposure during undergraduate medical training to contributes to recruitment and retention in nonurban settings. It can play a role within a broader strategy for overcoming the shortage of rural practitioners. Rural placements during medical education turned out to be particularly effective for rural-entry students. Given the increasing funding being directed towards medical schools to produce graduates that will work rurally, more robust high-quality research is needed.

Huicho, L., et al. (2010). "Increasing access to health workers in underserved areas: a conceptual framework for measuring results." Bull World Health Organ. **88**(5): 357-363.

Many countries have developed strategies to attract and retain qualified health workers in underserved areas, but there is only scarce and weak evidence on their successes or failures. It is difficult to compare lessons and measure results from the few evaluations that are available. Evaluation faces several challenges, including the heterogeneity of the terminology, the complexity of the interventions, the difficulty of assessing the influence of contextual factors, the lack of baseline

information, and the need for multi-method and multi-disciplinary approaches for monitoring and evaluation. Moreover, the social, political and economic context in which interventions are designed and implemented is rarely considered in monitoring and evaluating interventions for human resources for health. This paper proposes a conceptual framework that offers a model for monitoring and evaluation of retention interventions taking into account such challenges. The conceptual framework is based on a systems approach and aims to guide the thinking in evaluating an intervention to increase access to health workers in underserved areas, from its design phase through to its results. It also aims to guide the monitoring of interventions through the routine collection of a set of indicators, applicable to the specific context. It suggests that a comprehensive approach needs to be used for the design, implementation, monitoring, evaluation and review of the interventions. The framework is not intended to be prescriptive and can be applied flexibly to each country context. It promotes the use of a common understanding on how attraction and retention interventions work, using a systems perspective

Humphreys, J. S. (1998). "Delimiting 'rural': implications of an agreed 'rurality' index for healthcare planning and resource allocation." Aust.J Rural Health **6**(4): 212-216.

Rural and remote Australia is characterised by considerable geographical and social diversity. There is no 'natural' classification of what constitutes 'rural' or 'remote', and precise definition of what is meant by the term 'rural' has proved to be an elusive goal. Nonetheless, it is recognised that the differentiation of rural areas has important implications for healthcare planning and the research that underpins it. Whether it be the development of resource allocation formulae that determine the provision, location and type of rural health services, measuring service utilisation rates as an indicator of need for services or health outcome measures, the way in which populations and communities are delimited as urban, rural and remote will always influence and sometimes may even determine the assessment. The time is ripe for the development of an agreed classification for the investigation of rural health issues

Humphries, N., Crowe, S. et Brugha, R. (2018). "Failing to retain a new generation of doctors: qualitative insights from a high-income country." BMC Health Serv Res **18**(1): 144.

BACKGROUND: The failure of high-income countries, such as Ireland, to achieve a self-sufficient medical workforce has global implications, particularly for low-income, source countries. In the past decade, Ireland has doubled the number of doctors it trains annually, but because of its failure to retain doctors, it remains heavily reliant on internationally trained doctors to staff its health system. To halve its dependence on internationally trained doctors by 2030, in line with World Health Organisation (WHO) recommendations, Ireland must become more adept at retaining doctors. METHOD: This paper presents findings from in-depth interviews conducted with 50 early career doctors between May and July 2015. The paper explores the generational component of Ireland's failure to retain doctors and makes recommendations for retention policy and practice. RESULTS: Interviews revealed that a new generation of doctors differ from previous generations in several distinct ways. Their early experiences of training and practice have been in an over-stretched, under-staffed health system and this shapes their decision to remain in Ireland, or to leave. Perhaps as a result of the distinct challenges they have faced in an austerity-constrained health system and their awareness of the working conditions available globally, they challenge the traditional view of medicine as a vocation that should be prioritised before family and other commitments. A new generation of doctors have career options that are also strongly shaped by globalisation and by the opportunities presented by emigration. DISCUSSION: Understanding the medical workforce from a generational perspective requires that the health system address the issues of concern to a new generation of doctors, in terms of working conditions and training structures and also in terms of their desire for a more acceptable balance between work and life. This will be an important step towards future-proofing the medical workforce and is essential to achieving medical workforce self-sufficiency.

Hurst, S. A., et al. (2007). "Physicians' views on resource availability and equity in four European health care systems." Bmc Health Services Research **7**(137): 2-27, tabl.

http://www.biomedcentral.com/content/pdf/1472-6963-7-137.pdf

> In response to limited resources, health care systems have adopted diverse cost-containment strategies and give priority to differing types of interventions. The perception of physicians, who witness the effects of these strategies, may provide useful insights regarding the impact of system-wide priority setting on access to care.We conducted a cross-sectional survey to ascertain generalist physicians' perspectives on resources allocation and its consequences in Norway, Switzerland, Italy and the UK. Survey respondents (N=656, response rate 43%) ranged in age from 28-82, and averaged 25 years in practice. Most respondents (87.7%) perceived some resources as scarce, with the most restrictive being: access to nursing home, mental health services, referral to a specialist, and rehabilitation for stroke. Respondents attributed adverse outcomes to scarcity, and some respondents had encountered severe adverse events such as death or permanent disability . Despite universal coverage, 45.6% of respondents reported instances of underinsurance. Most respondents (78.7%) also reported some patient groups as more likely than others to be denied beneficial care on the basis of cost. Almost all respondents (97.3%) found at least one cost-containment policy acceptable. The types of policies preferred suggest that respondents are willing to participate in cost-containment, and do not want to be guided by administrative rules (11.2%) or restrictions on hospital beds (10.7%). Physician reports can provide an indication of how organizational factors may affect availability and equity of health care services. Physicians are willing to participate in cost-containment decisions, rather than be guided by administrative rules. Tools should be developed to enable physicians, who are in a unique position to observe unequal access or discrimination in their health care environment, to address these issues in a more targeted way.

Hussain, A., et al. (2012). "Strategies for dealing with future shortages in the nursing workforce: a review." Health Serv Manage Res **25**(1): 41-47.

> The well-anticipated and well-documented demographic shift attributed to ageing of the baby boomer generation will place significant demands upon the health-care industry in the future. Significant resources such as the nurse workforce, will be needed to provide health-care services to this cohort. There is a looming shortage of professional and paraprofessional nurses. This paper evaluates strategies that can be utilized to decrease the rate of the nursing shortage, while retaining the current supply of nurses. Recommendations for solving the nursing shortage problem include enhancing the work environment through fostering open communication, improving technology, nurse empowerment, building long-lasting and fulfilling partnerships, and efficient workplace organization.

Johnston, K. J., Wen, H. et Joynt Maddox, K. E. (2019). "Lack Of Access To Specialists Associated With Mortality And Preventable Hospitalizations Of Rural Medicare Beneficiaries." Health Affairs **38**(12): 1993-2002. https://doi.org/10.1377/hlthaff.2019.00838

> People living in rural areas have worse health outcomes than their urban counterparts do. Understanding what factors account for this could inform policy interventions for reducing rural-urban disparities in health. We examined a nationally representative survey of Medicare beneficiaries with one or more complex chronic conditions, which represented 61 percent of rural and 57 percent of urban Medicare beneficiaries. We found that rural residence was associated with a 40 percent higher preventable hospitalization rate and a 23 percent higher mortality rate, compared to urban residence. Having one or more specialist visits during the previous year was associated with a 15.9 percent lower preventable hospitalization rate and a 16.6 percent lower mortality rate for people with chronic conditions, after we controlled for having one or more primary care provider visits. Access to specialists accounted for 55 percent and 40 percent of the rural-urban difference in preventable hospitalizations and mortality, respectively. Medicare should consider interventions for rural beneficiaries who lack access to specialist care to reduce rural-urban disparities in health outcomes.

Kaduszkiewicz, H., Teichert, U. et van den Bussche, H. (2018). "[Shortage of physicians in rural areas and in the public health service : A critical analysis of the evidence on the role of medical education and training]." Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz **61**(2): 187-194.

BACKGROUND: A shortage of medical personnel has been seen for several decades in at least two sectors of the healthcare system: primary care in remote areas as well as medical care in the state public health departments (Offentliches Gesundheitswesen). Strategies to reduce these problems are being sought. OBJECTIVE: This review examines the proposals, practical initiatives and empirical studies in under- and postgraduate medical education in order to estimate their potential impact on the solution of these problems. The analysis covers both Germany and Anglo-Saxon countries. MATERIALS AND METHODS: The study is based on a literature search in PubMed and Medline covering the last 20 years. With regard to Germany, programmatic documents and studies published in the German Journal of General Practice (Zeitschrift fur Allgemeinmedizin) were also included. RESULTS AND DISCUSSION: Foreign empirical studies identify almost equal two factors with regard to primary care in remote areas: the recruitment of students from rural areas combined with special educational programs with a rural primary care orientation both in under- and postgraduate medical education. These programs should include several and longer practical working periods in primary care units and be well coordinated between the medical school and the local teaching physicians. As for the state public health sector, comparable initiatives are still lacking.

Kanakis, K., Young, L., Reeve, C., et al. (2020). "How does GP training impact rural and remote underserved communities? Exploring community and professional perceptions." BMC Health Serv Res **20**(1): 812.

BACKGROUND: Substantial government funding has been invested to support the training of General Practitioners (GPs) in Australia to serve rural communities. However, there is little data on the impact of this expanded training on smaller communities, particularly for smaller rural and more remote communities. Improved understanding of the impact of training on underserved communities will assist in addressing this gap and inform ongoing investment by governments and communities. METHOD: A purposive sample of GP supervisors, GP registrars, practice managers and health services staff, and community members (n = 40) from previously identified areas of workforce need in rural and remote North-West Queensland were recruited for this qualitative study. Participants had lived in their communities for periods ranging from a few months to 63 years (Median = 12 years). Semi-structured interviews and a focus group were conducted to explore how establishing GP training placements impacts underserved communities from a health workforce, health outcomes, economic and social perspective. The data were then analysed using thematic analysis. RESULTS: Participants reported they perceived GP training to improve communities' health services and health status (accessibility, continuity of care, GP workforce, health status, quality of health care and sustainable health care), some social factors (community connectedness and relationships), cultural factors (values and identity), financial factors (economy and employment) and education (rural pathway). Further, benefits to the registrars (breadth of training, community-specific knowledge, quality of training, and relationships with the community) were reported that also contributed to community development. CONCLUSION: GP training and supervision is possible in smaller and more remote underserved communities and is perceived positively. Training GP registrars in smaller, more remote communities, matches their training more closely with the comprehensive primary care services needed by these communities.

Kehrer, B. H. et Wooldridge, J. (1983). "An Evaluation of Criteria to Designate Urban Health Manpower Shortage Areas." Inquiry **20**(3): 264-275.

In the United States, federally designated health manpower shortage areas (HMSAs) have been eligible for a variety of programs intended to improve access to health services. Before 1978, HMSAs were predominantly rural. The Health Professions Educational Assistance Act of 1976 (P.L. 94-484) mandated that the criteria for designating HMSAs be revised to facilitate designation of urban areas. The most recent version of the HMSA criteria was published in 1980. This study applied the 1980 criteria to two Canadian urban areas. In general, the criteria did not succeed in distinguishing areas with relatively poorer access from those with relatively better access.

Kleinman, J. C. et Wilson, R. W. (1977). "Are "medically underserved areas" medically underserved?" Health Services Research **12**(2): 147-162.
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1071977/

A comparison of medically underserved areas (MUAs) and adequately served areas (ASAs) is presented. Nonmetropolitan areas represented in the Health Interview Survey (HIS) are classified as MUAs or ASAs by the official criterion of their scores on the Index of Medical Underservice (IMU), and HIS data from the two types of areas are examined for differences. Standard metropolitan statistical areas are also compared with the nonmetropolitan MUAs and ASAs. Results show no difference between MUA and ASA residents in number of physician visits per year or proportion with at least one visit in the past year, although MUA residents reported poorer health status, used some preventive services less, and used nonsurgical hospitalization more than did ASA residents. In gereral, most MUA-ASA differences tend to be similar in size to differences between ASAs and SMSAs. An alternative to the IMU, using HIS data to identify underserved areas, is discussed.

Kringos, D., et al. (2013). "The strength of primary care in Europe: an international comparative study." Br J Gen Pract **63**(616): e742-750.

BACKGROUND: A suitable definition of primary care to capture the variety of prevailing international organisation and service-delivery models is lacking. AIM: Evaluation of strength of primary care in Europe. DESIGN AND SETTING: International comparative cross-sectional study performed in 2009-2010, involving 27 EU member states, plus Iceland, Norway, Switzerland, and Turkey. METHOD: Outcome measures covered three dimensions of primary care structure: primary care governance, economic conditions of primary care, and primary care workforce development; and four dimensions of primary care service-delivery process: accessibility, comprehensiveness, continuity, and coordination of primary care. The primary care dimensions were operationalised by a total of 77 indicators for which data were collected in 31 countries. Data sources included national and international literature, governmental publications, statistical databases, and experts' consultations. RESULTS: Countries with relatively strong primary care are Belgium, Denmark, Estonia, Finland, Lithuania, the Netherlands, Portugal, Slovenia, Spain, and the UK. Countries either have many primary care policies and regulations in place, combined with good financial coverage and resources, and adequate primary care workforce conditions, or have consistently only few of these primary care structures in place. There is no correlation between the access, continuity, coordination, and comprehensiveness of primary care of countries. CONCLUSION: Variation is shown in the strength of primary care across Europe, indicating a discrepancy in the responsibility given to primary care in national and international policy initiatives and the needed investments in primary care to solve, for example, future shortages of workforce. Countries are consistent in their primary care focus on all important structure dimensions. Countries need to improve their primary care information infrastructure to facilitate primary care performance management.

Kroezen, M., et al. (2015). "Recruitment and retention of health professionals across Europe: A literature review and multiple case study research." Health Policy **119**(12): 1517-1528.

Many European countries are faced with health workforce shortages and the need to develop effective recruitment and retention (R&R) strategies. Yet comparative studies on R&R in Europe are scarce. This paper provides an overview of the measures in place to improve the R&R of health professionals across Europe and offers further insight into the evidence base for R&R; the interaction between policy and organisational levels in driving R&R outcomes; the facilitators and barriers throughout these process; and good practices in the R&R of health professionals across Europe. The study adopted a multi-method approach combining an extensive literature review and multiple-case study research. 64 publications were included in the review and 34 R&R interventions from 20 European countries were included in the multiple-case study. We found a consistent lack of evidence about the effectiveness of R&R interventions. Most interventions are not explicitly part of a coherent package of measures but they tend to involve multiple actors from policy and organisational levels, sometimes in complex configurations. A list of good practices for R&R interventions was identified, including context-sensitivity when implementing and transferring interventions to different organisations and countries. While single R&R interventions on their own have little impact, bundles of interventions are more effective. Interventions backed by political and executive commitment benefit from a strong support base and involvement of relevant stakeholders.

Kuhlmann, E., et al. (2013). "Bringing a European perspective to the health human resources debate: A scoping study." Health Policy **110**(1): 6-13.

> Healthcare systems across the world are increasingly challenged by workforce shortages and misdistribution of skills. Yet, no comprehensive European approach to health human resources (HHR) policy exists and action remains fragmented. This scoping study seeks to contribute to the debates by providing an overview of existing HHR research, and by exploring the challenges of a European approach with a focus on workforce planning. In terms of methods, we build on a scoping review comprising literature analysis and qualitative data gathered from policy experts. In our analysis we observe an overall lack of integrated HHR approaches as major obstacle of efficient HHR planning, and find that five dimensions of integration in HHR policy are needed: system, occupational, sector, gender, and socio-cultural integration. Increasing the analytical complexity of HHR planning models does not automatically bring about more reliable and efficient planning, as the added value of these models is highly context-dependent. Yet Europe is highly diverse and we therefore argue the need for a strategic HHR perspective that is capable of bridging many different HHR policies and planning systems, and combining national and European solutions efficiently.

Kumar, S. et Clancy, B. (2020). "Retention of physicians and surgeons in rural areas—what works?" Journal of Public Health(Ahead of pub).
https://doi.org/10.1093/pubmed/fdaa031

> Causes for health inequity among rural populations globally are multifactorial, and include poorer access to healthcare professionals. This study summarizes the recent literature identifying factors that influence rural doctor retention and analyses strategies implemented to increase retention. Uniquely, this study addresses the importance of context in the planning, implementation and success of these strategies, drawing on literature from high-, middle- and low-income countries.A systematic review of the English literature was conducted in two parts. The first identified factors contributing to rural doctor retention, yielding 28 studies (2015–2019). The second identified 19 studies up to 2019 that assessed the outcomes of implemented rural retention strategies.Universal retention factors for health professionals in a rural environment include rural background, positive rural exposure in training or in the early postgraduate years and personal and professional support. Financial incentives were less influential on retention, but results were inconsistent between studies and differed between high-, middle- and low-income nations. Successful strategies included student selection from rural backgrounds into medical school and undergraduate education programs and early postgraduate training in a rural environment. Bundled or multifaceted interventions may be more effective than single factor interventions.Rural health workforce retention strategies need to be multifaceted and context specific, and cannot be effective without considering the practitioner's social context and the influence of their family in their decision making. Adequate rural health facilities, living conditions, work-life balance and family, community and professional support systems will maximize the success of implemented strategies and ensure sustainability and continuity of healthcare workforce in rural environments.

Kurti, L., et al. (2011). "Physician's assistants: a workforce solution for Australia?" Aust.J Prim.Health **17**(1): 23-28.

> Significant medical workforce shortages, particularly in rural and remote locations, have prompted a range of responses in Australia at both state and Commonwealth levels. One such response was a pilot project to test the suitability of the Physician Assistant (PA) role in the Australian context. Five US-trained and accredited PAs were employed by Queensland Health and deployed in urban, rural and remote settings across Queensland. A concurrent mixed-method evaluation was conducted by Urbis, an independent research firm. The evaluation found that the PAs provided quality, safe clinical care under the supervision of local medical officers. The majority of nurses and doctors who worked with the PAs believed that the PAs made a positive contribution to the health care team by increasing capacity to meet patient needs; reducing on-call requirements for doctors; liaising with other clinical team members; streamlining procedures for efficient patient throughput; and providing continuity

during periods of doctor changeover. The Pilot demonstrated that a delegated PA role can provide safe, quality health care by augmenting an established healthcare team. The PA role has the potential to benefit the community by increasing the capacity of the health care system, and to improve recruitment and retention by providing an additional professional pathway. The small size of the Pilot limits the ability to generalise regarding the future efficacy of the PA role in Australia. Further research is required to test training and deployment of PAs in a wider range of Australian clinical settings, including general practice and rural health clinics

Labbe, J. J., Tak, H. J., Kwon, J., et al. (2018). "Demographic and Practice Characteristics of Physicians Who Care for Medically Underserved People: A National Survey." South Med J **111**(12): 763-766.

OBJECTIVES: Few national studies have examined the influence of role models as a potential predictor for caring for medically underserved (MUS) patients. This study tested associations between previous physician role model exposure and caring for MUS populations, as well as examines the practice environments of these physicians. METHODS: Between October and December 2011, we mailed a confidential questionnaire to a representative sample of 2000 US physicians from various specialties. The primary criterion variable was "Is your patient population considered medically underserved?" We assessed demographic and other personal characteristics (calling, spirituality, and reporting a familial role model). We also asked about their practice characteristics, including a validated measure that assessed whether their work environment was considered chaotic/hectic or calm. RESULTS: The survey response rate was 64.5% (1289/2000). Female physicians and African American physicians were more likely to report working in MUS settings (multivariate odds ratio [OR] 1.32, confidence interval [CI] 1.00-1.76 and OR 2.65, CI 1.28-5.46, respectively). Physicians with high spirituality (OR 1.69, CI 1.02-2.79) and who reported familial role model exposure (OR 1.91, CI 1.11-3.30) also were associated with working with MUS populations. Physicians who worked in academic medical centers (OR 1.93, CI 1.45-2.56) and in chaotic work environments (OR 3.25, CI 1.64-6.44) also were more likely to report working with MUS patients. CONCLUSIONS: Familial role models may be influencing physicians to work with MUS patients, but the quality of their current work environments raises concerns about the long-term retention of physicians in MUS settings.

Laven, G. et Wilkinson, D. (2003). "Rural doctors and rural backgrounds: how strong is the evidence? A systematic review." Aust.J Rural Health **11**(6): 277-284.

OBJECTIVE: We sought to summarise the evidence for an association between rural background and rural practice by systematically reviewing the national and international published reports. DESIGN: A systematic review. SETTING: A search of the national and international published reports from 1973 to October 2001. SUBJECT: The search criteria included observational studies of a case-control or cohort design making a clear and quantitative comparison between current rural and urban doctors, this resulted in the identification of 141 studies for potential inclusion. RESULTS: We systematically reviewed 12 studies. Rural background was associated with rural practice in 10 of the 12 studies, in which it was reported, with most odds ratios (OR) approximately 2-2.5. Rural schooling was associated with rural practice in all 5 studies that reported on it, with most OR approximately 2.0. Having a rural partner was associated with rural practice in 3 of the 4 studies reporting on it, with OR approximately 3.0. Rural undergraduate training was associated with rural practice in 4 of 5 studies, with most OR approximately 2.0. Rural postgraduate training was associated with rural practice in 1 of 2 studies, with rural doctors reporting rural training about 2.5 times more often. CONCLUSIONS: There is consistent evidence that the likelihood of working in rural practice is approximately twice greater among doctors with a rural background. There is a smaller body of evidence in support of the other rural factors studied, and the strength of association is similar to that for rural background

Leavey, R. et Wood, J. (1985). "Does the underprivileged area index work?" Br.Med J (Clin.Res.Ed.) **291**(6497): 709-711.

The underprivileged area index was developed by Jarman to identify areas with the greatest need for general practitioner services and where general practitioners were under the greatest pressure. We found that in wards that scored the worst on the underprivileged area index the doctor:patient ratios

were the highest. We suggest that the index needs to be used with other indicators to identify variations in need in small areas

Leduc, N. et Bilodeau, H. (2003). "Les mesures gouvernementales québécoises d'incitation à la pratique médicale en régions éloignées ou isolées." Cahiers De Sociologie Et De Demographie Medicales **43**(3): 505-527.

[BDSP. Notice produite par ORSMIP cSEf2R0x. Diffusion soumise à autorisation]. Les objectifs de cet article sont de décrire les mesures économiques et autres, prises par le gouvernement du Québec pour améliorer la répartition géographique des médecins puis d'analyser, à l'aide de la littérature publiée dans le domaine, leur influence réelle ou potentielle sur l'attraction, l'installation et le maintien de la pratique médicale en régions éloignées ou isolées. Cet exercice a permis de montrer les efforts considérables réalisés pour orienter le choix d'un lieu de pratique des médecins québécois. En effet lorsqu'on compare l'étendue et la diversité des mesures implantées et celles sur lesquelles les diverses études recensées ont porté, on constate que beaucoup d'entre elles n'ont encore fait l'objet d'aucun examen rigoureux et qu'il reste donc beaucoup à faire pour obtenir un portrait juste et exhaustif de leurs effets. (extrait du texte).

Levesque, M., Hatcher, S., Savard, D., et al. (2018). "Physician perceptions of recruitment and retention factors in an area with a regional medical campus." Can Med Educ J **9**(1): e74-e83.

Background: The factors that influence physicians to establish and maintain their practice in a region are variable. The presence of a regional medical campus (RMC) could influence physicians' choice. The objective of this study was to explore the factors influencing physician recruitment and retention, and in particular the role of a RMC, in a region of Quebec. Methods: A literature review of factors influencing physicians to stay in a rural area was conducted in order to create an interview guide. Questions were divided into sections: general information, family situation, medical training, career choice, current practice, intent to stay in the region, and impact of the RMC. Thirteen semi-structured individual interviews were conducted with practicing physicians. Data were analyzed using QDAMiner. Results: Recruitment factors were divided into six major themes: type of practice, spousal interest, opportunity for teaching, training in a region, workforce planning, and quality of life. Participants identified positive and negative factors associated with retention. In both cases, family and quality of work environment were mentioned. The RMC was perceived as having important impacts on the quality of professional life, research, medical practice, and regional development. Conclusion: This study highlights the role of RMCs in physician recruitment and retention via multiple impacts on the quality of practice of physicians working in the same area.

Li, J., Scott, A., McGrail, M., et al. (2014). "Retaining rural doctors: Doctors' preferences for rural medical workforce incentives." Soc Sci Med **121C**: 56-64.
PM:25306410

Many governments have implemented incentive programs to improve the retention of doctors in rural areas despite a lack of evidence of their effectiveness. This study examines rural general practitioners' (GPs') preferences for different types of retention incentive policies using a discrete choice experiment (DCE). In 2009, the DCE was administered to a group of 1720 rural GPs as part of the "Medicine in Australia: Balancing Employment and Life (MABEL)" study. We estimate both a mixed logit model and a generalized multinomial logit model to account for different types of unobserved differences in GPs' preferences. Our results indicate that increased level of locum relief incentive, retention payments and rural skills loading leads to an increase in the probability of attracting GPs to stay in rural practice. The locum relief incentive is ranked as the most effective, followed by the retention payments and rural skills loading payments. These findings are important in helping to tailor retention policies to those that are most effective

Mable, A. L. et Marriott, J. (2001). Etre stable - parvenir à un équilibre qui soit durable : examen international de la planification des effectifs de la santé. Ottawa Santé Canada**:** 70 , tabl., ann.

La planification des effectifs de la santé est le dernier volet de la réforme du système de santé auquel procèdent divers pays dans le monde. L'un des principaux objectifs de la planification des effectifs de

la santé est de disposer du bon nombre et d'une combinaison adéquate de travailleurs de la santé ayant les compétences recherchées aux bons endroits et aux moments opportuns afin d'offrir des services de qualité à ceux qui en ont besoin. Historiquement, la planification des effectifs a dû le plus souvent s'en remettre à des approches plutôt inadéquates pour planifier les ressources en médecins : elles se fondaient sur le maintien des ratios médecins-population existants. Une moindre importance a été accordée à la planification de ressources au soins infirmiers et d'autres fournisseurs de soins de santé. En dépit du fait que les récentes initiatives de réforme de la santé mettent l'accent sur " l'équipe ", les travaux de planification déjà menés ont eu tendance à perpétuer un schéma de fonctionnement cloisonné verticalement où des approches distinctes étaient mises en oeuvre selon la profession visée. Moins d'efforts ont été déployés pour déterminer les besoins futurs en médecins, infirmières et autres fournisseurs de soins de santé dans leur ensemble. Les efforts consentis par le passé ne se sont donc pas avérés assez précis, efficaces, ni exhaustifs pour éclairer suffisamment les responsables de l'élaboration et de la planification des politiques afin qu'ils puissent procéder à des changements tenant compte de l'évolution démographique et d'autres tendances observées au sein de la population dans son ensemble, de même qu'au sein de groupes de fournisseurs donnés. Ces travaux n'ont pas non plus tenu compte de l'évolution des modèles touchant la prestation des soins de santé. L'absence d'une approche moderne sophistiquée et systématique a eu pour effet d'aggraver les pénuries actuelles dans de nombreuses professions de la santé du Canada et d'autres pays. Dans certains pays, l'on procède à la mise au point d'approches plus modernes de la planification des effectifs de la santé. En se fondant sur les renseignements provenant de ces pays, ce rapport tente d'élaborer une approche nationale et systématique afin de préciser les ressources dont on dispose en vue de répondre aux besoins futurs des Canadiens. Au fur et à mesure que les systèmes de santé se complexifient et que l'éventail de fournisseurs de soins de santé et de praticiens s'élargit, il apparaît plus urgent d'améliorer la façon d'aborder la planification. Il semble que la plupart des pays en soient encore au tout début du processus de réexamen de leur façon d'aborder la planification des ressources. Bon nombre d'entre eux ne semblent pas y avoir encore apporté de changements fondamentaux. Un petit nombre commence à mettre en place des structures organisationnelles (ou à en favoriser la mise en place) de façon à assurer une certaine permanence du processus de planification des ressources et à éviter les réactions héritées du passé. Certains pays commencent à adopter des modalités multiples de planification des ressources. Un nombre plus restreint commence à pratiquer la planification pour l'ensemble des ressources, y compris la planification intégrée de même que l'examen des fournisseurs et travailleurs de la santé individuels. Les processus et les méthodologies de planification des ressources sont, jusqu'à aujourd'hui, caractérisés par un accent marqué sur la planification des ressources en médecins. Les approches ou expériences en matière de planification des ressources en soins infirmiers demeurent rares et un nombre encore plus faible d'approches sont axées sur d'autres professionnels de la santé oeuvrant au sein du système. Parallèlement, bon nombre des processus et des approches méthodologiques visant les médecins peuvent être, dans une certaine mesure, appliqués aux infirmières et autres professions ou l'ont été dans certains

Mackintosh, M. (2007). Planning and market regulation: strengths, weaknesses and interactions in the provision of less inequitable and better quality health care : a literature review. Johannesburg University of the Witwaterstrands**:** 52 , tabl.

This paper argues that planned health care provision and market regulation play distinct roles in relation to the effective provision of equitable health care. Governmental planned provision has a core objective ensuring that health system is redistributive and that the poor have access to competent care. Market regulation has as its central objective the shaping of the role and behaviour of the private sector within the health system. Management of the health system as a whole, which is a governmental responsability, therefore requires the integration of planning and regulation in a manner appropriate to each particular context.

Maier, C. B., Batenburg, R., Birch, S., et al. (2018). "Health workforce planning: which countries include nurse practitioners and physician assistants and to what effect?" Health Policy **122**(10): 1085-1092.

BACKGROUND: An increasing number of countries are introducing new health professions, such as Nurse Practitioners (NPs) and Physician Assistants (PAs). There is however limited evidence, on whether these new professions are included in countries' workforce planning. METHODS: A cross-country comparison of workforce planning methods. Countries with NPs and/or PAs were identified, workforce planning projections reviewed and differences in outcomes were analysed, based on a review of workforce planning models and a scoping review. Data on multi-professional (physicians/NPs/PAs) vs. physician-only models were extracted and compared descriptively. Analysis of policy implications was based on policy documents and grey literature. RESULTS: Of eight countries with NPs/PAs, three (Canada, the Netherlands, United States) included these professions in their workforce planning. In Canada, NPs were partially included in Ontario's needs-based projection, yet only as one parameter to enhance efficiency. In the United States and the Netherlands, NPs/PAs were covered as one of several scenarios. Compared with physician-only models, multi-professional models resulted in lower physician manpower projections, primarily in primary care. A weakness of the multi-professional models was the accuracy of data on substitution. Impacts on policy were limited, except for the Netherlands. CONCLUSIONS: Few countries have integrated NPs/PAs into workforce planning. Yet, those with multi-professional models reveal considerable differences in projected workforce outcomes. Countries should develop several scenarios with and without NPs/PAs to inform policy.

Maier, C. B., et al. (2016). "Descriptive, cross-country analysis of the nurse practitioner workforce in six countries: size, growth, physician substitution potential." BMJ Open **6**(9): e011901.

OBJECTIVES: Many countries are facing provider shortages and imbalances in primary care or are projecting shortfalls for the future, triggered by the rise in chronic diseases and multimorbidity. In order to assess the potential of nurse practitioners (NPs) in expanding access, we analysed the size, annual growth (2005-2015) and the extent of advanced practice of NPs in 6 Organisation for Economic Cooperation and Development (OECD) countries. DESIGN: Cross-country data analysis of national nursing registries, regulatory bodies, statistical offices data as well as OECD health workforce and population data, plus literature scoping review. SETTING/PARTICIPANTS: NP and physician workforces in 6 OECD countries (Australia, Canada, Ireland, the Netherlands, New Zealand and USA). PRIMARY AND SECONDARY OUTCOME MEASURES: The main outcomes were the absolute and relative number of NPs per 100 000 population compared with the nursing and physician workforces, the compound annual growth rates, annual and median percentage changes from 2005 to 2015 and a synthesis of the literature on the extent of advanced clinical practice measured by physician substitution effect. RESULTS: The USA showed the highest absolute number of NPs and rate per population (40.5 per 100 000 population), followed by the Netherlands (12.6), Canada (9.8), Australia (4.4), and Ireland and New Zealand (3.1, respectively). Annual growth rates were high in all countries, ranging from annual compound rates of 6.1% in the USA to 27.8% in the Netherlands. Growth rates were between three and nine times higher compared with physicians. Finally, the empirical studies emanating from the literature scoping review suggested that NPs are able to provide 67-93% of all primary care services, yet, based on limited evidence. CONCLUSIONS: NPs are a rapidly growing workforce with high levels of advanced practice potential in primary care. Workforce monitoring based on accurate data is critical to inform educational capacity and workforce planning.

Marchand, C. et Peckham, S. (2017). "Addressing the crisis of GP recruitment and retention: a systematic review." Br J Gen Pract **67**(657): e227-e237.

BACKGROUND: The numbers of GPs and training places in general practice are declining, and retaining GPs in their practices is an increasing problem. AIM: To identify evidence on different approaches to retention and recruitment of GPs, such as intrinsic versus extrinsic motivational determinants. DESIGN AND SETTING: Synthesis of qualitative and quantitative research using seven electronic databases from 1990 onwards (Medline, Embase, Cochrane Library, Health Management Information Consortium [HMIC], Cumulative Index to Nursing and Allied Health Literature (Cinahl), PsycINFO, and the Turning Research Into Practice [TRIP] database). METHOD: A qualitative approach to reviewing the literature on recruitment and retention of GPs was used. The studies included were English-language studies from Organisation for Economic Cooperation and Development countries. The titles and abstracts of 138 articles were reviewed and analysed by the research team. RESULTS: Some of the

most important determinants to increase recruitment in primary care were early exposure to primary care practice, the fit between skills and attributes, and a significant experience in a primary care setting. Factors that seemed to influence retention were subspecialisation and portfolio careers, and job satisfaction. The most important determinants of recruitment and retention were intrinsic and idiosyncratic factors, such as recognition, rather than extrinsic factors, such as income. CONCLUSION: Although the published evidence relating to GP recruitment and retention is limited, and most focused on attracting GPs to rural areas, the authors found that there are clear overlaps between strategies to increase recruitment and retention. Indeed, the most influential factors are idiosyncratic and intrinsic to the individuals.

Margolis, S. A. (2012). "Is Fly in/Fly out (FIFO) a viable interim solution to address remote medical workforce shortages?" Rural and Remote Health: 1-6.
http://www.rrh.org.au/publishedarticles/article_print_2261.pdf

Les médecins des régions éloignées de l'Australie sont rares, soit 58 praticiens seulement pour 100 000 habitants. Cet article propose la création d'un modèle Fly in/Fly out (FIFO), en vertu duquel les médecins visitent régulièrement les communautés éloignées plutôt que d'y habiter à temps plein.

Matsumoto, M., et al. (2010). "Policy implications of a financial incentive programme to retain a physician workforce in underserved Japanese rural areas." Soc Sci.Med **71**(4): 667-671.

Existing evidence supports the effectiveness of a financial incentive policy for medical students and early-career physicians in return for obligatory rural service. But whether the experience of contractual rural service affects the physician's choice of practice location after the service is completed remains unknown. This study analysed the practice location of Jichi Medical University (JMU) graduates. JMU is a Japanese medical education programme with a contract system under which all graduates have an obligation to serve in underserved areas for about six years in exchange for a 6-year undergraduate tuition waiver. 484 JMU graduates who were under rural service in 2000 and had completed the service by 2006 were included in the study. The rurality of the communities was determined by population density quintiles. The proportion of those practicing in the communities with the highest rurality quintile in 2000 (30.8%) decreased dramatically (8.7%) in 2006, but the geographic distribution of the participants after contract was still biased toward rural areas compared with the distribution pattern of all Japanese physicians. The flow of participants from rural to urban communities was largely unidirectional. In 2006, 452 (93.4%) practiced in places with the same or lower rurality than in 2000, while only 32 (6.6%) practiced in places with higher rurality as compared to the placements of 2000. Multivariate analysis showed that service experience in the communities of the first and second highest quintiles of rurality was associated with choosing such places after contract, independent of known predictors of rural practice, such as having a rural background and primary care specialty choice. Although the effect of contractual rural service substantially decreased after finishing the service, the experience of rural service early in the physician's career had a positive impact on the later choice of a rural practice. The results from this study support the use of a policy that attracts early-career physicians to practice in rural areas.

Mbemba, G., Gagnon, M., Pare, G., et al. (2013). "Interventions for supporting nurse retention in rural and remote areas: an umbrella review." Human Resources for Health **11**(44).
http://www.human-resources-health.com/content/11/1/44

Context : Retention of nursing staff is a growing concern in many countries, especially in rural, remote or isolated regions, where it has major consequences on the accessibility of health services. Purpose: This umbrella review aims to synthesize the current evidence on the effectiveness of interventions to promote nurse retention in rural or remote areas, and to present a taxonomy of potential strategies to improve nurse retention in those regions. Methods : We conducted an overview of systematic reviews, including the following steps: exploring scientific literature through predetermined criteria and extracting relevant information by two independents reviewers. We used the PRISMA (Preferred Reporting Items for Systematic reviews and Meta-Analyses) criteria in order to assess the quality of the reports. Findings : Of 517 screened publications, we included five reviews. Two reviews showed

that financial-incentive programs have substantial evidence to improve the distribution of human resources for health. The other three reviews highlighted supportive relationships in nursing, information and communication technologies support and rural health career pathways as factors influencing nurse retention in rural and remote areas. Overall, the quality of the reviews was acceptable. Conclusions : This overview provides a guide to orient future rural and remote nurse retention interventions. We distinguish four broad types of interventions: education and continuous professional development interventions, regulatory interventions, financial incentives, and personal and professional support. More knowledge is needed regarding the effectiveness of specific strategies to address the factors known to contribute to nurse retention in rural and remote areas. In order to ensure knowledge translation, retention strategies should be rigorously evaluated using appropriate designs.

Merat, N. (2016). Quelles modalités organisationnelles sont mises en place par les systèmes de santé en Allemagne, en Angleterre, en France, aux Pays-Bas et au Québec concernant les missions des médecins généralistes, leur répartition et la démographie sur leur territoire ? Tours Université de Tours. Faculté de Médecine de Tours. Tours. FRA / com., Université de Tours. Faculté de Médecine de Tours. Tours. FRA. **Thèse pour le doctorat en médecine:** c, 158.
http://memoires.scd.univ-tours.fr/index.php?fichier=Medecine/Theses/2016_Medecine_MeratNoemie.pdf

En France, le sentiment de pénurie de médecins généralistes est de plus en plus important chez les usagers de la santé. Il s'y ajoute une répartition inhomogène des médecins sur l'ensemble du territoire métropolitain français. Le but de cette recherche était de savoir si d'autres pays rencontraient cette même situation et par quels mécanismes ils tentaient d'y remédier. Cette thèse est une revue de la littérature. Elle est uniquement descriptive. Elle décrit les différents mécanismes mis en place par les pays concernant les rôles des médecins généralistes, leur répartition et la démographie sur leur territoire, mais n'évalue pas leur efficacité. Bien que les systèmes de santé des pays étudiés aient en commun une base bismarckienne ou beveridgienne, leur organisation actuelle dans chaque pays est unique et complexe : elle est le fruit de réformes successives propres à chaque pays. Ces organisations ne peuvent donc pas être comparées entre elles. La place centrale accordée depuis de nombreuses années aux soins primaires en Angleterre et aux Pays-Bas est associée à une répartition homogène des médecins généralistes sur leur territoire. Cette place centrale se traduit notamment par le rôle de gatekeeper qu'occupent les médecins généralistes. Dans les pays désirant réguler le nombre total de médecins, un mécanisme de numerus clausus à l'entrée des études de médecine est instauré. Tous les pays étudiés rencontrant des difficultés concernant la démographie médicale et la répartition des médecins généralistes sur leur territoire instaurent le même type de régulations. Ces mécanismes sont utilisés durant les études médicales, lors de l'installation du médecin et au moment de la retraite. Les mécanismes incitatifs sont majoritairement des avantages financiers à s'installer en zone déficitaire en médecins généralistes et à poursuivre son activité au lieu de prendre sa retraite. Les mécanismes désinsitatifs interdisent l'installation des médecins généralistes dans les zones estimées suffisamment pourvues. Malgré le peu de modalités de régulation mis en place, le seul pays de notre étude à ne pas rencontrer de problèmes concernant à la démographie médicale et à la répartition des médecins généralistes sur son territoire est les Pays-Bas.

Moehling, C. M., Niemesh, G. T., Thomasson, M. A., et al. (2020). "Medical education reforms and the origins of the rural physician shortage." Cliometrica **14**(2): 181-225.
https://doi.org/10.1007/s11698-019-00187-w

In the first two decades of the twentieth century, medical schools increased standards for admission and added basic science to their curricula. During this time period, the probability a new medical school graduate located in a rural area declined by 40%. Using novel data from the American Medical Directories, we find that physicians trained in more rigorous programs with higher admission standards were less likely to set up practice in rural areas. While all physicians were being drawn to metropolitan areas during this period, the pull was stronger for graduates of the higher quality schools. We also find some evidence that physicians trained in the more scientifically and clinically based programs were more strongly attracted to places with more hospitals. These findings suggest

that the medical education reforms of the early twentieth century contributed to the urban–rural disparity in access to physician care.

Ngune, I., et al. (2012). "Effective recruitment strategies in primary care research: a systematic review." Qual Prim Care **20**(2): 115-123.

BACKGROUND: Patient recruitment in primary care research is often a protracted and frustrating process, affecting project timeframes, budget and the dissemination of research findings. Yet, clear guidance on patient recruitment strategies in primary care research is limited. This paper addresses this issue through a systematic review. METHOD: Articles were sourced from five academic databases - AustHealth, CINAHL, the Cochrane Methodology Group, EMBASE and PubMed/Medline; grey literature was also sourced from an academic library and the Primary Healthcare Research & Information Service (PHCRIS) website. Two reviewers independently screened the articles using the following criteria: (1) published in English, (2) reported empirical research, (3) focused on interventions designed to increase patient recruitment in primary care settings, and (4) reported patient recruitment in primary care settings. RESULTS: Sixty-six articles met the inclusion criteria. Of these, 23 specifically focused on recruitment strategies and included randomised trials (n = 7), systematic reviews (n = 8) and qualitative studies (n = 8). Of the remaining articles, 30 evaluated recruitment strategies, while 13 addressed the value of recruitment strategies using descriptive statistics and/or qualitative data. Among the 66 articles, primary care chiefly included general practice (n = 30); nursing and allied health services, multiple settings, as well as other community settings (n = 30); and pharmacy (n = 6). Effective recruitment strategies included the involvement of a discipline champion, simple patient eligibility criteria, patient incentives and organisational strategies that reduce practitioner workload. CONCLUSION: The most effective recruitment in primary care research requires practitioner involvement. The active participation of primary care practitioners in both the design and conduct of research helps to identify strategies that are congruent with the context in which patient care is delivered. This is reported to be the optimal recruitment strategy.

Nicolas, G. (2014). "Les déserts médicaux sous l'éclairage du droit comparé." Cahiers De Droit De La Sante (Les) : Juridiques, Historiques Et Prospectifs(19): 179-190.

En 1971, le docteur Julian Tudor Hart a développé le principe du "inverse care law" selon lequel la disponibilité des soins médicaux de qualité est inversement proportionnelle à la nécessité de la population desservie. Cette lo s'applique particulièrement à l'offre de soins médicale libérale. L'interventionnisme publique n'a pas réussi à contrer ce principe au Royaume-Uni et les inégalités d'accès aux soins se sont accrues à partir de 1980 (Black report). Cet article décrit les réformes successives entreprises par le gouvernement britannique, afin de remédier à ces disparités d'accès aux soins.

Nixon, G., et al. (2017). "Training generalist doctors for rural practice in New Zealand." Rural Remote Health
OCDE (2016). Health Workforce Policies in OECD Countries : Right Jobs, Right Skills, Right Places, Paris : OCDE http://www.oecd.org/fr/publications/health-workforce-policies-in-oecd-countries-9789264239517-en.htm

Health workers are the cornerstone of health systems, playing a central role in providing health services to the population and improving health outcomes. The demand and supply of health workers have increased over time in all OECD countries, with jobs in the health and social sector accounting for more than 10% of total employment now in several OECD countries. This publication reviews key trends and policy priorities on health workforce across OECD countries, with a particular focus on doctors and nurses given the preeminent role that they have traditionally played in health service delivery.

OCDE (2021). Delivering Quality Education and Health Care to All. Preparing regions for demographics change. OECD Rural Studies. Paris OCDE**:** 217.
https://www.oecd-ilibrary.org/fr/urban-rural-and-regional-development/delivering-quality-education-and-health-care-to-all_83025c02-en

COVID-19 has put renewed focus on the importance of addressing longstanding challenges that OECD governments face in delivering public services, especially in regions with people spread over a wider area where economies of scale are more difficult to achieve. The physical infrastructure needed to provide good quality education and health services can be more complex and expensive in rural and remote regions that also struggle to attract and retain education and health care professionals. Acute ageing trends in many rural regions and, in some cases, a shrinking population will require sustainable policy responses that will need to be coherent with pressure to drive efficiencies in public spending. This report examines the nuances specific to the delivery of education and health care to people everywhere, offering recommendations on how to better adapt provision to the realities of today and the emerging realities of tomorrow to face the challenges of distance, demographic change and fiscal belt-tightening. The report also examines digital connectivity issues in rural and remote regions, recognising the significant scope for digital delivery of services to mitigate challenges related to distance. Finally, the report looks at governance issues, including fiscal issues, through which the delivery of these critical services is administered and paid for.

Ogden, J., Preston, S., Partanen, R. L., et al. (2020). "Recruiting and retaining general practitioners in rural practice: systematic review and meta-analysis of rural pipeline effects." Med J Aust **213**(5): 228-236.

OBJECTIVE: To synthesise quantitative data on the effects of rural background and experience in rural areas during medical training on the likelihood of general practitioners practising and remaining in rural areas. STUDY DESIGN: Systematic review and meta-analysis of the effects of rural pipeline factors (rural background; rural clinical and education experience during undergraduate and postgraduate/vocational training) on likelihood of later general practice in rural areas. DATA SOURCES: MEDLINE (Ovid), EMBASE, Informit Health Collection, and ERIC electronic database records published to September 2018; bibliographies of retrieved articles; grey literature. DATA SYNTHESIS: Of 6709 publications identified by our search, 27 observational studies were eligible for inclusion in our systematic review; when appropriate, data were pooled in random effects models for meta-analysis. Study quality, assessed with the Newcastle-Ottawa scale, was very good or good for 24 studies, satisfactory for two, and unsatisfactory for one. Meta-analysis indicated that GPs practising in rural communities was significantly associated with having a rural background (odds ratio [OR], 2.71; 95% CI, 2.12-3.46; ten studies) and with rural clinical experience during undergraduate (OR, 1.75; 95% CI, 1.48-2.08; five studies) and postgraduate training (OR, 4.57; 95% CI, 2.80-7.46; eight studies). CONCLUSION: GPs with rural backgrounds or rural experience during undergraduate or postgraduate medical training are more likely to practise in rural areas. The effects of multiple rural pipeline factors may be cumulative, and the duration of an experience influences the likelihood of a GP commencing and remaining in rural general practice. These findings could inform government-led initiatives to support an adequate rural GP workforce. PROTOCOL REGISTRATION: PROSPERO, CRD42017074943 (updated 1 February 2018).

Ogundeji, Y., Clement, F., Wellstead, D., et al. (2021). "Primary care physicians' perceptions of the role of alternative payment models in recruitment and retention in rural Alberta: a qualitative study." CMAJ Open **9**(3): E788-e794.

BACKGROUND: Despite well-documented challenges in recruiting physicians to rural practice, few Canadian studies have described the role physician payment models may play in attracting and retaining physicians to rural practice. This study examined the perspectives of rural primary care physicians on the factors that attract and retain physicians in rural locations, including the role that alternative payment models (APMs) might play. METHODS: This was a qualitative study involving in-depth, open-ended interviews with rural primary care physicians practising under fee-for-service (FFS) models and APMs in Alberta, Canada. Participants were recruited from the Rural Health Professions Action Plan member list (consisting of physicians practising in rural or remote locations in Alberta) and the College of Physicians and Surgeons of Alberta online database. Interviews were conducted April to June 2020, and data were analyzed using a thematic framework approach. RESULTS: Fourteen physicians were interviewed. There were 5 themes identified: factors that attract physicians to rural practice, barriers and challenges associated with rural practice, the potential role of APMs in recruitment and retention, factors that physicians consider in deciding to change payment models,

and physician perceptions of APMs compared with FFS models. Participants expressed that APMs may have some role to play in retaining rural physicians but identified professional challenges, and family-related and personal factors as key determinants. Most FFS physicians indicated that they were interested in exploring APMs provided specific concerns were addressed (e.g., clear and adequately compensated APM contracts, and physician involvement in the development of APMs). INTERPRETATION: Primary care physicians practising in rural regions in Alberta view payment models as one consideration among many in their decision to pursue rural practice. Alternative payment model contracts designed with the input of physicians may have a role to play in attracting and retaining physicians to rural practice.

Oliveira, A. P. C., Poz, M. R. D., Craveiro, I., et al. (2018). "Factors that influence human resources for health policy formulation: a multiple case study in Brazil and Portugal." Cad Saude Publica **34**(2): e00220416.

This study aims to analyze whether the process by which policies for human resources for health that aim to improve the geographic distribution of physicians have been informed by scientific evidence in Brazil and Portugal. This was a multiple case study on a decision-making process for human resources for health in Brazil and Portugal. The respective case studies were based on Brazil's More Doctors Program (Programa Mais Medicos - PMM) and Portugal's strategy of hiring foreign physicians through bilateral agreements, to work in the country's National Health Service (SNS). We interviewed 27 key actors in the policy-making process on the following topics: factors that influenced the policy decisions, actors that were expected to win or lose from the policy, and the scientific evidence and available data used in the policy-making, among others. The most evident factors appearing in the interviews as having influenced the PMM were: institutions; external factors (Presidential elections); group interests (e.g. physicians' professional associations), governments (Brazil and Cuba), international organizations, and civil society; and ideas (scientific evidence). The most frequently cited factors in Portugal were: institutions and interests of government (from Portugal and the countries involved in the bilateral agreements), civil society, and groups (physicians' professional associations). Contrary to the case study in Brazil, where the evidence was reported to having played an important role in the policy decisions, in Portugal, scientific evidence was not identified as contributing to the specific policy process.

OMS (2010). Increasing access to health workers in remote and rural areas through improved retention. Global Policy Recommendations, Genéve : OMS**:** 72p.
http://whqlibdoc.who.int/publications/2010/9789241564014_eng.pdf

ONDPS (2015). Les conditions d'installation des médecins de ville en France et dans cinq pays européens. 2 volumes. Paris ONDPS**:** 2 vol. (101; 145), fig., tabl., cartes.

En France, le système de santé est fondé historiquement sur une gestion différenciée de l'offre de soins : planificatrice et étatisée dans le secteur des établissements de santé (par exemple carte sanitaire et autorisation de lits et d'équipements lourds après 1970, SROS après 1991, etc.), de tradition libérale et conventionnelle dans le secteur de ville. Ainsi, l'essentiel de la régulation de la médecine de ville est réalisé, en amont de l'installation, par le biais des dispositifs qui s'appliquent aux flux d'étudiants (places ouvertes au numerus clausus par UFR à l'issue du concours de fin de première année - PACES - et épreuves classantes nationales - ECN - qui déterminent pour tous les étudiants ayant validé leur second cycle d'études, les postes d'internat ouverts par spécialité et UFR). Les dispositifs qui tendent à organiser l'offre de ville sont beaucoup plus récents et conservent le statut de correctifs incitatifs : il s'agit en particulier de la loi HPST de juillet 2009 qui impose aux nouvelles ARS de définir le maillage pertinent de leur région (les territoires de santé) et d'y organiser les soins de premier recours en ville ou encore le Pacte Santé Territoire de décembre 2012 qui crée les praticiens territoriaux de médecine générale (PTMG). Cette situation a conduit l'Observatoire national de la démographie des professions de santé à s'interroger sur les dispositifs qui, dans quelques pays européens proches, sont destinés à orienter l'installation des médecins en ville. L'étude est complétée, dans un second volume, par des monographies par pays : Allemagne, Belgique, Espagne, Pays-Bas et Royaume-Uni (résumé de l'éditeur)

Ono, T., et al. (2014). Geographic Imbalances in Doctor Supply and Policy Responses. OECD Health Working Paper; 69. Paris OCDE: 65 , tabl.

> Doctors are distributed unequally across different regions in virtually all OECD countries, and this causes concern about how to continue to ensure access to health services everywhere. In particular access to services in rural regions is the focus of attention of policymakers, although in some countries, poor urban and sub-urban regions pose a challenge as well. Despite numerous efforts this mal-distribution of physician supply persists. This working paper first examines the drivers of the location choice of physicians, and second, it examines policy responses in a number of OECD countries.

Relic, D., Fister, K. et Bozikov, J. (2019). "Using Simulation Modeling to Inform Policy Makers for Planning Physician Workforce in Healthcare System in Croatia." Stud Health Technol Inform **264**: 1021-1025.

> The objective of this paper is to show how a simple but powerful simulation model can be build up using standard spreadsheet program and used to simulate future, needs and supply of physicians in order to inform policy makers at national level when deciding on enrollment to medical schools and immigration quotas for physicians. The Republic of Croatia is facing a serious shortage of physicians in the healthcare system and simulation results have shown that the gap between needs and supply will even increase if current enrollment qoutas to medical schools would persist. Increasing enrollment quotas, adjusting immigration policy, re-directing physicians from other professions to the healthcare system, task shift and skill mix options are just some of the measures needed to be taken promptly in order to prevent a huge deficit of physicians in the future. Simulation modeling is certainly a method for predicting changes within healthcare systems with a possibility to examine multiple different scenarios and suggest interventions.

Reuter-Oppermann, M., Nickel, S. et Steinhauser, J. (2019). "Operations research meets need related planning: Approaches for locating general practitioners' practices." PLoS One **14**(1): e0208003.

> BACKGROUND: In most western countries a shortage of general practitioners (GP) exists. Newly qualified GPs often prefer to work in teams rather than in single-handed practices. Therefore, new practices offering these kinds of working conditions will be attractive in the future. From a health care point of view, the location planning of new practices will be a crucial aspect. In this work we studied solutions for locating GP practices in a defined administrative district under different objectives. METHODS: Using operations research (OR), a research discipline that originated from logistics, different possible locations of GP practices were identified for the considered district. Models were developed under two main basic requirements: that one practice can be reached by as many inhabitants as possible and to cut down the driving time for every district's inhabitant to the next practice location to less than 15 minutes. Input data included the demand (population), driving times and the current GP locations. RESULTS: Three different models were analysed ranging from one single practice solution to five different practices. The whole administrative district can reach the central community "A" in at most 23 minutes by car. Considering a maximum driving time of 15 minutes, locations in four different cities in the district would be sufficient. CONCLUSION: Operations research methods can be used to determine locations for (new) GP practices. Depending on the concrete problem different models and approaches lead to varying solutions. These results must be discussed with GPs, mayors and patients to find robust locations regarding future developments.

Russell, D. J., et al. (2017). "Determinants of rural Australian primary health care worker retention: A synthesis of key evidence and implications for policymaking." Aust J Rural Health **25**(1): 5-14.

> OBJECTIVE: To synthesise key Australian empirical rural retention evidence and outline implications and potential applications for policymaking. DESIGN: A comprehensive search of Medline, PsychINFO, CINAHL plus, Scopus and EMBASE revealed eight peer-reviewed empirical studies published since 2000 quantifying factors associated with actual retention. SETTING AND PARTICIPANTS: Rural and remote Australian primary health care workers. MAIN OUTCOME MEASURES: Hazard ratios (hazard of leaving rural), mean length of stay in current rural position and odds ratios (odds of leaving rural). RESULTS: A broad range of geographical, professional, financial, educational, regulatory and personal factors are

strongly and significantly associated with the rural retention of Australian primary health care workers. Important factors included geographical remoteness and population size, profession, providing hospital services, practising procedural skills, taking annual leave, employment grade, employment and payment structures, restricted access to provider numbers, country of training, vocational training, practitioner age group and cognitive behavioural coaching. These findings suggest that retention strategies should be multifaceted and 'bundled', addressing the combination of modifiable factors most important for specific groups of Australian rural and remote primary health care workers, and compensating health professionals for hardships they face that are linked to less modifiable factors. CONCLUSIONS: The short retention of many Australian rural and remote Allied Health Professionals and GPs, particularly in small, outer regional and remote communities, requires ongoing policy support. The important retention patterns highlighted in this review provide policymakers with direction about where to best target retention initiatives, as well as an indication of what they can do to improve retention.

Samb, O. M., Loignon, C. et Contandriopoulos, D. (2019). "[Innovations to improve access to care for vulnerable people in OECD countries.]." Sante Publique **Vol. 31**(4): 497-505.

INTRODUCTION: This study presents results of a systematic review aimed at mapping and understanding which elements are essential to the success of innovations for the improvement of the healthcare access for vulnerable groups. METHOD: A mixed systematic literature review was conducted and several databases were studied (Medline, Cinahl, Embase, Social Work, SocIndex). All OECD countries were covered in 10-year period (2005-2015). In total, 26 articles were deemed relevant and were included in the review. RESULTS: The thematic synthesis reveals several categories of innovation such as navigation services, outreach services and clinics offering adapted care. It also highlights key characteristics which contributed to the success of these innovations and improved patient satisfaction, such as social proximity, mastery of context on the part of the worker, interorganizational and interdisciplinary collaboration, respectful care and, finally, sustainability of funding. CONCLUSION: One of the main lessons learned from this review is that providing health services in a compassionate way is a determinant for access to care among vulnerable groups.

Scanlan, G. M., Cleland, J., Johnston, P., et al. (2018). "What factors are critical to attracting NHS foundation doctors into specialty or core training? A discrete choice experiment." BMJ Open **8**(3): e019911.

OBJECTIVES: Multiple personal and work-related factors influence medical trainees' career decision-making. The relative value of these diverse factors is under-researched, yet this intelligence is crucially important for informing medical workforce planning and retention and recruitment policies. Our aim was to investigate the relative value of UK doctors' preferences for different training post characteristics during the time period when they either apply for specialty or core training or take time out. METHODS: We developed a discrete choice experiment (DCE) specifically for this population. The DCE was distributed to all Foundation Programme Year 2 (F2) doctors across Scotland as part of the National Career Destination Survey in June 2016. The main outcome measure was the monetary value of training post characteristics, based on willingness to forgo additional potential income and willingness to accept extra income for a change in each job characteristic calculated from regression coefficients. RESULTS: 677/798 F2 doctors provided usable DCE responses. Location was the most influential characteristic of a training position, followed closely by supportive culture and then working conditions. F2 doctors would need to be compensated by an additional 45.75% above potential earnings to move from a post in a desirable location to one in an undesirable location. Doctors who applied for a training post placed less value on supportive culture and excellent working conditions than those who did not apply. Male F2s valued location and a supportive culture less than female F2s. CONCLUSION: This is the first study focusing on the career decision-making of UK doctors at a critical careers decision-making point. Both location and specific job-related attributes are highly valued by F2 doctors when deciding their future. This intelligence can inform workforce policy to focus their efforts in terms of making training posts attractive to this group of doctors to enhance recruitment and retention.

Schafer, W. (2016). Primary care in 34 countries: perspectives of general practitioners and their patients. Utrecht NIVEL**:** 340 , tab., graph., fig. http://www.nivel.nl/sites/default/files/bestanden/Proefschrift_Primary_care_34_countries_Schafer.pdf

This thesis aims to evaluate primary care service delivery in Europe and in other parts of the world . Strong primary care is expected to meet the current challenges of healthcare systems which are facing increasing numbers of people with chronic diseases and rising healthcare costs. The thesis is written in the context of the international study 'Quality and Costs of Primary Care in Europe' (QUALICOPC). The countries studied include 26 EU member states as well as Australia, Canada, Iceland, FYR Macedonia, New Zealand, Norway, Switzerland and Turkey. As primary care is the point where many patients enter the professional healthcare system, easy access and a generalist approach to the health problems people present are important features.

Scheffler, R. M. et Arnold, D. R. (2019). "Projecting shortages and surpluses of doctors and nurses in the OECD: what looms ahead." Health Economics, Policy and Law **14**(2): 274-290. https://www.cambridge.org/core/article/projecting-shortages-and-surpluses-of-doctors-and-nurses-in-the-oecd-what-looms-ahead/493055A944EF9EC181D8C4C2D3C3247E

There is little debate that the health workforce is a key component of the health care system. Since the training of doctors and nurses takes several years, and the building of new schools even longer, projections are needed to allow for the development of health workforce policies. Our work develops a projection model for the demand of doctors and nurses by Organisation for Economic Co-operation and Development (OECD) countries in the year 2030. The model is based on a country's demand for health services, which includes the following factors: per capita income, out-of-pocket health expenditures and the ageing of its population. The supply of doctors and nurses is projected using country-specific autoregressive integrated moving average models. Our work shows how dramatic imbalances in the number of doctors and nurses will be in OECD countries should current trends continue. For each country in the OECD with sufficient data, we report its demand, supply and shortage or surplus of doctors and nurses for 2030. We project a shortage of nearly 400,000 doctors across 32 OECD countries and shortage of nearly 2.5 million nurses across 23 OECD countries in 2030. We discuss the results and suggest policies that address the shortages.

Scheffler, R. M. (2008). Is there a doctor in the house ?, Stanford ; Stanford University Press

This is the bedrock health care concern for Americans, encompassing as it does additional concerns about affordability, accessibility, efficiency, and specialty expertise. Richard M. Scheffler brings an economist's insight to the question, showing how shifts in market power underlie the changes we have seen in the health workforce and how they will affect the future availability of doctors. Predicting the "right" ratio of doctors to population in the future is only a small piece of the puzzle, and one that has been the subject of much forecasting, and little agreement, over the past several decades. In this concise and readable analysis, the author goes beyond the guessing game to demonstrate that today's health care system is the product of financial influences in both the policy realm and on the ground in the offices of medical centers, HMOs, insurers, and physicians throughout America. He shows how factors such as physician income, medical training costs, and new technologies affect the specialties and geographic distribution of doctors. Scheffler then brings these findings to bear on a set of predictions for the U.S. and international physician workforce that extend five and ten years into the future. As part of his vision of tomorrow's ideal workforce, he offers a template for enhancing the efficiency and cost-effectiveness of the health care system overall. In the groundbreaking second half of the book, the author, a health policy expert himself, tests his ideas in conversations with leading figures in health policy, medical education, health economics, and physician practice. Their unguarded give-and-take offers a window on the best thinking currently available anywhere. Finally, Scheffler combines their insights with his own to offer observations that will change the way health care's stakeholders should think about the future

Sempowski, I. P. (2004). "Effectiveness of financial incentives in exchange for rural and underserviced area return-of-service commitments: systematic review of the literature." Can.J Rural Med **9**(2): 82-88.

OBJECTIVE: To evaluate the effectiveness of programs that provide financial incentives to physicians in exchange for a rural or underserviced area return-of-service (ROS) commitment. METHODS: Medline and Ovid HealthSTAR databases were searched from 1966 to 2002. STUDY SELECTION: The initial search yielded 516 results. Bibliography review yielded additional references. Articles were excluded if they involved financial incentives to change physician behaviours or enhance profit. Ten publications were selected as the highest level of evidence available. The quality of the evidence was low and of limited applicability (1 retrospective and 1 prospective cohort study, the remainder cross-sectional surveys). Three studies were from Canada, 1 from New Zealand, and the remaining 6 were from the United States. RESULTS: Outcome measures included initial recruitment of physicians, buyout rates and long-term retention. The majority of studies reported effective recruitment despite high buyout rates in some US-based programs. Increasing Canadian tuition and debt among medical students may make these programs attractive. The 1 prospective cohort study on retention showed that physicians who chose voluntarily to go to a rural area were far more likely to stay long term than those who located there as an ROS commitment. Multidimensional programs appeared to be more successful than those relying on financial incentives alone. CONCLUSION: ROS programs to rural and underserviced areas have achieved their primary goal of short-term recruitment but have had less success with long-term retention. Additional research is needed to examine the cost effectiveness of existing ROS programs and the incorporation of other retention strategies, such as medical education initiatives, community and professional support, differential rural fees and alternate funding models

Sénat (2008). La démographie médicale. Paris Sénat**:** 44, tabl.
http://www.senat.fr/noticerap/2007/lc185-notice.html

Réalisé par le service des études juridiques du Sénat, ce document de législation comparée porte sur la démographie médicale et analyse les dispositions en vigueur dans sept pays européens : l'Allemagne, l'Angleterre, l'Autriche, la Belgique, l'Espagne, les Pays-Bas et la Suisse, ainsi qu'au Québec. Malgré le déséquilibre géographique qui caractérise l'offre de soins en France, les deux principes de liberté d'installation des médecins et de libre accès au conventionnement ont été préservés jusqu'à ce jour : seules, des mesures incitatives ont été prises pour compenser la sous-médicalisation de certains territoires. L'examen de la situation dans plusieurs pays européens, l'Allemagne, l'Angleterre, l'Autriche, la Belgique, l'Espagne, les Pays-Bas et la Suisse, ainsi qu'au Québec, montre que : dans tous les pays étudiés, un numerus clausus limite l'accès aux études de médecine, mais il n'est pas nécessairement déterminé en fonction des besoins futurs ; la liberté d'installation des médecins conventionnés est restreinte non seulement en Angleterre, où les intéressés sont liés par contrat au Service national de santé, mais aussi en Allemagne, en Autriche, en Suisse et au Québec ; la Belgique limite par voie réglementaire le nombre annuel des nouveaux médecins conventionnés ; le Québec a multiplié les mesures d'incitation à l'installation dans les régions sous-médicalisées. Aucun des dispositifs mis en place pour améliorer la répartition géographique n'a toutefois permis de résoudre la totalité des problèmes. Du reste, plusieurs pays envisagent de modifier le leur.

Simoens, S. et Hurst, J. (2006). The supply of physician services in OECD countries, Paris : OCDE
https://www.oecd.org/dataoecd/27/22/35987490.pdf

Les pays membres de l'OCDE sont confront,s … plusieurs d,fis dans leur volont, de faire co‹ncider l'offre avec la demande de services m,dicaux. Cela implique de prendre les bonnes d,cisions concernant les effectifs et la formation des nouveaux entrants, la politique de r,tention ou de mise … la retraite des stocks existants de m,decins, et les politiques migratoires des m,decins. Cela exige ,galement des politiques qui assurent une bonne r,partition des sp,cialit,s et de la distribution g,ographique des m,decins. Cela demande des d,cisions appropri,s sur les termes et conditions d'exercice, et sur les modes de r,mun,ration - non seulement pour attirer un nombre suffisant d'individus aux professions m,dicales, mais aussi pour s'assurer que ces personnes sont motiv,es pour ˆtre les plus productives possible. Ce document explore toutes ces questions … partir d'une mise en perspective internationale. La deuxiŠme partie propose un cadre d'analyse de l'emploi des m,decins dans les pays de l'OCDE en distinguant la demande et l'offre de m,decins, et en identifiant deux

diff,rents concepts de p,nurie et de surplus. La troisiŠme section analyse les effectifs de m,decins et leur impact en termes de co–ts, de productivit, et de r,sultats en sant,. Les ,vidences actuelles de p,nuries et de surplus de m,decins, ainsi qu'un certain nombre de facteurs d'offre affectant les p,nuries et surplus futurs sont analys,s dans la quatriŠme partie. Il s'en suit une discussion sur les diverses politique- s mises en ouvre pour assurer une offre ad,quate de m,decins, en distinguan- t l'effectif global de m,decins au niveau national, la distribution g,ographique au sein d'un pays, et la composition des sp,cialit,s dans la population m,dicale. La huitiŠme partie passe en revue les politiques qui affectent la productivit, des m,decins. Enfin, les remarques conclusive termine cette ,tude

Simoens, S., et al. (2005). Tackling nurses shortages in OECD countries. OECD Health Working Papers ; 19. Paris OCDE**:** 147 , tabl.
http://www.oecd.org/dataoecd/11/10/34571365.pdf

Tous les pays de l'OCDE, à l'exception de quelques-uns, font état d'une pénurie d'infirmières. Etant donné que la demande d'infirmières va vraisemblablement augmenter encore et que l'offre devrait diminuer sous l'effet du vieillissement de cette population, la pénurie est susceptible de persister, voire de s'aggraver dans l'avenir si des mesures ne sont pas prises pour accroître les flux d'entrées dans la profession et réduire le nombre de sorties, ou pour augmenter la productivité des infirmières. Ce document présente une analyse de la pénurie d'infirmières que connaissent actuellement les pays de l'OCDE. Il rend compte des données disponibles sur ce phénomène et examine les différences entre pays dans le domaine de l'emploi infirmier. Il passe également en revue un certain nombre de facteurs qui agissent du côté de la demande et de l'offre et pourraient déterminer l'existence de futures pénuries d'infirmières et l'ampleur qu'elles auront. Afin d'apporter une solution à ce problème, les auteurs comparent et évaluent les mesures que les pouvoirs publics peuvent prendre pour accroître les flux d'entrées dans la population active infirmière, réduire les sorties et améliorer les taux de rétention du personnel infirmier. La réaction tardive du marché est certes sans doute à l'origine des cycles de pénurie et d'excédent d'infirmières qui se sont produits dans le passé, mais il semble que le manque de personnel infirmier auquel les pays de l'OCDE sont et seront confrontés dans l'avenir soit induit par des facteurs plus divers, d'ordre économique, démographique et sociologique. Outre ce décalage dans la réaction du marché, la pénurie actuelle d'infirmières paraît tenir au fait que les jeunes sont moins nombreux à entrer dans la profession, qu'un plus large éventail de débouchés professionnels leur est offert, que le métier d'infirmière est socialement peu valorisé, que les conditions de travail du personnel infirmier sont perçues de façon négative et que ce dernier vieillit. De plus, la demande d'infirmières a continué de croître en raison du vieillissement de la population, d'une intensification de l'action de défense des consommateurs et de l'évolution rapide des technologies médicales. Il existe pour le moment peu d'informations sur le rapport coût-efficacité des différentes politiques qui visent à assurer une offre d'infirmières suffisante. La rémunération et les conditions de travail, réunis, semblent influer sur les flux d'entrées dans la profession et les flux de sorties, ainsi que sur la rétention du personnel infirmier. Des études ont montré que la rémunération avait une incidence sur le nombre d'admissions dans les écoles d'infirmières, la décision des infirmières diplômées d'exercer, la rétention du personnel infirmier et les sorties de la profession, mais d'autres recherches sont nécessaires pour quantifier les effets de la rémunération sur ces stocks et flux. L'amélioration des conditions d'emploi, tels que : l'assouplissement des modalités de travail et de départ à la retraite, la mise en place des dispositifs d'aide aux familles, l'amélioration des politiques de gestion du personnel, la création d'une culture professionnelle favorable, l'amélioration des perspectives de carrière, semblent également avoir eu un succès dans la rétention du nombre d?infirmières. En outre, le niveau des effectifs paraît jouer un rôle dans le recrutement et la rétention ; en observant les faits, on commence à se rendre compte que lorsqu'il existe un rapport infirmières/patients minimum, la rotation du personnel infirmier est plus faible et les entrées dans les écoles d'infirmières plus nombreuses. Certaines études montrent aussi qu'il y aurait peut-être moyen de réduire la pénurie de personnel infirmier en augmentant la proportion d'infirmières pourvues d'un bon niveau de formation, sans en employer plus qu'il n'en faut. Si la pénurie de personnel infirmier semble devoir s'aggraver dans un proche avenir en l'abs

Soles, T. L., et al. (2017). "Family medicine education in rural communities as a health service intervention supporting recruitment and retention of physicians: Advancing Rural Family Medicine: The Canadian Collaborative Taskforce." Can Fam Physician **63**(1): 32-38.

> OBJECTIVE: To develop a pan-Canadian rural education road map to advance the recruitment and retention of family physicians in rural, remote, and isolated regions of Canada in order to improve access and health care outcomes for these populations. COMPOSITION OF THE TASK FORCE: Members of the task force were chosen from key stakeholder groups including educators, practitioners, the College of Family Physicians of Canada education committee chairs, deans, chairs of family medicine, experts in rural education, and key decision makers. The task force members were purposefully selected to represent a mix of key perspectives needed to ensure the work produced was rigorous and of high quality. Observers from the Canadian Medical Association and Health Canada's Council on Health Workforce, and representatives from the Royal College of Physicians and Surgeons of Canada, were also invited to provide their perspectives and to encourage and coordinate multiorganization action. METHODS: The task force commissioned a focused literature review of the peer-reviewed and gray literature to examine the status of rural medical education, training, and practice in relation to the health needs of rural and remote communities in Canada, and also completed an environmental scan. REPORT: The environmental scan included interviews with more than 100 policy makers, government representatives, providers, educators, learners, and community leaders; 17 interviews with practising rural physicians; and 2 surveys administered to all 17 faculties of medicine. The gaps identified from the focused literature review and the results of the environmental scan will be used to develop the task force's recommendations for action, highlighting the role of key partners in implementation and needed action. CONCLUSION: The work of the task force provides an opportunity to bring the various partners together in a coordinated way. By understanding who is responsible and the actions each stakeholder needs to take to make the recommendations a reality, the task force can lay the groundwork for developing a coordinated, comprehensive health human resource strategy that considers the integral role of medical education as a health system intervention.

Stigler, F. L., Zipp, C. R., Jeitler, K., et al. (2021). "Comprehensive catalogue of international measures aimed at preventing general practitioner shortages." Fam Pract **38**(6): 793-801.
https://doi.org/10.1093/fampra/cmab045

> Many countries are facing a shortage and misallocation of general practitioners (GPs). The development of a policy response may benefit from the knowledge of worldwide policies that have been adopted and recommended to counteract such a development.To identify measures proposed or taken internationally to prevent GP shortages.A literature review followed by an expert assessment focussed on sources from OECD countries.The literature search identified international policy documents and literature reviews in bibliographical databases, and examined institutional websites and references of included publications. The internet search engine Google was also used. The resulting measures were then assessed for completeness by three experts.Ten policy documents and 32 literature reviews provided information on 102 distinct measures aimed at preventing GP shortages. The measures attempt to influence GPs at all stages of their careers.This catalogue of measures to prevent GP shortages is significantly more comprehensive than any of the policy documents it is based on. It may serve as a blueprint for effective reforms aimed at preventing GP shortages internationally.This review identified 102 distinct measures to prevent a GP shortage. These measures influence GPs at all stages of their careers. These measures may serve as a blueprint for reforms to prevent GP shortages.

Stroka, M. A. (2021). Regional variation in the supply of general and medical practitioners and its consequences for inpatient service utilization. Ruhr Economic Papers ; 877. Essen RWI**:** 26.
https://www.econstor.eu/bitstream/10419/232073/1/1752321456.pdf

> There is widespread concern about the consequences of the undersupply of outpatient care for the utilization of inpatient care. It is common knowledge in the media that urban areas aften are characterized by an oversupply of health care providers, while rural areas suffer from shortage. As such, the undersupply of outpatient medical care in rural areas can lead to higher utilization of

inpatient care due to both substitution effects and the possible disastrous health consequences if medical care is not received frequently or quickly enough. On the basis of administrative data from the largest sickness fund in Germany, this study analyzes the relationship between the district density of general as well as medical practitioner and the individual number of hospitalizations. We find evidence for a significant negative association between the share of general and medical practitioners in the population and the utilization of inpatient health care services, measured in the amount of yearly hospitalizations.

Swami, M. et Scott, A. (2021). "Impact of rural workforce incentives on access to GP services in underserved areas: Evidence from a natural experiment." Social Science & Medicine **281**: 114045. https://doi.org/10.1016/j.socscimed.2021.114045

Financial incentives are often used to improve recruitment and retention of physicians in rural and remote areas. In 2010, the General Practice Rural Incentive Program (GPRIP) was introduced in Australia, causing an exogenous change in the eligibility for rural incentives for some geographical areas. This study investigates the effect of this policy reform on waiting times for a non-urgent GP appointment using panel data (2008–2014) on 2058 GPs. Using difference-in-difference methodology, results show that the number of GPs in practices in newly eligible areas increased. However, no evidence is found that this reduces waiting times for existing patients, and only weak evidence is found that waiting times for new patients fell, by around 16%. Our results suggest that financial incentives may only play a limited role in improving access to primary care and should not be the only solution to address medical workforce shortages in underserved areas.

Tan, S. et Mays, N. (2014). "Impact of initiatives to improve access to, and choice of, primary and urgent care in the England: a systematic review." Health Policy **118**(3): 304-315.

BACKGROUND: There were ten initiatives in the primary and urgent care system in the English NHS during the New Labour government, 1997-2010, aimed at delivering higher quality, more accessible and responsive care by expanding access, increasing convenience and introducing greater patient choice of provider. We examine their impact on demand, equity, patient satisfaction, referrals, and costs. METHODS: Studies were systematically identified through electronic databases and reference lists of publications. Studies of all designs were included if published between 1997 and 2013, and with empirical data on the impacts above. RESULTS: Nineteen studies of ten initiatives were included. Innovations often overlapped, complicating care. There was some demand for new provision on grounds of convenience, but little evidence of substitution between services. Patient satisfaction varied across schemes. There was little evidence on the costs and benefits of new versus existing provision. CONCLUSION: New services generated a more complex system where new and existing providers delivered overlapping services. The new provision did not induce substitution and was likely to have increased overall demand. Initiatives to improve access to existing provision may have greater potential to improve access and convenience at lower marginal costs than developing new forms of provision.

Teljeur, C., et al. (2010). "General practitioner workforce planning: assessment of four policy directions." BMC Health Serv Res **10**: 148.

BACKGROUND: Estimating the supply of GPs into the future is important in forecasting shortages. The lengthy training process for medicine means that adjusting supply to meet demand in a timely fashion is problematic. This study uses Ireland as a case study to determine the future demand and supply of GPs and to assess the potential impact of several possible interventions to address future shortages. METHODS: Demand was estimated by applying GP visit rates by age and sex to national population projections. Supply was modelled using a range of parameters derived from two national surveys of GPs. A stochastic modelling approach was adopted to determine the probable future supply of GPs. Four policy interventions were tested: increasing vocational training places; recruiting GPs from abroad; incentivising later retirement; increasing nurse substitution to enable practice nurses to deliver more services. RESULTS: Relative to most other European countries, Ireland has few GPs per capita. Ireland has an ageing population and demand is estimated to increase by 19% by 2021.

Without intervention, the supply of GPs will be 5.7% less than required in 2021. Increasing training places will enable supply to meet demand but only after 2019. Recruiting GPs from overseas will enable supply to meet demand continuously if the number recruited is approximately 0.8 per cent of the current workforce per annum. Later retirement has only a short-term impact. Nurse substitution can enable supply to meet demand but only if large numbers of practice nurses are recruited and allowed to deliver a wide range of GP services. CONCLUSIONS: A significant shortfall in GP supply is predicted for Ireland unless recruitment is increased. The shortfall will have numerous knock-on effects including price increases, longer waiting lists and an increased burden on hospitals. Increasing training places will not provide an adequate response to future shortages. Foreign recruitment has ethical considerations but may provide a rapid and effective response. Increased nurse substitution appears to offer the best long-term prospects of addressing GP shortages and presents the opportunity to reshape general practice to meet the demands of the future.

Tesson, G., et al. (2008). "Distributed Medical Education as a Solution to Physician Mal-distribution : One Model or Many ?" Cahiers De Sociologie Et De Demographie Medicales **48**(2): 289-306.

[BDSP. Notice produite par OBRESA 8GqR0x8k. Diffusion soumise … autorisatio- n]. La Facult, de M,decine de l'Ontario du Nord a ,t, cr,,e pour lutter contre la d,sertification m,dicale de la r,gion. Le long processus de d,cision conduisant … cette implantation peut-ˆtre sch,matiquement vu comme jalonn, des ,tapes suivantes : (1) la reconnaissance d'une situation de p,nurie en m,decins ; (2) l'acceptation du principe qui postule que le recrutement des ,tudiants peut ˆtre am,lior, lorsque la desserte des contr,es d,favoris,es apparaŒt comme une priorit, ; (3) la d,cision entre une cr,ation ex nihilo ou une extension des structure- s existantes ; (4) au plan pratique, le choix de l'endroit d'implantation. L'analyse montre que ce processus ne peut pas ˆtre identique partout. En fait, une telle implantation d,pend d'une multitude de facteurs. (R,sum, d'auteur)

Touati, N. et Turgeon, J. (2013). "Répartition géographique des médecins de famille : quelles solutions à un problème complexe ?" Sante Publique **25**(4): 465-473.
http://www.cairn.info/article.php?ID_ARTICLE=SPUB_134_0465

[BDSP. Notice produite par EHESP 9GqlR0xq. Diffusion soumise à autorisation]. Dans cet article, les auteurs s'intéressent à la question de la répartition géographique des médecins omnipraticiens, en focalisant sur les enjeux d'attraction. L'analyse repose sur une approche configurationnelle. Définie simplement, cette approche stipule que les impacts d'une intervention sont liés d'une part, à la cohérence interne entre les caractéristiques d'une intervention et d'autre part, à la cohérence qui existe entre cette intervention et son contexte. Une étude de cas longitudinale a été menée, correspondant à l'expérience du Québec sur 35 ans. Les mesures mobilisées ont surtout porté sur la formation, les incitatifs (positifs et négatifs), le support, et depuis 2004 une certaine forme de coercition. La sélection des candidatures à l'entrée en médecine en fonction de certaines variables individuelles susceptibles d'influencer le lieu de pratique, a été peu mise en oeuvre. La combinaison des mesures gagne en efficacité à travers le temps : ces gains en efficacité sont interprétés en se référant à la cohérence interne des mesures et à la cohérence par rapport à l'environnement externe. Les interventions favorables à une répartition équitable des effectifs ne sauraient se limiter à l'activation d'un levier donné et doivent être pensées comme des interventions complexes.

Trombley, B., Brodsky, S., et al. (2019). "Early Effects of an Accountable Care Organization Model for Underserved Areas." N Engl J Med **381**(6): 543-551.

BACKGROUND: The Centers for Medicare and Medicaid Services (CMS) developed the Accountable Care Organization (ACO) Investment Model (AIM) to encourage the growth of Medicare Shared Savings Program (MSSP) ACOs in rural and underserved areas. AIM provides financial support to eligible MSSP ACOs by means of prepayment of shared savings. Estimation of the performance of AIM ACOs on measures of spending and utilization in their first performance year would be useful for understanding the viability of ACOs located in these areas. METHODS: We analyzed Medicare claims and enrollment data for a group of fee-for-service beneficiaries who had been attributed to 41 AIM ACOs and for a comparable group of beneficiaries who resided in the ACO markets but were served

primarily by non-ACO providers. We used a difference-in-differences study design to compare changes in outcomes from the baseline period (2013 through 2015) to the performance period (2016) among beneficiaries attributed to AIM ACOs with concurrent changes among beneficiaries in the comparison group. The primary outcome of interest was total Medicare Part A and B spending. RESULTS: Provider participation in AIM was associated with a differential reduction in total Medicare spending of $28.21 per beneficiary per month relative to the comparison group, which amounted to an aggregate decrease of $131.0 million. Over the same period, CMS made $76.2 million in prepayments and paid an additional $6.2 million in shared savings to ACOs in which shared savings exceeded the prepayments. After we accounted for this $82.4 million in CMS spending, the aggregate net reduction was $48.6 million, which corresponded to a net reduction of $10.46 per beneficiary per month. Decreases in the number of hospitalizations and use of institutional post-acute care contributed to the observed reduction in overall spending. CONCLUSIONS: With up-front investments, participation in ACO shared savings contracts by providers serving rural and underserved areas was associated with lower Medicare spending than that among non-ACO providers. (Funded by the Centers for Medicare and Medicaid Services.).

Vanlerenberghe, J. M. et Daudigny, Y. (2016). Rapport d'information sur l'organisation et financement de la médecine de ville en Allemagne. Paris Sénat**:** 23.
http://www.senat.fr/rap/r15-867/r15-8671.pdf

La commission des affaires sociales du Sénat considère que si le système allemand de régulation de la médecine de ville n'est pas transposable en tant que tel à la France, il est porteur d'éléments de responsabilisation des acteurs dont nous pourrions nous inspirer. En Allemagne, le mode de négociation entre médecins et caisses d'assurance maladie repose sur plusieurs équilibres fondamentaux : la soumission des sommes perçues par les médecins au respect du principe d'équilibre budgétaire des caisses d'assurance maladie, la fixation des honoraires par la négociation entre médecins et caisses et la représentation institutionnelle des médecins au travers d'un double niveau d'élection (celui du Land et le niveau fédéral). Depuis 2009, l'assurance maladie légalement obligatoire ne peut présenter de déficit, et les cotisations employeurs ne peuvent augmenter. Ainsi, dès lors que les dépenses augmentent, les cotisations des salariés augmentent également et, même si les caisses et les médecins sont fortement incités à maîtriser les coûts, l'ajustement d'une année sur l'autre est assez sévère. En France, le rapport entre les médecins, les caisses et l'Etat est historiquement très différent de ce qui existe en Allemagne. Transposer des mécanismes sans prendre en compte cet élément fondamental serait voué à l'échec. Le système allemand n'est par ailleurs pas exempt de fragilités, s'agissant notamment des différences de prise en charge des assurés du régime légal et de ceux relevant du système privé, de la désertification médicale, et du maintien de l'équilibre budgétaire à long terme compte tenu de l'évolution démographique du pays. Plusieurs évolutions récentes dans l'organisation des soins rendent néanmoins intéressants les outils de régulation du système allemand. Il pourrait être utile, au niveau régional, de développer les moyens d'information des médecins, pour que les URPS et les ARS participent ensemble à une meilleure connaissance et à une meilleure gestion de la médecine de ville. Cette connaissance ne doit pas avoir uniquement pour but de mieux gérer les dépenses de médecine de ville, mais aussi et peut-être surtout de mieux adapter les pratiques aux besoins de santé de la population, et ainsi de parvenir à une gestion commune par les financeurs et les praticiens de l'innovation au service des patients. La commission des affaires sociales tient enfin à souligner le besoin de coopération entre la France et l'Allemagne sur les questions de santé, que ce soit en matière de fixation de prix du médicament, ou même pour établir un dialogue entre les différents régimes d'assurance maladie. (résumé des auteurs).

Viscomi, M., et al. (2013). "Recruitment and retention of general practitioners in rural Canada and Australia: a review of the literature." Can J Rural Med **18**(1): 13-23.

INTRODUCTION: Both Canada and Australia are facing severe shortages of primary health workers, and these shortages are exacerbated in rural and remote communities. This literature review highlights similarities and explores the factors that serve to attract and retain family practitioners in underserved regions of Canada and Australia. METHODS: We used MEDLINE on OvidSP to review the literature between Jan. 1, 2000, and June 30, 2012. We excluded sources if the primary objective did

not consider recruitment or retention of general practitioners. RESULTS: We found a total of 114 sources, 28 of which were excluded, leaving 86 sources for review. We organized results according to 5 life stages of family physicians in rural practice and graded the literature according to the strength of the methodology and the relevance of the findings. We chronologically categorized Canadian and Australian literature that discussed recruitment and retention of family practitioners into rural practice. CONCLUSION: Various factors that pertain to each life stage of a family physician have been shown to positively correlate with the eventual decision to commence and remain practising in rural areas. Training programs should be better structured to attract candidates who are more likely to enter rural practice. Policy-makers should be mindful of these findings, because improvements in retention will deliver large financial savings.

Vogler, S. et Fischer, S. (2020). "How to address medicines shortages: Findings from a cross-sectional study of 24 countries." Health Policy **124**(12): 1287-1296.
https://doi.org/10.1016/j.healthpol.2020.09.001

Shortages of medicines have become a major public health challenge. The aim of this study was to survey national measures to manage and combat these shortages. A questionnaire survey was conducted with public authorities involved in the Pharmaceutical Pricing and Reimbursement Information (PPRI) network. Reponses relating to measures as of March / April 2020 were received from 24 countries (22 European countries, Canada and Israel). In 20 countries, manufacturers are requested to notify – usually on an obligatory basis – upcoming and existing shortages, which are recorded in a register. Further measures include a regular dialogue with relevant stakeholders (18 countries), financial sanctions for manufacturers in cases of non-supply and/or non-compliance with reporting or stocking requirements (15 countries) and simplified regulatory procedures (20 countries). For defined medicines, supply reserves have been established (14 countries), and legal provisions allow the issuing of export bans (10 countries). Some measures have been introduced since the end of 2019 and countries are planning and discussing further action. While governments reacted by taking national measures, the COVID-19 crisis might serve as an opportunity to join forces in cross-country collaboration and develop joint (e.g. European) solutions to address the shortage issue in a sustainable manner. A practical first step could be to work on a harmonisation of the national registers.

Wakerman, J. (2004). "Defining remote health." Aust.J Rural Health **12**(5): 210-214.

OBJECTIVE: To develop a definition of the discipline of Remote Health. DESIGN: A broad literature search using key words and an Internet search of industry-recognised web sites were carried out. RESULTS: Fifty-five relevant citations and nine web sites were reviewed, covering Australia, Canada, New Zealand, the United Kingdom and United States. The papers offered a variety of definitions of geographical and practice-based approaches to 'remoteness', and definitions of 'remote and rural health'. CONCLUSIONS: None of the single current definitions in the literature adequately reflect all of the characteristics of Remote Health in Australia. A definition is offered: Remote Health is an emerging discipline with distinct sociological, historical and practice characteristics. Its practice in Australia is characterised by geographical, professional and, often, social isolation of practitioners; a strong multidisciplinary approach; overlapping and changing roles of team members; a relatively high degree of GP substitution; and practitioners requiring public health, emergency and extended clinical skills. These skills and remote health systems, need to be suited to working in a cross-cultural context; serving small, dispersed and often highly mobile populations; serving populations with relatively high health needs; and a physical environment of climatic extremes

Walker, J., Quaile, M. et Tumin, D. (2021). "Rural Employment of Health Care Workers: A Longitudinal Cohort Study." J Rural Health **37**(4): 705-713.

PURPOSE: Preserving and increasing the health care workforce in rural areas has become imperative due to the shortage of health care workers serving rural populations. However, limited data are available on long-term patterns of employment in rural settings among health care workers. METHODS: We analyzed the National Longitudinal Survey of Youth, which enrolled a nationally representative sample of adolescents in 1979 and tracked their career outcomes through 2016. Using

the US Census Bureau occupation codes, we identified participants who worked in health care occupations, and we classified their employment in rural versus urban areas. FINDINGS: Of the 1,007 respondents (including 109 doctoral health professionals), 70% worked only in urban locations, 13% worked only in rural locations, and 17% worked in both rural and urban locations during their health care career. Rural upbringing, White race, and female gender were associated with rural employment. Among nondoctoral health professionals, lower educational attainment was associated with increased likelihood of working only in rural settings. CONCLUSION: Our study indicates the rural workforce is split between workers who are only employed in rural settings, and those who are intermittently employed in rural and urban settings. Therefore, retention of health care workers in rural settings and recruitment of workers from urban settings to practice in rural areas are important strategies for addressing the rural health care worker shortage. Rural upbringing, previously described as predictive of physician practice in rural locations, appears the strongest predictor of rural employment for both doctoral health professionals and nondoctoral health professionals.

Whitehead, J., Pearson, A. L., Lawrenson, R., et al. (2018). "Framework for examining the spatial equity and sustainability of general practitioner services." Aust J Rural Health **26**(5): 336-341.

OBJECTIVE: To propose a framework for examining both the spatial equity and sustainability of GP aservices. DESIGN: A conceptual discussion based on a systematic literature review of spatial equity definitions and methods. SETTING: Improving the spatial equity of health services is a key step in achieving health equity. Health systems should contribute to achieving health equity and maintain equitable services into the future. The GP services are a key component of primary health care, which often aims to promote health equity. Despite the importance of spatially equitable and sustainable GP services, a framework for analysis has not yet been established. MAIN OUTCOME MEASURE: Examples of how the proposed framework could be implemented are provided from the New Zealand health care context. RESULT: The framework entails three steps: (i) defining spatial equity and sustainability; (ii) estimating current and future distributions of health services and needs; and (iii) quantifying spatial equity and sustainability. In step (i), a needs-based distribution is the most common definition of spatial equity, while sustainability is the ability to provide ongoing equitable access. Step (ii) depends on current and future estimates of access and need within a well-defined geographical area. In step (iii), spatial equity and sustainability should be quantified through measures, such as the Gini coefficient. Current and future levels of spatial equity should then be compared to assess the sustainability of equitable GP services. CONCLUSION: This article outlines a novel conceptual for examining the spatial equitability and sustainability of GP services.

Wieland, L., Ayton, J. et Abernethy, G. (2021). "Retention of General Practitioners in remote areas of Canada and Australia: A meta-aggregation of qualitative research." Aust J Rural Health **29**(5): 656-669.

OBJECTIVE: Our aim was to systematically review qualitative evidence regarding the experiences and perceptions of General Practitioners and the factors influencing retention in remote areas of Canada and Australia. The objectives were to identify gaps and inform policy to improve retention of remote doctors, which should in turn reduce health inequalities for remote communities. DESIGN: Meta-aggregation of qualitative studies of General Practitioners and general practice registrars who had worked in a remote area of Australia or Canada for a minimum of 1 year and/or were intending to stay remote long term in their current placement. RESULTS: Six synthesised findings were identified: peer and professional support, organisational support, uniqueness of remote lifestyle and work, burnout and time off, personal family issues and cultural and gender issues. CONCLUSIONS: Long-term retention of doctors in remote areas of Australia and Canada is influenced by a range of negative and positive perceptions, and experiences with key factors being professional, organisational and personal. All 6 synthesised findings span a spectrum of policy domains and service responsibilities, and therefore, a central coordinating body could be well placed to implement a multifactorial retention strategy.

Wright, R. A., et al. (1996). "Finding the medically underserved: a need to revise the federal definition." J Health Care Poor Underserved **7**(4): 296-307.

The relationship between the primary service area (PSA) of an urban community health center (CHC) program and a federally defined "medically underserved area" (MUA) was assessed. Federal guidelines that most reliably predicted medical underservice were identified. The service area was statistically defined by census tract penetration rates. The MUA was defined by an index of medical underservice (IMU) according to federal parameters of physician supply, poverty level, percentage elderly persons, and infant mortality. An index score was calculated for the country, service area, and each census tract. Analysis by tract determined the most significant discriminating parameters. By excluding two tracts concentrated with managed-care physicians, the service area qualified as an MUA. Tracts that fulfilled MUA and service area criteria were highly associated ($p < 0.0001$). Only poverty level and infant mortality were useful discriminating parameters. Federal indicators of demand (elderly population) and supply (physicians) did not adequately address issues to access for the medically underserved in urban neighborhoods. Other parameters that might serve as proxies of care access and underserved are discussed

Wyonch, R. (2021). Help Wanted: How to Address Labour Shortages in Healthcare and Improve Patient Access. Commentary; 392. Toronto CD Howe Institute**:** 36 , tabl., graph.
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3820955&dgcid=ejournal_htmlemail_demand:supply:in:health:economics:ejournal_abstractlink

To address a pandemic, preserving and maintaining the healthcare system's capacity is critical. This Commentary evaluates factors contributing to healthcare labour shortages and investigates the inter-relationships between access to health services, the number of healthcare providers, compensation rates and migration patterns. Addressing healthcare access challenges likely requires increasing the number of healthcare providers and also addressing inefficiencies in the combination of inputs – the mix of providers, facilities, tools and equipment. Overall, the results suggest a critical and strategic examination of fee schedules for physician services, with the goal of reducing the average cost per service but strategically increasing remuneration for difficult-to-access services. Nurses and other care providers can increase the efficiency of healthcare delivery through expanding scopes of practice or filling gaps when there is a shortage of family or specialist physicians. However, there are, as well, shortages of nurses and other healthcare providers. Another example of increasing the efficiency of healthcare services is the shift toward team-based care. A critical feature of both expanding scopes of practice and team-based care is effective communication and knowledge transfer between supervising specialists and care providers. The time and costs associated with training new physicians make it infeasible to address labour shortages arising from a crisis or an unexpected population need simply through training more of the needed physicians. However, shifting methods and modes of care delivery, or adapting scopes of practice, are tools to address short-term healthcare labour supply gaps. Over the longer term, increasing the efficiency and supply of healthcare labour will require adapting medical education policies, remuneration and entry pathways to practising medical professions, as well as continuing to modernize care delivery methods, coordination and health data accessibility.

Yocom, C. L. (2017). Health Care: Telehealth and Remote Patient Monitoring Use in Medicare and Selected Federal Programs. Washington GAO**:** 72.
http://www.gao.gov/assets/690/684115.pdf

Does Medicare pay when beneficiaries use two-way video visits to get care from their doctors? It depends. Medicare pays for some two-way video visits—referred to as "telehealth"—if the patients connect from rural health facilities. Generally, Medicare doesn't pay for telehealth in urban facilities or in the patient's home or office. The authors of this report talked to some health care associations, who believe that telehealth has the potential to maintain or improve quality of care and said that these rules create barriers to using telehealth. Medicare is testing new ways to provide health care that allow telehealth coverage regardless of location.

Yoshida, S., Matsumoto, M., Kashima, S., et al. (2019). "Geographical distribution of family physicians in Japan: a nationwide cross-sectional study." BMC Fam Pract **20**(1): 147.

BACKGROUND: Geographical maldistribution of physicians, and their subsequent shortage in rural areas, has been a serious problem in Japan and in other countries. Family Medicine, a new board-certified specialty started 10 years ago in Japan by Japan Primary Care Association (JPCA), may be a solution to this problem. METHODS: We obtained the workplace information of 527 (78.4%) of the 672 JPCA-certified family physicians from an online database. From the national census data, we also obtained the workplace information of board-certified general internists, surgeons, obstetricians/gynaecologists and paediatricians and of all physicians as the same-generation comparison group (ages 30 to 49). Chi-squared test and residual analysis were conducted to compare the distribution between family physicians and other specialists. RESULTS: Five hundred nineteen JPCA-certified family physicians and 137,587 same-generation physicians were analysed. The distribution of family physicians was skewed to municipalities with a lower population density, which shows a sharp contrast to the urban-biased distribution of other specialists. The proportion of family physicians in non-metropolitan municipalities was significantly higher than that expected based on the distribution of all same-generation physicians ($p < 0.001$). CONCLUSIONS: Family physicians distributed in favour of rural areas much more than any other specialists in Japan. The better balance of family physician distribution reported from countries with a strong primary care orientation seems to hold even in a country where primary care orientation is weak, physician distribution is not regulated, and patients have free access to healthcare. Family physicians comprise only 0.2% of all Japanese physicians. However, if their population grows, they can potentially rectify the imbalance of physician distribution. Government support is mandatory to promote family medicine in Japan.

Young, S. G., Gruca, T. S. et Nelson, G. C. (2020). "Impact of nonphysician providers on spatial accessibility to primary care in Iowa." Health Services Research **n/a**(n/a).
https://onlinelibrary.wiley.com/doi/abs/10.1111/1475-6773.13280

Abstract Objective To assess the impact of nonphysician providers on measures of spatial access to primary care in Iowa, a state where physician assistants and advanced practice registered nurses are considered primary care providers. Data Sources 2017 Iowa Health Professions Inventory (Carver College of Medicine), and minor civil division (MCD) level population data for Iowa from the American Community Survey. Study Design We used a constrained optimization model to probabilistically allocate patient populations to nearby (within a 30-minute drive) primary care providers. We compared the results (across 10 000 scenarios) using only primary care physicians with those including nonphysician providers (NPPs). We analyze results by rurality and compare findings with current health professional shortage areas. Data Collection/Extraction Methods Physicians and NPPs practicing in primary care in 2017 were extracted from the Iowa Health Professions Inventory. Principal Findings Considering only primary care physicians, the average unallocated population for primary care was 222 109 (7 percent of Iowa's population). Most of the unallocated population (86 percent) was in rural areas with low population density (< 50/square mile). The addition of NPPs to the primary care workforce reduced unallocated population by 65 percent to 78 252 (2.5 percent of Iowa's population). Despite the majority of NPPs being located in urban areas, most of the improvement in spatial accessibility (78 percent) is associated with sparsely populated rural areas. Conclusions The inclusion of nonphysician providers greatly reduces but does not eliminate all areas of inadequate spatial access to primary care.

Zaman, R. U., et al. (2014). Factors affecting health worker density: evidence from a quantitative crosscountry analysis. Rochester Social Science Electronic Publishing**:** 17 , fig.
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2541690

In 2006 the World Health Organization identified 57 countries with critical shortage of health workforce. A number of cross-country studies have explored the effect of the health workforce density on countries' health outcomes. However, little is known about the factors driving health workforce density. The objective of this study was to identify the factors affecting the density of health workforce, which would provide broader understanding of the underlying causes of this crisis and help formulate appropriate policies in order to mitigate the challenge. This study analysed data from 183 UN member countries to assess the association between the various demographic, economic and political factors and the health workforce density. Out of 183 countries, 66 (36%) had a heath

workforce density below the WHO recommended threshold of 2.3 per 1,000 people. The adult literacy rate (p-value<0.01), total health expenditure (p-value<0.01) and social stability (p-value=0.04) are statistically significant. Total health expenditure had the greatest (33%) effect on the density of health workforce, followed by literacy rates (25%) and social stability (11%). This cross-country study provides a snapshot of the potential factors affecting health workforce density. Two of the three significant factors (adult literacy rate and social stability) are not directly related to countries' health system, which indicates that a holistic and integrated approach is required in order to alleviate the health workforce crisis. Further studies triangulating various quantitative and qualitative data would extend the understanding of the topic.

LES MESURES COERCITIVES POUR RESTREINDRE LA LIBERTE D'INSTALLATION

Un petit point sur l'évluation des mesures coercitives

De nombreux projets ou amendements aux lois de financement de la sécurité sociale ont été déposés en France, ces dernières années, soit à l'Assemblée nationale, soit au Sénat, pour imposer un conventionnement sélectif dans les régions sous-dotées et contraindre les jeunes médecins à s'installer dans les déserts médicaux. Mais aucun n'a été adopté[16]. Les sénateurs Cardoux et Daudigny ont montré, en 2017, que l'encadrement des installations pour infirmiers a des effets surtout pour les zones intermédiaires, avec notamment des effets de bord (installation à la frontière des zones sur dotées).

Des stratégies contraignantes ont été mises en place dans certains pays selon des modalités qui peuvent être classées en deux catégories :
-Un passage obligé d'exercice dans des zones déficitaires fléchées, pendant une durée déterminée, pour certaines catégories de médecins ;
-Une restriction plus globale de la liberté d'installation, les médecins exerçant leur choix dans le cadre d'un nombre limiatif de places (ou de postes ou de conrtats) défini par zone géographique.

Les revues de littérature les plus récentes concluent aux résultats suivants :

- La revue d'Ono et al (2014) rappelle que les pays de l'OCDE contraignant l'installation sont rares : Canada (Québec, New Brunswick), Danemark, Allemagne, Norvège et Slovénie. Elle détaille les programmes de l'Allemagne et du Danemark mais ne note pas d'effets positifs en termes de rééquilibrage. Pour l'Allemagne elle pointe les risques de déconventionnement de certains médecins, qui préfèrent s'installer quand même dans des zones sur dotées et souligne que ce programme n'a pas fait l'objet d'évaluation.
- Celle de Frehywot et al (2010) porte sur l'efficacité des services obligatoires dans les zones sous dotées de 70 pays, mais les résultats s'avèrent mitigés et les études d'évaluation font défaut ou sont imprécises. Elle note cependant des effets positifs en termes d'installations médicales à Porto-Rico, en Afrique du Sud et Thaïlande. Elle souligne enfin l'effet de découragement auprès des professionnels de santé.
- Celle de Verma P. et al. (2016) n'aborde pas les mesures contraignantes.
- Celle de Grobler, L. et al. (2015) cite l'étude de Frehywot et rappelle que « forcer le redéploiement de professionnels peu préparés ou motivés peut défaire l'objectif ». Celle de Danish (2019) aboutit à la mêmee conclusion.
- Enfin celle de la Drees (Polton, D. et al. -2021) : « Les exemples internationaux vont plutôt, globalement, dans le sens d'un impact positif d'une politique de régulation des installations sur l'équité de la distribution géographique, celle-ci étant appréciée à un niveau assez agrégé, le niveau régional en général. S'agissant de savoir si, en tout point du territoire (à un niveau infrarégional), l'accès au médecin est assuré de façon satisfaisante, et si la régulation des installations permet d'éviter les pénuries localisées dans les zones peu attractives, la réponse est moins affirmative. Les publications disponibles sur l'impact des dispositifs récents de régulation dans des zones peu attractives qui ont été mis en œuvre en Allemagne ou au Québec sont peu nombreuses, et ne permettent pas d'en apprécier de manière fine les résultats. Il faut souligner enfin que la régulation s'inscrit à chaque fois dans un contexte spécifique et dans une politique d'ensemble ».

Revues de littérature

Danish, A., Blais, R. et Champagne, F. (2019). "Strategic analysis of interventions to reduce physician shortages in rural regions." Rural and Remote Health **19**(4): 5466.
http://europepmc.org/abstract/MED/31752495
https://doi.org/10.22605/RRH5466

> INTRODUCTION:Physician shortages in rural regions of OECD countries has led to the development of regulatory, financial, educational and tailored interventions designed to reduce physician shortages. Studies evaluating these interventions report weak or inconclusive results. The objective of this research is to examine the strategic relevance of the interventions by identifying and prioritizing the determinants of physician shortages and analyzing the interventions based on their ability to target the determinants. METHODS:First, the determinants of physician shortages were identified and

[16] Fromentin, V. (éd.). (2017). "La désertification médicale : mythes et réalités.Galilée, H.S. n° 2." Galilée(H.S. N°2

categorized using Mays et al's 2005 method for reviewing qualitative literature. Second, the determinants were prioritized based on importance, severity and solvability, using Lehmann et al's multilevel categorization of factors affecting attraction and retention. Third, the interventions were analyzed based on their ability to target the determinants through a document analysis as descriptive commentary from a policy analysis perspective. RESULTS:Three individual and 10 contextual (work, rural or international context) determinants of physician shortages were identified. Non-rural background, inadequate training and inadequate incentive structure were prioritized as level 1. Lack of professional support, poor work infrastructure and personal interests were prioritized as level 2. Poor rural infrastructure, inadequate supply planning and cultural difference were prioritized as level 3. Non-minority background, geography and climate, global migration and aging population were prioritized as level 4. Establishing rural medical schools targets the greatest number of priority determinants, followed by financial interventions targeting practicing physicians and non-traditional health services delivery strategies. Curriculum changes, professional support strategies, selective admission to medical schools, financially targeting student physicians and coercive regulatory measures follow. Community support strategies target the fewest number of determinants and trickle-down economic regulation targets none. CONCLUSION:Strategic analysis demonstrates that most interventions designed to reduce physician shortages in rural regions are strategically relevant because they address the priority determinants of physician shortages. A link is established between the determinants of physician shortages and the interventions, thereby addressing an important concern expressed in the literature. An original contribution is made to health human resources literature by relying on established theoretical frameworks to achieve a strategic analysis of the interventions.

Frehywot, S., et al. (2010). "Compulsory service programmes for recruiting health workers in remote and rural areas: do they work?" Bull World Health Organ(88): 364-370, tab., graph., fig.

Compulsory service programmes have been used worldwide as a way to deploy and retain a professional health workforce within countries. Other names for these programmes include ”obligatory”, ”mandatory”, ”required” and ”requisite.” All these different programme names refer to a country’s law or policy that governs the mandatory deployment and retention of a heath worker in the underserved and/or rural areas of the country for a certain period of time. This study identified three different types of compulsory service programmes in 70 countries. These programmes are all governed by some type of regulation, ranging from a parliamentary law to a policy within the ministry of health. Depending on the country, doctors, nurses, midwives and all types of professional allied health workers are required to participate in the programme. Some of the compliance-enforcement measures include withholding full registration until obligations are completed, withholding degree and salary, or imposing large fines. This paper aims to explain these programmes more clearly, to identify countries that have or had such programmes, to develop a typology for the different kinds and to discuss the programmes in the light of important issues that are related to policy concepts and implementation. As governments consider the cost of investment in health professionals’ education, the loss of health professionals to emigration and the lack of health workers in many geographic areas, they are using compulsory service requirements as a way to deploy and retain the health workforce.

Grobler, L., et al. (2015). "Interventions for increasing the proportion of health professionals practising in rural and other underserved areas." Cochrane Database Syst Rev(6): Cd005314.

BACKGROUND: The inequitable distribution of health professionals, within countries, poses an important obstacle to the optimal functioning of health services. OBJECTIVES: To assess the effectiveness of interventions aimed at increasing the proportion of health professionals working in rural and other underserved areas. SEARCH METHODS: We searched the Cochrane Central Register of Controlled Trials (CENTRAL, including specialised register of the Cochrane Effective Practice and Organisation of Care Group; March 2014), MEDLINE (1966 to March 2014), EMBASE (1988 to March 2014), CINAHL (1982 to March 2014), LILACS (February 2014), Science Citation Index and Social Sciences Citation Index (up to April 2014), Global Health (March 2014) and the World Health Organization (WHO) International Clinical Trials Registry Platform (ICTRP) (June 2013). We also searched reference lists of all papers and relevant reviews identified, and contacted authors of

relevant papers regarding any further published or unpublished work. SELECTION CRITERIA: Randomised trials, non-randomised trials, controlled before-and-after studies and interrupted time series studies evaluating the effects of various interventions (e.g. educational, financial, regulatory or support strategies) on the recruitment or retention, or both, of health professionals in underserved areas. DATA COLLECTION AND ANALYSIS: Two review authors independently screened titles and abstracts and assessed full texts of potentially relevant studies for eligibility. Two review authors independently extracted data from eligible studies. MAIN RESULTS: For this first update of the original review, we screened 8945 records for eligibility. We retrieved and assessed the full text of 125 studies. Only one study met the inclusion criteria of the review. This interrupted time series study, conducted in Taiwan, found that the implementation of a National Health Insurance scheme in 1995 was associated with improved equity in the geographic distribution of physicians and dentists. We judged the certainty of the evidence provided by this one study very low. AUTHORS' CONCLUSIONS: There is currently limited reliable evidence regarding the effects of interventions aimed at addressing the inequitable distribution of health professionals. Well-designed studies are needed to confirm or refute findings of observational studies of educational, financial, regulatory and supportive interventions that might influence healthcare professionals' decisions to practice in underserved areas. Governments and medical schools should ensure that when interventions are implemented, their impacts are evaluated using scientifically rigorous methods to establish the true effects of these measures on healthcare professional recruitment and retention in rural and other underserved settings.

Grobler, L., et al. (2009). "Interventions for increasing the proportion of health professionals practising in rural and other underserved areas." Cochrane Database of Systematic Reviews(2): 27. http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD005314.pub2/pdf

The inequitable distribution of health professionals, within and between countries, poses an important obstacle to the achievement of optimal attainable health for all. To assess the effectiveness of interventions aimed at increasing the proportion of health professionals working in rural and other underserved areas. We searched the specialised register of the Cochrane Effective Practice and Organisation of Care Group (up to July 2007), the Cochrane Central Register of Controlled Trials (CENTRAL) and the Database of Abstracts of Reviews of Effectiveness (up to July 2007), MEDLINE (1966 to July 2007), EMBASE (1988 to July 2007), CINAHL (1982 to July 2007) and LILACS (up to July 2007). We also searched reference lists of all papers and relevant reviews identified, and contacted authors of relevant papers regarding any further published or unpublished work. Randomised controlled trials, controlled trials (not strictly randomised), controlled before-after studies and interrupted time series studies evaluating the effects of various interventions (e.g. educational, financial or regulatory strategies) on the recruitment and/or retention of health professionals in under-served areas. Two reviewers independently screened titles and abstracts obtained from the search in order to identify potentially relevant studies. No studies met the inclusion criteria. There are no studies in which bias and confounding are minimised to support any of the interventions that have been implemented to address the inequitable distribution of health care professionals. Well-designed studies are needed to confirm or refute findings of various observational studies regarding educational, financial, regulatory and supportive interventions that may influence health care professionals' choice to practice in underserved areas. Governments and educators should ensure that where interventions are implemented this is done within the context of a well-planned study so that the true effects of these measures on recruitment and long term retention can be determined in various setting.

Hines, S., Wakerman, J., Carey, T. A., et al. (2020). "Retention strategies and interventions for health workers in rural and remote areas: a systematic review protocol." JBI Database System Rev Implement Rep **18**(1): 87-96.

OBJECTIVE: The objective of the current review is to examine the association between exposure to strategies or interventions to retain health workers in rural and remote areas of high-income countries and improved retention rates. INTRODUCTION: Attracting and retaining sufficient healthcare staff to provide adequate services for residents of rural and remote areas is an international problem. High-income countries have specific challenges in staffing remote and rural areas; despite the majority of the population clustering in large cities, a significant number of communities are in rural, remote or

frontier areas which may be perceived as less attractive locations in which to live and work. INCLUSION CRITERIA: The review will consider studies that include health workers in high-income countries where participants have been exposed to interventions, support measures or incentive programs to increase retention or workforce length of employment or reduce turnover for health workers in rural and remote areas. Analytical observational studies, case-control studies, analytical cross-sectional studies, descriptive observational study designs, and descriptive cross-sectional studies published from 2010 will be eligible for inclusion. METHODS: We will use the JBI methodology for reviews of risk and etiology. A range of databases will be searched. Two reviewers will screen, critically appraise eligible articles, and extract data from included studies. Data synthesis will be conducted, where feasible, with RevMan 5.3.5. A random effects model will be used to conduct meta-analyses. We will assess the certainty of the findings using the Grading of Recommendations, Assessment, Development and Evaluation (GRADE) approach.

Mbemba, G., et al. (2013). "Interventions for supporting nurse retention in rural and remote areas: an umbrella review." Human Resources for Health **11**(44).
http://www.human-resources-health.com/content/11/1/44

Context : Retention of nursing staff is a growing concern in many countries, especially in rural, remote or isolated regions, where it has major consequences on the accessibility of health services. Purpose: This umbrella review aims to synthesize the current evidence on the effectiveness of interventions to promote nurse retention in rural or remote areas, and to present a taxonomy of potential strategies to improve nurse retention in those regions. Methods : We conducted an overview of systematic reviews, including the following steps: exploring scientific literature through predetermined criteria and extracting relevant information by two independents reviewers. We used the PRISMA (Preferred Reporting Items for Systematic reviews and Meta-Analyses) criteria in order to assess the quality of the reports. Findings : Of 517 screened publications, we included five reviews. Two reviews showed that financial-incentive programs have substantial evidence to improve the distribution of human resources for health. The other three reviews highlighted supportive relationships in nursing, information and communication technologies support and rural health career pathways as factors influencing nurse retention in rural and remote areas. Overall, the quality of the reviews was acceptable. Conclusions : This overview provides a guide to orient future rural and remote nurse retention interventions. We distinguish four broad types of interventions: education and continuous professional development interventions, regulatory interventions, financial incentives, and personal and professional support. More knowledge is needed regarding the effectiveness of specific strategies to address the factors known to contribute to nurse retention in rural and remote areas. In order to ensure knowledge translation, retention strategies should be rigorously evaluated using appropriate designs.

Ono, T., Schoenstein, M. et Buchan, J. (2014). Geographic Imbalances in Doctor Supply and Policy Responses. OECD Health Working Paper; 69. Paris OCDE**:** 65 , tabl.
http://dx.doi.org/10.1787/5jz5sq5ls1wl-en

Doctors are distributed unequally across different regions in virtually all OECD countries, and this causes concern about how to continue to ensure access to health services everywhere. In particular access to services in rural regions is the focus of attention of policymakers, although in some countries, poor urban and sub-urban regions pose a challenge as well. Despite numerous efforts this mal-distribution of physician supply persists. This working paper first examines the drivers of the location choice of physicians, and second, it examines policy responses in a number of OECD countries.

Polton, D., Chaput, H. et Portela, M. (2021). Remédier aux pénuries de médecins dans certaines zones géographiques - Les leçons de la littérature internationale. Paris Drees**:** 78.
https://drees.solidarites-sante.gouv.fr/sites/default/files/2021-12/DD89.pdf

Depuis une vingtaine d'années, la référence de plus en plus fréquente aux « déserts médicaux » dans les médias et le débat public traduit la préoccupation croissante de la population concernant l'accessibilité géographique aux soins de médecins. Même si ce terme recouvre une réalité qu'il est

difficile d'objectiver, il est indéniable que l'évolution de la démographie médicale en France, notamment pour la médecine générale, a accru les tensions dans les territoires qui étaient déjà les moins bien desservis. Dans les prochaines années, alors que le vieillissement de la population entraînera une augmentation des besoins de soins, les projections laissent augurer une diminution de l'offre médicale en médecine de ville, surtout en soins primaires. Ces tendances risquent de dégrader encore l'accessibilité dans les zones les moins attractives. La situation de la France n'est pas unique. La répartition géographique des effectifs médicaux est inégale dans tous les pays, à des degrés divers. Partout, l'accès aux services de santé est plus difficile à assurer dans certains territoires, tels que les zones rurales, notamment éloignées ou isolées, ou les zones urbaines défavorisées. Répondre aux besoins sur l'ensemble du territoire et mieux équilibrer la distribution de l'offre sont des préoccupations largement partagées, dont plusieurs rapports internationaux se sont fait l'écho dans les années récentes (respectivement des rapports de l'Organisation mondiale de la santé [OMS], de l'Organisation de coopération et de développement économiques [OCDE] et de la Com-mission européenne). Pour remédier à ces difficultés, des stratégies variées ont été déployées au cours des dernières décennies. L'objectif de ce Dossier de la DREES est, à partir d'une analyse de la littérature internationale, de décrire ces politiques, de rassembler les éléments d'évaluation de leurs impacts et de dégager quelques réflexions pour alimenter le débat sur la situation française. Ce dossier comporte également un état des lieux des préférences des médecins dans leur choix d'installation et des princi-paux déterminants de leur installation et de leur maintien sur leur lieu d'exercice, autant de leviers potentiels pour l'action publique.

Verma, P., Ford, J. A., Stuart, A., et al. (2016). "A systematic review of strategies to recruit and retain primary care doctors." Bmc Health Services Research **16**(1): 126.
https://doi.org/10.1186/s12913-016-1370-1

There is a workforce crisis in primary care. Previous research has looked at the reasons underlying recruitment and retention problems, but little research has looked at what works to improve recruitment and retention. The aim of this systematic review is to evaluate interventions and strategies used to recruit and retain primary care doctors internationally.

Études françaises

Pour en savoir plus sur les propositions de loi en cours :

- Site de l'Assemblée nationale :

Proposition de loi n°5090 visant à favoriser l'installation de médecins en zone sous-dotées - Assemblée nationale, 22 février 2022, Aurélien Pradié et suivants

Dossier « Urgence contre la désertification médicale
Proposition de loi n° 4784 (décembre 2021)
https://www.assemblee-nationale.fr/dyn/15/dossiers/urgence_desertification_medicale

Dossier : « Pour une santé accessible à tous et contre la déserticiation médicale »
Rapport Jumel
https://www.assemblee-nationale.fr/dyn/15/dossiers/sante_accessible_tous

- Site du Sénat : dossier « Les collectivités locales à l'épreuve de la désertification médicale
Rapport Mouiller/Schillinger (octobre 2021)
http://www.senat.fr/espace_presse/actualites/202110/les_collectivites_a_lepreuve_des_deserts_medicaux_linnovation_territoriale_en_action.html

Barnay, T. et Schmitt, Y. (2018/09-10). "Faut-il limiter la liberté d'installation des médecins libéraux ?" Cahiers Francais(406).

Dans un rapport sur l'avenir de l'assurance maladie publié fin 2017, la Cour des comptes proposait, dans l'idée de rendre l'accès aux soins plus équitable, de limiter la liberté d'installation des médecins libéraux par le biais d'un système de conventionnement sélectif, qui serait fonction de la zone géographique d'installation et des besoins de sur ce territoire. Yannick Schmitt et Thomas Barnay livrent dans cet article leurs points de vue respectifs sur le sujet.

Cardoux, J. N. et Daudigny, Y. (2017). Rapport d'information sur les mesures incitatives au développement de l'offre de soins primaires dans les zones sous-dotées. Paris Sénat**:** 129 , tab., graph., fig.
http://www.senat.fr/rap/r16-686/r16-6861.pdf

La France ne manque pas de professionnels de santé mais leur répartition sur le territoire est très inégale. En outre, les tensions devraient s'accroître à court terme du fait des perspectives de la démographie médicale. La question de l'accès géographique aux soins cristallise un sentiment d'abandon d'une partie de la population et des élus, dans un domaine où l'attachement à une prise en charge solidaire est fort. Elle est toutefois le symptôme de fragilités territoriales dont les enjeux dépassent la politique de santé et appellent une réponse cohérente des différentes politiques publiques. Les nombreux dispositifs mis en place pour favoriser le développement ou le maintien de l'offre de soins primaires dans les zones fragiles (aides à l'installation, mesures fiscales, aides à l'investissement, bourses d'étude, etc.) poursuivent des ambitions louables. Cependant, mis en place en ordre dispersé, leur articulation est imparfaite ; par ailleurs, ils se sont superposés sans évaluation, dans des zones aux contours fluctuants. Pour les rapporteurs de ce rapport sénatorial, il est nécessaire de bâtir des réponses concertées avec les acteurs de terrain pour agir plus efficacement.

Cour des Comptes (2017). L'avenir de l'Assurance maladie. Assurer l'efficience des dépenses, responsabiliser les acteurs. Paris Cour des Comptes **:** 287 , tabl., cartes.
www.ccomptes.fr/sites/default/files/2017-11/20171129-rapport-avenir-assurance-maladie_0.pdf

Le système d'assurance maladie créé en 1945 permet à la France d'afficher de bons résultats en termes d'espérance de vie. Pour autant, la prévalence de pratiques à risque, un taux de mortalité infantile élevé et des inégalités croissantes d'accès aux soins nuancent ces résultats, obtenus en outre au prix de déficits récurrents. La France se caractérise aussi par une dépense de santé élevée en proportion du PIB et par la part importante des assurances complémentaires dans son financement. Face à l'augmentation structurelle des dépenses, alors que les outils actuels de régulation ont atteint leurs limites, la qualité et l'égalité d'accès aux soins ne pourront être maintenues ou renforcées qu'en réformant l'organisation et la gestion du système de santé. il ressort que, pour améliorer en continu la qualité des soins, garantir leur accès pour toute la population et sur tout le territoire et faire face à des défis renouvelés qui amplifient les tendances lourdes à l'augmentation des dépenses, des efforts de grande ampleur sont indispensables sur le long terme en vue d'accroître leur efficience, c'est-à-dire en travaillant simultanément sur l'amélioration des prestations et la réduction de leurs coûts (I). Pour parvenir à des résultats suffisants, et face à la trop fréquente mise en échec des politiques de maîtrise de la dépense, la création ou la restauration, dans un cadre clair et renouvelé, d'instruments efficaces pour organiser l'action de l'assurance maladie, est nécessaire (II). Ces outils doivent être utilisés pour mettre fin aux situations acquises et sources d'inefficience de tous ordres que des mécanismes d'allocation des ressources insuffisants ont laissé se consolider (III). Un tel mouvement, engageant des réformes sur de très nombreux aspects du système de soins et de l'assurance maladie, est à concevoir comme un processus continu, car le progrès scientifique, le vieillissement, les nouvelles formes de prise en charge, l'évolution de la situation économique et financière de notre pays, le soumettent sans relâche à de nouvelles contraintes. Il n'a de chances d'aboutir que si la régulation et le pilotage de l'ensemble, aujourd'hui faibles et éclatés, retrouvent efficacité et cohérence en redéfinissant les responsabilités des différents acteurs et en se structurant autour d'objectifs de santé publique et de qualité des soins (IV).

Garot, G. (2019). Mesures d'urgence sur la désertification médicale. Paris Assemblée Nationale**:** 2 vol. (63 +31).

Il y a tout juste une année, l'Assemblée nationale examinait une proposition de loi portant sur la lutte contre les déserts médicaux. Inscrit à l'ordre du jour par le groupe Nouvelle gauche, rejeté par la

majorité parlementaire, le texte portait notamment sur la mise en place d'un mécanisme de limitation du conventionnement avec l'assurance maladie dans les zones les plus largement dotées en médecins - généralistes comme spécialistes. Deux arguments étaient alors avancés à l'appui du rejet : disposer de davantage de temps pour appliquer les mesures incitatives prévues par la convention médicale de 2016, attendre le plan santé dont on annonçait la sortie imminente et qui comportait un volet d'accès aux soins. Un an plus tard, le contexte doit alerter la représentation nationale, car le problème d'inégalités d'accès aux soins persiste et s'accroît. Alors que le projet d'organisation et de transformation du système de santé a été dévoilé en février 2019, ce rapport présente de nouvelles mesures pour lutter contre la désertification médicale en France.

Maurey, H. et Longeot, J. F. (2020). Rapport d'information sur les déserts médicaux. Paris Sénat**:** 85. http://www.senat.fr/rap/r19-282/r19-282.html

Dix ans après la loi Bachelot dite « HPST » et malgré l'accélération du rythme d'adoption des lois et plans « Santé », les politiques mises en place pour lutter contre les inégalités territoriales d'accès aux soins demeurent manifestement insuffisantes. Face à l'évidence, les gouvernements successifs continuent de repousser les solutions volontaristes qui leur sont proposées. Depuis sa création, la commission de l'aménagement du territoire et du développement durable du Sénat porte une attention constante à ce sujet. Si elle se réjouit que des avancées aient eu lieu (télémédecine, réforme des études de santé, partages de compétences entre professionnels de santé) dans le cadre de la récente loi du 26 juillet 2019 relative à l'organisation et à la transformation du système de santé, elle considère que tout n'a pas été tenté. Dès lors, elle recommande : 1. d'avancer sur le chemin d'une troisième voie, entre incitation financière sans contrepartie et coercition à l'installation des médecins, de régulation progressive des installations de médecins, pour rééquilibrer l'offre médicale dans le pays au bénéfice des territoires ruraux les plus fragiles ; 2. de mieux adapter l'organisation du système de soins à la réalité des territoires, en renforçant l'association des collectivités territoriales à la politique de santé et en activant l'ensemble des leviers susceptibles de libérer du temps médical dans les territoire.

Sautel, M. (2014). Description et évaluation des moyens mis en œuvre par les pouvoirs publics, en France eta l'étranger, pour retenir ou inciter les médecins généralistes à exercer en milieu rural: revue narrative non exhaustive de la littérature. Grenoble : Faculté de médecine.

Touati, N. et Turgeon, J. (2013). "Répartition géographique des médecins de famille : quelles solutions à un problème complexe ?" Sante Publique **25**(4): 465-473. http://www.cairn.info/article.php?ID_ARTICLE=SPUB_134_0465

[BDSP. Notice produite par EHESP 9GqlR0xq. Diffusion soumise à autorisation]. Dans cet article, les auteurs s'intéressent à la question de la répartition géographique des médecins omnipraticiens, en focalisant sur les enjeux d'attraction. L'analyse repose sur une approche configurationnelle. Définie simplement, cette approche stipule que les impacts d'une intervention sont liés d'une part, à la cohérence interne entre les caractéristiques d'une intervention et d'autre part, à la cohérence qui existe entre cette intervention et son contexte. Une étude de cas longitudinale a été menée, correspondant à l'expérience du Québec sur 35 ans. Les mesures mobilisées ont surtout porté sur la formation, les incitatifs (positifs et négatifs), le support, et depuis 2004 une certaine forme de coercition. La sélection des candidatures à l'entrée en médecine en fonction de certaines variables individuelles susceptibles d'influencer le lieu de pratique, a été peu mise en oeuvre. La combinaison des mesures gagne en efficacité à travers le temps : ces gains en efficacité sont interprétés en se référant à la cohérence interne des mesures et à la cohérence par rapport à l'environnement externe. Les interventions favorables à une répartition équitable des effectifs ne sauraient se limiter à l'activation d'un levier donné et doivent être pensées comme des interventions complexes.

Le recours aux médecins étrangers : les mobilités professionnelles facilitées par la législaion de l'Union européenne

Aperçu sur le recours aux médecins étrangers dans les pays de l'OCDE

Le recours à des médecins diplômés à l'étranger, associé à la régulation de l'accès à l'exercice de la médecine dans certains secteurs et territoires est de plus en plus utilisé dans de nombreux pays de l'OCDE comme levier permettant de résoudre les problèmes de raréfaction et de répartition des médecins. De ce fait, en moyenne, la part des médecins étrangers dans les pays de l'OCDE est passée de 19,5 % en 2000 à 22 % en 2010. La France a longtemps fait figure d'exception avec, d'une part, un recours modeste aux médecins diplômés à l'étranger comparativement à d'autres pays de l'OCDE. Pour l'année 2010, les médecins diplômés à l'étranger représentaient 19,5% des médecins en activité en France alors qu'ils étaient respectivement de 26,4 %, 52,8 % , 34,9 %, 35,4 % et 25,4 % aux États-Unis, Australie, Canada, Royaume-Uni et Belgique, (OECD, 2015). Il s'avère en outre, qu'en France, ces médecins exercent principalement à l'hôpital et que pour ce qui concerne leur éventuelle installation en ambulatoire, elle ne soit pas conditionnée à des critères géographiques en matière d'installation. Les travaux du Conseil national de l'Ordre des médecins (CNOM) dressent une première géographie des MDE et de leurs lieux d'installation ainsi que leurs profils (Cnom, 2014 ; 2015 ; 2017). Ils exercent principalement une activité salariée (60 % contre 25 % de libéraux) et ont une répartition régionale contrastée. L'évolution de la libre circulation et de l'installation des médecins à l'échelle mondiale ou infra européenne (forte migration venant des pays d'Europe centrale et de l'Est : Pologne, République Tchèque, Slovaquie, Hongrie, Roumanie) ont changé sensiblement la donne en ce qui concerne la France. Depuis la directive européenne de 2005, qui a institué une reconnaissance automatique des diplômes européens, les médecins titulaires d'un diplôme européen relèvent désormais de la libre circulation et peuvent à ce titre s'installer où ils le souhaitent. Avec l'entrée de la Roumanie dans l'Union européenne en 2007, la France a connu une entrée massive de médecins provenant de ce pays. Entre 2007 et 2017, les effectifs de médecins roumains en France ont bondi de 629 % passant de 560 à 4254 ce qui classe la Roumanie, comme étant le premier pays pourvoyeur parmi les pays européens avec 42 % de médecins européens formés devant la Belgique avec 16 % (CNOM, 2017). Bien qu'en valeur absolue la France reste éloignée de la moyenne des pays de l'OCDE (17 %) et encore plus des pays développés de langue anglaise (20-25 %), cette tendance récente constitue un choc remarquable pour la France (OCDE, 2016, Drees 2016).

ÉTUDES FRANÇAISES

Abbas, R., et al. (2015). "Comparison of British and French expatriate doctors'characteristics and motivations." Rev Epidemiol Sante Publique **63**(1): 21-28, graph., tabl., carte.

[BDSP. Notice produite par ORSRA IR0xpkDm. Diffusion soumise à autorisation]. Les phénomènes migratoires dans les populations de médecins étant encore peu étudiés, malgré l'importance de connaître la démographie médicale, cette étude vise à déterminer les caractéristiques et les motivations des médecins français installés au Royaume-Uni et des médecins britanniques installés en France. Méthodes : Il s'agit d'une étude transversale par auto-questionnaire adressé en 2005 à tous les médecins français exerçant en Grande-Bretagne et en 2009 à tous les médecins britanniques exerçant en France, en utilisant les données officielles des conseils nationaux de médecins. Ce questionnaire, développé pour l'étude et envoyé par courrier, explorait les motivations d'expatriation, ainsi que le niveau de satisfaction des nouvelles conditions de vie. Résultats : Au total, 98 médecins français (sur 244) et 40 médecins britanniques (sur 86) ont répondu, essentiellement des généralistes avec une expérience professionnelle de 8 à 9 ans. Le sex-ratio était proche de 1 dans les 2 groupes avec une majorité de femmes chez les moins de 50 ans. Les motivations différaient : les médecins français étaient intéressés par le système de soin (National Health Service) alors que les britanniques étaient attirés par les perspectives d'évolution de carrière, le rapprochement familial et les conditions environnementales (climat favorable du sud de la France). Dans l'ensemble, les médecins considéraient l'émigration comme une expérience satisfaisante : 84% des médecins français étaient satisfaits de leur nouvelle situation contre 58% des médecins britanniques. Conclusion : Cette étude, la première en son genre, fait mieux comprendre les migrations de médecins entre la France et le Royaume-Uni. (Résumé auteur).

Bertrand, D. (2021). "Deux nouvelles procédures d'accès à l'exercice médical pour les médecins à diplôme hors union européenne en 2021. Aspect juridique et démographique." Bulletin De L'academie Nationale De Medecine **205**(8): 993-998.

https://doi.org/10.1016/j.banm.2021.07.001

Résumé La loi du 24 juillet 2019 prévoit deux nouvelles procédures d'accès au plein exercice pour des médecins à diplôme hors Union Européenne. La voie de la régularisation concerne les médecins associés ayant un exercice en France ; le dépôt d'un dossier à l'agence régionale de santé leur permet de se présenter devant une commission régionale qui rend une décision d'acceptation, de refus ou de complément à acquérir. Ce dépôt de dossier entraîne une autre conséquence, l'autorisation de poursuivre son activité en France en attendant de passer devant la commission. La procédure de la commission territoriale est destinées aux Antilles-Guyane et peut autoriser un médecin étranger titulaire d'un diplôme de médecine de tous les pays à exercer dans la région après avoir été retenu par une commission à prédominance médicale. Avant cette loi, le préfet (autorité administrative) délivrait ses autorisations. Ces deux voies complètent les trois déjà existantes.

Bocognano, A., Lhermet, C. et Petit, V. (2019). Les étudiants européens dans le troisième cycle de médecine en France. Etudes ; 1. Paris ONDPS**:** 30.
https://solidarites-sante.gouv.fr/IMG/pdf/ondps_-_etudes_-_bat_-_291019_-_web.pdf

La formation des médecins est un volet déterminant de la démographie médicale. Le numerus clausus pour l'entrée en médecine et l'accès au 3ème cycle à l'issue des épreuves classantes nationales (ECN) en constituent aujourd'hui les principaux leviers de régulation. Dans cette étude qui paraît aujourd'hui, l'ONDPS s'intéresse à l'analyse d'un phénomène encore peu documenté : « Les étudiants européens dans le 3ème cycle de médecine en France ». En effet, en 2018, on compte plus de 600 étudiants européens qui ont présenté leur candidature aux ECN qui donnent accès au 3ème cycle des études médicales en France. Leur nombre a quadruplé depuis 2012, et en 2018 ils représentaient 6,6 % des candidats. L'étude de l'ONDPS apporte un éclairage sur le parcours de formation de ces étudiants. Une connaissance fine de ces flux migratoires deviendra essentielle aux projections de démographie médicale.

Bouet, P. et Rasse, S. (2017). Études longitudinales (2007-2017) des médecins nés hors de France et des médecins diplômés hors de France : perspectives des flux migratoires et trajectoires. Paris Conseil National de l'Ordre des médecins **:** 166, tabl., graph., cartes.

Cette étude sur les flux migratoires de médecins à diplômes étrangers en France constate une augmentation constante des médecins étrangers en activité régulière depuis 10 ans. En 2017, on dénombre 22 619 médecins à diplôme étranger en activité régulière. Cela représente 11% de l'activité régulière en France en 2017. Parmi ces médecins titulaires d'un diplôme délivré dans un autre pays, 45% sont originaires de l'Union européenne. Contrairement à une idée largement répandue, cette population n'est pas une réponse aux difficultés territoriales d'accès aux soins. Cette étude montre que ces médecins étrangers, quelle que soit leur nationalité, et à l'instar de leurs confrères français, ne s'installent pas dans les zones définies comme déficitaires par les ARS. Par ailleurs et de manière générale, on observe que la part de l'exercice salarié est dominante (62 %) chez les médecins titulaires d'un diplôme européen ou extra-européen. Cela est vérifié partout en France : l'exercice salarié est privilégié par les médecins à diplôme étranger dans toutes les régions de France, par les médecins à diplôme européen comme par les médecins à diplôme extra-européen.

Cash, R. et Ulmann, P. (2008). Projet OCDE sur la migration des professionnels de santé : le cas de la France. Health Working Papers ; 36.

This report examines health workforce demographics in France, together with recent trends in migration policies regarding health professionals. It also analyses workforce planning and the possible role of the recruitment of foreign health workers in coming years. Workforce trends in the 1990s were marked by restrictions governing the training of doctors and nurses. Since then, training capacities have expanded significantly, and France is now on a par with the European average and above the OECD-wide average in terms of density of doctors. The available figures show that the international recruitment of health professionals does not play a decisive role in France. A large share of foreign-trained health workers come from EU countries, in particular because of the European legislation

aimed at facilitating recognition of diplomas of EU nationals for most health professions. Non-EU diplomas, however, are subject to tighter restrictions laid down by French legislation, which limits access to the profession. Foreign-trained doctors and nurses are primarily employed in hospitals. In the latest projection models, the trend of the total stock of doctors is linked mainly to the trend of the French medical-studies admissions quota (numerus clausus), and no particular assumption is made regarding migration. Similarly, the current human resource management policies in the health sector do not envisage resorting to international recruitment, but are based on a series of structural measures involving the retirement age, co-operation among hospitals and other incentives aimed at encouraging health professionals to move to underserved areas. However, the role of foreign recruitment cannot be overlooked, since with EU enlargement there might be an increase in migration from Central and Eastern European countries, especially Romania.

Chevillard, G., Moullan, Y., Lucas-Gabrielli, V., Mousquès, J. (2022). Les médecins libéraux diplômés formés à l'étranger contribuent à enforcer l'offre de soins dans les zones sous-dotées (Projet Migrare). Questions d'Economie de la Santé (Irdes) :269 (à paraître)

- Voir la rubrique sur le site de l'Irdes : Soins primaires

Cottereau, V. (2015). "Les praticiens à diplôme hors Union Européenne (PADHUE) en France : quand les hôpitaux ont recours à des médecins-migrants." Revue Francophone Sur La Sante Et Les Territoires.

Depuis les années 1980, l'évolution de la démographie médicale française engendre une inégale distribution des praticiens sur le territoire national. Ces déséquilibres sont en partie liés à des déficits de praticiens dans les hôpitaux de pôles urbains secondaires et à des stratégies d'évitement de certaines zones urbaines défavorisées ou rurales par les nouvelles générations de médecins. Cette problématique a ainsi créé une possibilité pour les praticiens à diplôme hors Union Européenne de venir travailler en France, pour pallier à des déficits dramatiques au sein de structures hospitalières. L'objectif de cette recherche est d'étudier la situation des PADHUE au sein de la région Poitou-Charentes, région touchée par la « pénurie médicale partielle ». Elle s'interroge sur la répartition géographique et les conditions d'exercice de ces médecins ainsi que sur les parcours et les projets migratoires de ces migrants hautement qualifiés qui exercent dans un secteur-clé: celui de l'hôpital.

Conseil National de l'Ordre des médecins (2014). Les flux migratoires et trajectoires des médecins. Situation en 2014. Paris Conseil National de l'Ordre des médecins **:** 136, tabl., fig.
http://www.conseil-national.medecin.fr/sites/default/files/flux_migratoires_trajectoires_des_medecins_2014.pdf

Le Conseil national de l'Ordre des médecins (CNOM) publie pour la première fois une étude sur les flux migratoires et trajectoires des médecins - situation en 2014, réalisée à partir des chiffres du Tableau de l'Ordre 2014. Terre d'accueil, la France a toujours attiré beaucoup de médecins mais contrairement aux idées reçues, l'arrivée des médecins nés hors de France et/ou disposant d'un diplôme européen ou extra-européen ne permet pas de régler les problèmes de démographie médicale dans les territoires en tension car la majorité des titulaires de diplômes étrangers (62,4 %) se tournent vers le salariat, en particulier le service public hospitalier.

Cottereau, V. (2019). "Les praticiens à diplôme hors Union européenne (PADHUE) en France : décryptage d'un projet de retour devenu « irréalisable »." Géocarrefour **93**(93).

Depuis les années 1980, les mesures visant à réduire le nombre de médecins en France, combinées aux réformes des études médicales, ont eu pour conséquence immédiate de faire diminuer rapidement le nombre d'internes dans les hôpitaux publics et d'engendrer d'importants problèmes de « pénurie » de praticiens. C'est dans ce contexte que l'État français a ouvert ses hôpitaux aux praticiens à diplôme hors Union européenne (PADHUE). Initialement, la présence de ces médecins dans les hôpitaux publics ne devait être que temporaire, tant pour l'État français que pour les praticiens qui envisageaient majoritairement de retourner exercer dans leur pays d'origine. Or, cette solution s'est perpétuée et la plupart des PADHUE sont restés en France, bien que la législation complexe à leur égard entraîne une certaine instabilité et précarité durant la période où leur diplôme

n'est pas reconnu. Cette situation soulève donc de nombreuses interrogations sur les raisons qui ont incité ces praticiens à rester en France et à progressivement abandonner leur projet de retour.

Denour, L. et Junker, R. (1995). "Les médecins étrangers dans les hôpitaux français." Revue Européenne des Migrations Internationales **11**(3): 145-166.

Los medicos etranjeros en los hospitales franceses Linda DENOUR, Rémi JUNKER La reforma de 1984, modificada despues de la Directiva Europea de 1975, sustituye a los dos caminos de acceso a los estudios de especialidades médicas una vía única : el colegio de internos. Se reserva este medio de acceso a los estudiantes formados en Francia exclusivamente, sea cual sea su nacionalidad. De ahora en adelante, los estudiantes formados fuera de la Unión Europea no pueden tener acceso a una especialidad sino por vías específicas. Aún naturalizados no se les permite ejercer en Francia con un diploma de especialización entregado en Francia y menos todavía con un diploma de doctor en medicina entregado en el extranjero. Por la tanto el hospital es para ellos el único empleador posible. Ellos ocupan empleos precarios, penosos y mal pagados en los departamentos dejados de lado por los médicos franceses y/o etranjeros matriculados en el Colegio de médicos, quienes prefieren el sector privado lucrativo y con menos obligaciones. Algunos de ellos desean permanecer en Francia porque las condiciones de vida y de práctica de la medicina son my dificiles en sus paises de origen, y tambien porque aprecian la cultura francesa. Una evolución reciente en la legislación que responde a las carencias de especialistas, entre otras, en algunos departamentos de los hospitales no universitarios, podría permitir a los más experimentados acceder a un estatuto contractual más valorizante.

Déplaude, M.-O. (2011). "Une xénophobie d'État ? Les médecins « étrangers » en France 1945-2006." Politix **95**(3): 207-231.

Desclaux, A. (2017). "La disparition silencieuse des médecins PADHUE : fin d'une injustice d'État ou nouvelle exclusion ?" Sante Publique **30**(3): 341-344.

[BDSP. Notice produite par EHESP 8rR0xkED. Diffusion soumise à autorisation]. Les médecins ayant acquis leur diplôme hors de l'Union Européenne (PADHUE) avaient en France un statut spécifique défavorable, appelé à disparaître fin 2016. Jusqu'à cette date, un processus sélectif de validation leur permettait d'obtenir une habilitation au "plein exercice" de la médecine. La date limite vient d'être repoussée d'un an pour résoudre les situations de médecins "dans l'impasse" et éviter les tensions dans les services hospitaliers. Ceci conduit à s'interroger sur les conditions d'exercice et les motivations de médecins étrangers, en particulier africains, qui contribuent au fonctionnement du système de soins français, ainsi que sur les contraintes pesant sur leur intégration. Faut-il saluer la disparition de conditions d'exercice inégalitaires, ou déplorer la fermeture de l'accès des PADHUE au plein exercice en France à partir de 2018 ? Des travaux récents en sciences sociales, notamment sur les motivations à migrer de médecins issus de pays africains, montrent la complexité des enjeux. Dans un système de santé français protectionniste et soucieux de maintenir la couverture sanitaire, en décalage par rapport à la globalisation favorable aux mobilités transnationales, la fermeture des frontières aux médecins diplômés hors d'Europe, équivalant à remplacer l'inégalité par l'exclusion, pose question.

Hatzfeld, C., Boidé, M. et Baumelou, A. (2009). "Professionnels de santé non citoyens européens et/ou à diplôme non communautaire." Hommes & migrations(1282): 90-100.

Malgré une réglementation stricte et une forte tradition qui laissaient peu de place aux étrangers, une procédure dérogatoire a été créée en 1972, dont le principe gouverne la procédure d'autorisation d'exercice actuelle pour les professions médicales et les pharmaciens. Cependant, face au déficit en professionnels formés en France et vu la compétence de nombreux candidats non européens, on peut regretter que la sélection soit si rude. A contrario, des professionnels quittent le pays où ils ont été formés, qui souffre d'une extrême pénurie. Des mesures devraient être prises au niveau international pour arrêter cette hémorragie.

Kalozandry, H. (2016). Difficulties experienced by Europeans General Practitioners who choose to work in Aquitaine: qualitative study
https://dumas.ccsd.cnrs.fr/dumas-01306096

Introduction : En Aquitaine, de nombreuses communes souffrent du manque de médecins généralistes (MG) pour assurer les soins de premier recours. Pour faire face, des médecins généralistes à diplômes étrangers sont recrutés. Cependant, plusieurs cas de changement de lieu d'exercice ont été constatés à travers les médias. L'objectif de cette étude est d'analyser les difficultés ressenties par les MG à diplômes européens installées en Aquitaine. Méthode : Cette étude qualitative par entretien semi-dirigé a été menée auprès des MG non diplômés des universités françaises, installés en libéral. Les candidats ont été sélectionnés en variation maximale. Les entretiens ont été réalisés jusqu'à la saturation des données. Les données verbales ont été enregistrées par un dictaphone, retranscrites, codées et analysées. Tous les médecins ont signé leur consentement éclairé. Résultats : Au total dix médecins ont été interrogés. La moyenne d'âge était de 47,3 ans. Les pays d'obtention des diplômes étaient la Roumanie, l'Espagne, la Belgique et l'Italie. Tous les médecins étaient satisfaits de leur situation professionnelle. Cependant, notre analyse a révélé trois catégories de difficultés : les problèmes liés à l'administration, des difficultés pour constituer une patientèle et une préoccupation marquée de l'avenir. L'analyse des résultats a été soumise à la triangulation des données. Conclusion : Les MG à diplômes européens, installés en libéral font face non seulement aux mêmes problèmes ceux qui sont formés en France mais également à d'autres difficultés. Un meilleur accompagnement devrait être mis en place dans le contexte de pénurie de médecins dans de nombreuses régions en France.

Lochard, Y., Meilland, C. et Viprey, M. (2007). "La situation des médecins à diplôme hors UE sur le marché du travail." La Revue de l'Ires **53**(1): 83-110.

MINTANDJIAN, a. (2015). What is driving the careers of young general practitioners in Île-de-France? Cohort study - Étude des déterminants du parcours professionnel des jeunes médecins généralistes en Île-de-France : étude de cohorte**:** 108.
https://dumas.ccsd.cnrs.fr/dumas-01304247

CONTEXTE : Aucune mesure ne semble améliorer la répartition des généralistes sur le territoire. Il parait important de rechercher les véritables leviers du parcours professionnel des généralistes. QUESTION : Quels sont les déterminants du parcours professionnel des généralistes en Île-de-France (IDF) ? MÉTHODE : Suivi de cohorte sur 9 mois, recueil de données par questionnaires électroniques autoadministrés aux médecins ayant débuté leur TCEM en novembre 2010 en IDF. Analyses statistiques avec BiostaTGV. RÉSULTATS : 28,4% (n=124) d'inclusion. Sex ratio comparable à la population cible. 22% n'exercent pas la MG, 50% ont une pratique exclusive de la MG (77,6% de remplaçants). On note un véritable plébiscite de l'exercice en centre de santé (55%-67%des installés, 15-19% des remplaçants).DISCUSSION : Il existe des biais de sélection et de classement. La méthode ne permet pas l'étude des déterminants sur le type de lieu d'exercice (urbain / rural). Semblent favoriser un exercice de la MG : faire son SASPAS en 6ème semestre (p=0,002), remplacer pendant l'internat (p=0.002) et pendant une durée supérieure à 5 semaines (p=0,001). Faire un DESC exclut totalement l'exercice de la MG (p<0,001).CONCLUSION : notre étude met en évidence des déterminants liés à une pratique plus importante de la médecine générale. De ces constats, on peut ébaucher des propositions, comme l'obligation de réaliser un SASPAS en 6e semestre. Cependant notre étude comporte des limites. Nous proposons de créer un observatoire régional des jeunes généralistes en Île-de-France. Il inclurait tous les ans un échantillon représentatif de la promotion d'IMG sortante et le suivrait pendant plusieurs années.

Le Vigouroux, A. (2012). "[Continuity of hospital care and foreign doctors: regularization of a system and its limitations in France]." Glob Health Promot **19**(3): 74-77.

Observatoire National de Démographie des Professions de santé (2016). Les mobilités internationales des quatre professions de santé : flux entrants et sortants des médecins, chirurgiens-dentistes, sages-femmes et pharmaciens. Paris ONDPS**:** 185 , tab., graph., fig.

Cette étude, réalisée en collaboration avec la Fédération nationale des observatoires régionaux de santé (Fnors), décrit, en termes de démographie médicale et d'environnement règlementaire, les mobilités de médecins, odontologistes, sages-femmes et pharmaciens (professionnels et étudiants) qui viennent exercer en France après des études à l'étranger ou qui, à l'inverse, n'exercent pas en France après leur cursus français d'études.

Reynaudi, M. (2012). "La mobilité internationale des professionnels de santé." Note D'analyse (La)(308): 11 , tabl., fig.

La France, contrairement à d'autres pays, n'a pas opté pour un recrutement actif à l'étranger afin d'alimenter son système de santé en ressources humaines. Ainsi, seuls 7,4 % des médecins exerçant en France sont titulaires d'un diplôme obtenu à l'étranger, contre 30 % au Royaume-Uni. Toutefois, le nombre de professionnels formés à l'étranger et exerçant en France augmente, notamment dans les localités peu attractives, rurales ou en périphérie des villes, ainsi que dans des disciplines ou des professions en manque conjoncturel d'effectif. La mobilité, facilitée dans le cadre de la libre circulation au sein de l'Union européenne (UE), a un impact sur les systèmes de santé des pays receveurs comme des pays d'origine, tant en termes de régulation, de qualité que d'accès aux soins. Il s'agit donc de mieux encadrer la mobilité d'emploi des professionnels de santé. Parallèlement, faciliter des temps de formation à l'étranger pour les étudiants et les professionnels pourrait bénéficier à la France et à ses partenaires, et participer à l'édification d'un espace européen de la santé.

Rubiano Espindola, L. (2018). Étude de la régularisation et de l'intégration professionnelle des médecins à diplôme extracommunautaire en France: analyse de la loi de 2006, Sorbonne Paris Cité. http://www.theses.fr/2018USPCB060

Séchet, R. et Vasilcu, D. (2012). "Les migrations de médecins roumains vers la France, entre démographie médicale et quête de meilleures conditions d'exercice." Norois. Environnement, aménagement, société(223): 63-76.

Les professionnels de santé roumains sont nombreux à partir exercer à l'étranger. En France, leur présence contribue à atténuer les problèmes de démographie médicale. En revanche, cet exode aggrave les difficultés du système sanitaire roumain. Ces migrations s'inscrivent dans un marché mondial des personnels médicaux en cours de constitution défavorable à la Roumanie comme à beaucoup de pays en développement ou en transition. Les incitations de l'Organisation Mondiale de la Santé pour une éthique des politiques migratoires ne sont pas suffisantes pour réguler les flux.

Sirna, F. (2021). Les médecins à diplôme étranger en France : tous médecins et tous égaux ? De Facto.

Pour pallier au manque de personnel médical, la France fait appel à des médecins étrangers. Malgré son haut niveau de qualification, ce personnel peine à bénéficier d'un traitement équivalent à celui des médecins diplômés en France.

Wolmark, C. (2012). "Médecins étrangers : sortir de l'invisibilité." Plein droit **92**(1): 36-40.

ÉTUDES EUROPEENNES

Étude comparée

Medevielle, P. (2020). La mobilité des professionnels de santé au sein de l'Union européenne. Paris Sénat ; Paris Assemblée Nationale.
http://www.senat.fr/rap/r19-563/r19-5631.pdf
Dans ce rapport, on entendra par professionnels de santé les médecins généralistes, les médecins spécialistes, les praticiens de l'art dentaire, les infirmiers, les pharmaciens, les sages-femmes, les aides-soignants et les masseurs-kinésithérapeutes. Ces professions sont des professions réglementées au sens de la directive 2005/36/CE, modifiée par la directive

2013/55/UE, relative à la reconnaissance des qualifications professionnelles, c'est-à-dire des activités professionnelles dont l'exercice est subordonné, en vertu de dispositions législatives, réglementaires ou administratives nationales, à la possession de qualifications professionnelles déterminées. Pour favoriser la mobilité, malgré ces dispositions nationales, le législateur européen a tenté d'harmoniser les conditions de qualifications nécessaires à l'exercice de ces professions réglementées au sein des États membres. C'est dans le secteur de la santé que l'harmonisation a été la plus rapide. Dès lors, la mobilité des professionnels de santé est devenue une réalité avec des conséquences diverses sur l'offre de soins dans les États membres de l'Union européenne. Elle s'accompagne d'inquiétudes au regard des conditions de mise en oeuvre des principes de reconnaissance mutuelle des qualifications et de la remise en cause des conditions particulières d'exercice au sein de chaque État membre. Après avoir présenté le cadre réglementaire en vigueur pour la reconnaissance des qualifications professionnelles, le présent rapport examinera les difficultés liées à la mise en oeuvre de cette réglementation, ainsi que les craintes qu'elle suscite parmi les professionnels de santé.

Aasland, O. G. et Rosta, J. (2010). "Career entry and career perspectives of medical graduates in Norway." Cahiers De Sociologie Et De Demographie Medicales **50**: 63-79.

Adhikari, R. et Grigulis, A. (2014). "Through the back door: nurse migration to the UK from Malawi and Nepal, a policy critique." Health Policy Plan **29**(2): 237-245.

The UK National Health Service has a long history of recruiting overseas nurses to meet nursing shortages in the UK. However, recruitment patterns regularly fluctuate in response to political and economic changes. Typically, the UK government gives little consideration of how these unstable recruitment practices affect overseas nurses. In this article, we present findings from two independent research studies from Malawi and Nepal, which aimed to examine how overseas nurses encountered and overcame the challenges linked to recent recruitment and migration restrictions. We show how current UK immigration policy has had a negative impact on overseas nurses' lives. It has led them to explore alternative entry routes into the UK, affecting both the quality of their working lives and their future decisions about whether to stay or return to their home country. We conclude that the shifting forces of nursing workforce demand and supply, leading to abrupt policy changes, have significant implications on overseas nurses' lives, and can leave nurses 'trapped' in the UK. We make recommendations for UK policy-makers to work with key stakeholders in nurse-sending countries to minimize the negative consequences of unstable nurse recruitment, and we highlight the benefits of promoting circular migration.

Adhikari, R. et Melia, K. M. (2015). "The (mis)management of migrant nurses in the UK: a sociological study." J Nurs Manag **23**(3): 359-367.

AIM: To examine Nepali migrant nurses' professional life in the UK. BACKGROUND: In the late 1990 s the UK experienced an acute nursing shortage. Within a decade over 1000 Nepali nurses migrated to the UK. METHOD: A multi-sited ethnographic approach was chosen for this study. Between 2006 and 2009, 21 in-depth interviews with Nepali nurses were conducted in the UK using snowballing sampling. RESULT: Nepali migrant nurses are highly qualified and experienced in specialised areas such as critical care, management and education. However, these nurses end up working in the long-term care sector, providing personal care for elderly people - an area commonly described by migrant nurses as British Bottom Care (BBC). This means that migrant nurses lack career choices and professional development opportunities, causing them frustration and lack of job satisfaction. CONCLUSION: International nurse migration is an inevitable part of globalisation in health. Nurse managers and policy makers need to explore ways to make better use of the talents of the migrant workforce. IMPLICATIONS FOR NURSING MANAGEMENT: We offer a management strategy to bring policies for the migrant workforce into line with the wider workforce plans by supporting nurses in finding jobs relevant to their expertise and providing career pathways.

Afentakis, A. et Maier, T. (2013). "[Can nursing staff from abroad meet the growing demand for care? Analysis of labor migration in nursing professions in 2010]." Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz **56**(8): 1072-1080.

Owing to demographic changes, there will probably not be enough nursing staff available in the future to cover the continually increasing demand for long-term care. Among other things, labor migration is seen as a means to meet shortages in care staff. This report analyzes to what extent migrant workers meet the need for nursing staff today, what the structure of their qualifications is, and from which countries they come. The results show that migrant workers in nursing professions mainly come from the eastern EU countries and the former Soviet Union. The percentage of nursing staff with a minimum qualification of 1 year of long-term care training is significantly lower in the group of migrant workers than in the group of nonmigrant workers. Given the decline of new migrant workers in nursing professions in the past decade, labor migration contributes only to a small extent toward closing this gap in the long term. In view of the increase in training rates and labor participation, it is to be regarded rather as a temporary solution.

Aiken, L. H., et al. (2016). "The changing role of nursing." Eurohealth **22**(1): 36 , tabl., fig. http://www.euro.who.int/en/about-us/partners/observatory/news/news/2016/03/new-eurohealth-on-the-changing-role-of-nursing

This issue examines the changing role of nursing, including articles on the state of nursing in the European Union, nurse migration, EU accession and nursing, and whether there an EU framework for nurse education. Other articles include: Health priorities of the Dutch EU Presidency; Implementation status of the cross-border care directive; Making sense of EU health law; Managed entry agreements in the Baltic countries (Estonia, Latvia and Lithuania); What does the Euro Health Consumer Index tell us; and Eurohealth Monitor.

Amorim-Lopes, M., Almeida, A. et Almada-Lobo, B. (2019). "Physician Emigration: Should They Stay or Should They Go? A Policy Analysis." Computational Economics **54**(3): 905-931. http://dx.doi.org/10.1007/s10614-018-9854-1

Physician emigration can either function as an escape valve to help the health labour market clear from a supply surplus, or aggravate the problem further in case of a shortage. Either way, policy-makers should be particularly aware and devise policies to minimize the occurrence of an imbalance in the physician workforce, which may require physician retention policies if barriers to entry and other market rigidities can not be removed. To this purpose we have developed an agent-based computational economics model to analyse physician emigration, and have used it to study the impact of potential short- and long-term retention policies. As a real case study we have calibrated it with data from Portugal, which features a very particular health system with many rigidities. Results show that all policies are capable of increasing the workforce size, but not all reduce emigration. Also, the effect of return migration is non-negligible, and may substantially offset the impact on the workforce size. Furthermore, the welfare impact of the policies varies considerably. Whether policies to retain physicians should be enacted or whether policy makers should let physicians go will depend on the type of imbalance present in the health system.

Bazoukis, X., Kalampokis, N., Papoudou-Bai, A., et al. (2020). "The increasing incidence of immigration and information-seeking behaviour of medical doctors in north-western Greece." Rural Remote Health **20**(1): 4877.

INTRODUCTION: Brain drain, an increasing phenomenon, can be defined as the international transfer of resources, in the form of a highly educated workforce, from developing to more developed countries. The tendency for migration leads to the activation of informational behaviour. The aim of this study was to search for the main causes of emigration of Greek medical doctors while their country suffers from an economic crisis. METHODS: A cross-sectional study using a quantitative sampling method in the form of questionnaires was performed. These questionnaires were answered by 143 doctors working in the National Health System in the city of Ioannina in north-western Greece. Correlations between the examined parameters and predictive factors of immigration trend were recorded. RESULTS: A total of 85% of the respondents were dissatisfied with their wage, only 30% were sure that they would keep their current job and nearly 52% of them answered negatively to questions regarding their professional development. Only 33% of the physicians were negatively disposed towards moving abroad. Most of them were permanent personnel. Unsatisfactory wages, job

uncertainty, non-permanent working status and low professional development opportunities were correlated with the phenomenon of immigration (all p<0.001). In the multivariate binary logistic regression analysis, lower wage (odds ratio (OR)=0.66, 95% confidence interval (CI)=0.453-0.961, p=0.03) and job uncertainty (OR=1.355, 95%CI=1.040-1.767, p=0.025) were independent predictors of the immigration trend. CONCLUSION: The tendency of Greek medical doctors to emigrate is strongly related to financial dissatisfaction, professional insecurity and minimal development opportunities. Especially in rural areas these high immigration trends can result in a shortage of GPs. The need for emigration is less common among qualified doctors with permanent contracts.

Bojanic, A., et al. (2015). "Brain drain: final year medical students' intentions of training abroad." Postgrad Med J **91**(1076): 315-321.

BACKGROUND: In Croatia, a new European Union (EU) member state since July 2013, there is already a shortage of around 3280 doctors to reach the European average. OBJECTIVES: To investigate the emigration intentions of the current cohort of final year medical students at Zabreb School of Medicine. METHODS: An electronic questionnaire was used in June 2013 to assess the attitudes of 232 final year medical students towards working conditions abroad and expectations for career opportunities in Croatia following accession to the EU. RESULTS: With an overall response rate of 87%, more than half of the surveyed students (106/202, 53%) intended to travel abroad, either for specialty (52/202, 26%) or subspecialty (54/202, 27%) training. More female students (58/135, 43%) than male students (17/62, 27%) indicated they would not emigrate. Most attractive emigration destinations were: Germany (34/121, 28%), USA (19/121, 16%), the UK (19/121, 16%), Switzerland (16/121, 13%) and Canada (11/121, 9%). The most important goals that respondents aimed to achieve through training abroad were to excel professionally (45/120, 38%), to prosper financially (20/120, 17%) and to acquire new experiences and international exposure (31/120, 26%). CONCLUSIONS: Students' motivating factors, goals for and positive beliefs about training abroad, as well as negative expectations regarding career opportunities in Croatia, may point towards actions that could be taken to help make Croatia a country that facilitates medical education and professional career development of young doctors.

Botezat, A. et Ramos, R. (2020). "Physicians' brain drain - a gravity model of migration flows." Global Health **16**(1): 7.

BACKGROUND: The past two decades have been marked by impressive growth in the migration of medical doctors. The medical profession is among the most mobile of highly skilled professions, particularly in Europe, and is also the sector that experiences the most serious labour shortages. However, surprisingly little is known about how medical doctors choose their destinations. In addition, the literature is scarce on the factors determining the sharp rise in the migration of doctors from Africa, Asia and Eastern and Southeastern Europe, and how the last economic crisis has shaped the migration flows of health professionals. METHODS: We use the new module on health worker migration provided by the Organisation for Economic Co-operation and Development (OECD) for 2000-2016 in order to examine the channels through which OECD countries attract foreign physicians from abroad. We estimate a gravity model using the Pseudo-Poisson Maximum Likelihood estimator. RESULTS: Our results reveal that a lower unemployment rate, good remuneration of physicians, an aging population, and a high level of medical technology at the destination are among the main drivers of physicians' brain drain. Furthermore, an analysis of the mobility of medical doctors from a number of regions worldwide shows that individuals react differently on a country-wise basis to various determinants present in the destination countries. Physicians from African countries are particularly attracted to destination countries offering higher wages, and to those where the density of medical doctors is relatively low. Concurrently, a higher demand for healthcare services and better medical technology in the receiving country drives the inflow of medical doctors from Central and Eastern Europe, while Asian doctors seem to preferentially migrate to countries with better school systems. CONCLUSIONS: This study contributes to a deeper understanding of the channels through which OECD countries attract foreign medical doctors from abroad. We find that, apart from dyadic factors, a lower unemployment rate, good remuneration of physicians, an aging population, and good medical infrastructure in the host country are among the main drivers of physicians' brain drain. Furthermore,

we find that utility from migration to specific countries may be explained by the heterogeneity of origin countries.

Braeseke, G., et al. (2013). "[Migration. Opportunities for recruitment of skilled employees in the care sector]." Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz **56**(8): 1119-1126.

A central objective of this study was to estimate the potential workforce for the elderly care sector in Germany and to compare it with the predicted demand for nurses in 2030. The authors describe the opportunities and obstacles in recruiting skilled professionals from EU member states and from countries outside the EU. Different scenarios of how to raise labor input are discussed so as to determine the domestic potential until 2030 in Germany. The results show that only by assuming unrealistic conditions, e. g., expectations of a high full-time working quota or far more working women, can the domestic potential meet the predicted future demands. Therefore, Germany's chances of attracting skilled foreign workers were assessed by analyzing wage differentials, unemployment probabilities, demographic developments, and professional and cultural aspects between the countries. A major finding study is that the German labor market cannot provide enough nursing care professionals for the elderly care sector by 2030. Secondly, most of the other EU member states are facing similar challenges, at least in the long run. Therefore, it is recommendable to intensify collaboration with populous Asian countries in the future.

Buchan, J. (éd.), et al. (2014). Health professional mobility in a changing Europe. New dynamics -mobile individuals and diverse responses, Copenhague : OMS Bureau régional de l'Europe http://www.euro.who.int/__data/assets/pdf_file/0006/248343/Health-Professional-Mobility-in-a-Changing-Europe.pdf

Pour les responsables politiques, la mobilité des professionnels de santé en Europe est devenue une cible mouvante, dont la direction et l'importance évoluent rapidement en raison d'une profonde transformation liée à l'élargissement de l'Union européenne (UE) et à la crise économique et financière. Cette mobilité entraîne une modification de l'effectif des professionnels de santé dans les pays ainsi que de l'éventail des compétences disponibles, avec des répercussions sur la performance des systèmes de santé. Pour prévoir et planifier leurs besoins en personnel, les pays doivent tenir compte de ce phénomène. Il leur faut pour cela disposer d'informations claires sur les tendances en matière de mobilité et sur les personnes concernées, ainsi que sur les mesures qui contribuent de manière efficace à retenir les agents de santé nationaux et à intégrer ceux formés à l'étranger. La question de la mobilité des professionnels de santé n'a pas encore été réglée en Europe, alors que l'impact de la crise financière se fait toujours sentir sur les personnels européens et sur leur mobilité. Cet ouvrage apporte un éclairage nouveau sur la mobilité des professionnels de santé dans cette Europe en mutation. Il s'agit du deuxième volume réalisé dans le cadre du projet PROMeTHEUS, après une première publication qui présentait des études de cas portant sur différents pays. Ses 14 chapitres thématiques sont regroupés en trois sections : la nouvelle dynamique de la mobilité des professionnels de santé ; l'individu mobile ; les mesures à prendre dans une Europe en mutation. Loin d'être une simple analyse de la situation, cet ouvrage propose des outils pratiques, notamment des critères de référence pour la tenue des registres professionnels, une typologie des individus mobiles, des instruments qualitatifs afin d'étudier la motivation du personnel et un ensemble de mesures concrètes aux niveaux de l'UE, des pays et des organisations, parmi lesquelles des accords bilatéraux, des codes et des initiatives sur les lieux de travail (résumé de l'éditeur).

Buchan, J., Baldwin, S. et Munro, M. (2008). Migration of Health Workers: The UK Perspective to 2006. OECD Health Working Paper; 38. Paris OCDE**:** 59, tabl., fig. http://www.oecd.org/dataoecd/48/2/41500789.pdf

Le Royaume-Uni compte 56 millions habitants, et en matière de santé, la plupart des prestations y sont fournies par le biais du National Heath Service (NHS). Le NHS emploie plus d'un million d'agents. A la fin des années 90, un des principaux obstacles à l'amélioration du NHS était la pénurie de personnel qualifié. La réponse du gouvernement a consisté à « étoffer » les effectifs du NHS. Pour ce faire, les pouvoirs publics disposent de quatre grands moyens d'action possibles : développer la

formation dispensée dans le pays même, améliorer le taux de maintien des agents en poste (ce qui permet de diminuer les besoins en recrutement de nouveaux agents), convaincre les agents ayant cessé d'exercer pour le moment de « reprendre du service », et recruter des professionnels de la santé à l'international. Soucieux d'étoffer rapidement ses effectifs, le NHS a eu recours au recrutement à l'international. L'opération a été facilitée par l'application de la procédure de traitement accéléré des demandes de permis de travail pour les professionnels de la santé, par le ciblage des personnes à recruter dans des pays précis (en faisant appel à des agences de recrutement spécialisées), et par la coordination du recrutement au niveau local au sein du NHS. Ce recrutement à l'international prenait également appui sur un Code de bonnes pratiques. L'un des points clés de ce Code est l'interdiction faite au NHS de cibler les pays en développement dans sa politique de recrutement actif sauf accord formel du gouvernement du pays considéré. Même si, entre 1999 et 2005, en Angleterre, le NHS a vu ses effectifs augmenter dans des proportions sans précédent, à partir de 2005 cette progression s'est très vite ralentie et a finalement cessé. A partir de l'exercice 2004-2005, apparaissent au sein du NHS des déficits financiers que la Commission de la santé du Parlement britannique impute, du moins en partie, au coût du renforcement des effectifs et au coût découlant des nouvelles clauses de rémunération figurant dans les contrats des agents du Service. Par la suite, la politique migratoire britannique a subi des modifications qui ont également eu un impact sur le recrutement à l'international. Désormais, la médecine, les soins infirmiers et les autres professions de la santé ne sont plus classés parmi les métiers « en tension », ce qui aboutira inévitablement à une réduction significative de l'afflux de cliniciens étrangers dans le NHS britannique. L'expérience du Royaume-Uni a mis en évidence les possibilités offertes par le recours à une politique de recrutement à l'international de grande ampleur pour répondre aux besoins quand il s'agit d'étoffer des effectifs. Les principales recommandations de l'étude de cas sont les suivantes : L'immigration ne devrait être examinée que dans le cadre du mécanisme global de planification des effectifs utilisé au niveau national ;l'immigration ne devrait pas être utilisée isolément, ni être envisagée comme une solution « au rabais », ce qui reviendrait à considérer les professionnels de la santé issus de l'immigration comme des « produits consommables » ; Il conviendrait de surveiller ou de réglementer l'activité des agences de recrutement ; les accords bilatéraux peuvent constituer un moyen de gérer effectivement le processus migratoire entre un pays d'origine et un pays de destination ; dans un pays où la plupart des employeurs et des agences de recrutement sont tenus de se conformer à un code de bonnes pratiques applicable à l'échelle nationale, il devient dans une certaine mesure possible de gérer le processus de recrutement dans un souci d'éthique et d'efficience ; pour avoir quelques chances de voir la mise en œuvre d'un code international suivie d'effets, il importe de surveiller de manière plus effective les flux de travailleurs de la santé ; S'agissant du mécanisme de recrutement actif à l'international, les observations faites récemment en Angleterre amènent à conclure à son efficacité quand on cherche à étoffer rapidement des effectifs, mais l'extrême rapidité du processus exige un suivi attentif afin de ne pas dépasser les objectifs de croissance que l'on s'est éventuellement fixés ; Pour être pleinement efficace, le processus de recrutement actif à l'international doit aussi être intégré avec soin dans la stratégie globale de planification des effectifs.

Byrne, J. P., Conway, E., McDermott, A. M., et al. (2021). "How the organisation of medical work shapes the everyday work experiences underpinning doctor migration trends: The case of Irish-trained emigrant doctors in Australia." Health Policy **125**(4): 467-473.

Medical migration is a global phenomenon. In Ireland, hospital doctor emigration has increased significantly in recent years, with Australia a destination of choice. With work and employment conditions cited as a driver of these trends, this article explores how health system differences in the organisation of medical work shape the everyday experiences of hospital doctors which underpin migration decisions. Drawing on 51 semi-structured interviews conducted in July-August 2018 with Irish-trained hospital doctors who had emigrated to work in Australia, the findings highlight doctors' contrasting experiences of medical work in the Irish and Australian health systems. Key system differences in the organisation of medical work manifested at hospital level and related to medical hierarchy; staffing, support and supervision; and governance and task coordination. Findings indicate that retention of hospital doctors is as much about the quality of the work experience, as it is about the quantity and composition of the workforce. At a time of international competition for medical

staff, effective policy for the retention of hospital doctors requires an understanding of the organisation of work within health systems. Crucially, this can create working contexts in which doctors flourish or from which they seek an escape.

Connell, J. (2020). "Doctor Retention or Migration: From Ireland to the World? Comment on "Doctor Retention: A Cross-sectional Study of How Ireland Has Been Losing the Battle"." Int J Health Policy Manag.

The recent study of prospective doctor migration and retention suggests that more than half of junior doctors intend to migrate from Ireland. While intent is not necessarily outcome, such intentions match similar survey results in Ireland and elsewhere. The rationale for migration is described as a function of difficult workplace circumstances (notably long hours and mismanagement). Lifestyle factors may however also be important for both migration and significant levels of return migration. These are related to family formation, and to an established culture of migration, that has contributed to a considerable circularity of mobility and migration, primarily between Anglophone countries. International migration may also have unspecified regional variations and impacts. Migration has taken a similar form for half a century and longstanding policies to constrain its more damaging impacts have been conspicuously unsuccessful yet responses remain urgent.

Davda, L. S., Radford, D. R. et Gallagher, J. E. (2020). "Migration, Retention and Return Migration of Health Professionals Comment on "Doctor Retention: A Cross-sectional Study of How Ireland Has Been Losing the Battle"." Int J Health Policy Manag.

Medical education and training of health professionals are linked with their recruitment and retention. Practising as a competent health professional requires life-long continuous training and therefore training structures in health systems appear to influence doctors job satisfaction, their well-being and their intentions to remain in that health system. The commentary critiques aspects of the paper on doctors retention in Ireland, while drawing some parallels with the United Kingdom. There appears to be an emerging type of health professional migrants 'education tourists' who travel to other countries to obtain medical education creating new routes of migration and this presents new challenges to source and destination countries. The global shortage of doctors and other health professionals further exacerbates health inequalities as seen in the present pandemic and therefore the increased need for research into health professionals' migration and their integration.

De Nadal, J. (2010). "Career entry and career perspectives of medical graduates in Spain." Cahiers De Sociologie Et De Demographie Medicales **50**: 81-99.

De Oliveira, A. P., et al. (2017). "Challenges and strategies to improve the availability and geographic accessibility of physicians in Portugal." Hum Resour Health **15**(1): 24.

BACKGROUND: Shortages of physicians in remote, rural and other underserved areas and lack of general practitioners limit access to health services. The aims of this article are to identify the challenges faced by policy and decision-makers in Portugal to guarantee the availability and geographic accessibility to physicians in the National Health Service and to describe and analyse their causes, the strategies to tackle them and their results. We also raise the issue of whether research evidence was used or not in the process of policy development. METHODS: We analysed policy and technical documents, peer-reviewed papers and newspaper articles from 1995 to 2015 through a structured search of government websites, Portuguese online newspapers and PubMed and Virtual Health Library (Biblioteca Virtual em Saude (BVS)) databases; key informants were consulted to validate and complement the documentary search. RESULTS: The challenges faced by decision-makers to ensure access to physicians were identified as a forecasted shortage of physicians, geographical imbalances and maldistribution of physicians by level of care. To date, no human resources for health policy has been formulated, in spite of most documents reviewed stating that it is needed. On the other hand, various isolated and ad hoc strategies have been adopted, such as incentives to choose family health as a specialty or to work in an underserved region and recruitment of foreign physicians through bilateral agreements. CONCLUSIONS: Health workforce research in Portugal is scarce, and therefore, policy decisions regarding the availability and accessibility of physicians are not based on

evidence. The policy interventions described in this paper should be evaluated, which would be a good starting point to inform health workforce policy development.

Diaz, E., et al. (2014). "Immigrant and native regular general practitioners in Norway. A comparative registry-based observational study." Eur J Gen Pract **20**(2): 93-99.

BACKGROUND: More than 10% of the population and nearly 20% of all general practitioners (GPs) in Norway have an immigrant background. There are reasons to believe that immigrant GPs have different demographic characteristic and serve different populations than native GPs. OBJECTIVES: To describe the characteristics of the lists and population subscribed to immigrant GPs in Norway and compare them with those of Norwegian-born GPs. METHODS: Immigrant GPs were defined as persons born abroad with both parents from abroad. Two national registers were linked with information about all inhabitants and GPs in Norway in 2008: the GPs Database, and the National Population Register. Logistic regression was used to study the influence of the GP's immigrant background on different characteristics. RESULTS: Compared to native GPs, immigrant GPs are younger, more often women, and more frequently work alone and in rural areas. GPs with immigrant background have a higher proportion of immigrant patients (OR = 3.2; 95% CI: 2.7-3.8), not only from their own culture, but also from other cultures, and this proportion increases over time. Immigrant GPs have more difficulties recruiting patients compared to their native colleagues (OR = 0.3; 95% CI: 0.3-0. 4 for having closed lists), but this difference seems to diminish over time. There are, however, substantial differences between immigrant GPs from different areas of the world. CONCLUSION: The characteristics of the populations assigned to GPs with or without immigrant background are different. This should be taken into account when studying differences between immigrant and native GPs.

Domagała, A., Kautsch, M., Kulbat, A., et al. (2022). "Exploration of Estimated Emigration Trends of Polish Health Professionals." Int J Environ Res Public Health **19**(2).

BACKGROUND: Due to the significant staff shortages, emigration of health professionals is one of the key challenges for many healthcare systems. OBJECTIVE: The aim of this article is to explore the estimated trends and directions of emigration among Polish health professionals. METHODS: The emigration phenomenon of Polish health professionals is still under-researched and the number of studies in this field is limited. Thus, the authors have triangulated data using two methods: a data analysis of five national registers maintained by chambers of professionals (doctors, nurses, midwives, physiotherapists, pharmacists, and laboratory diagnosticians), and data analysis from the Regulated Profession Database in The EU Single Market. RESULTS: According to the data from national registers, between 7-9% of practicing doctors and nurses have applied for certificates, which confirm their right to practice their profession in other European countries (most often the United Kingdom, Germany, Sweden, Spain, and Ireland). The relatively high number of such certificates applied for by physiotherapists is also worrying. Emigration among pharmacists and laboratory diagnosticians is rather marginal. CONCLUSIONS: Urgent implementation of an effective mechanism for monitoring emigration trends is necessary. Furthermore, it is not possible to retain qualified professionals without systemic improvement of working conditions within the Polish healthcare system.

Driouchi, A. (2014). Evidence and Prospects of Shortage and Mobility of Medical Doctors: A Literature Survey. MPRA Paper ; 59322. Munich MPRA**:** (41).
http://mpra.ub.uni-muenchen.de/59322/1/MPRA_paper_59322.pdf

This paper focuses on the shortage in health workforce, its causes and its consequences. The implied mobility is also introduced. Series of issues are introduced to better capture the global prospects facing the health system. A literature review survey on the above dimensions is the main source of information used in this paper. The attained outcomes confirm the existing increasing current and future trends of shortage and mobility of the health workforce with emphasis on medical doctors. The expected consequences on developing countries are discussed in relation to the increasing demand for healthcare but also to the technological changes taking place at the level of the sector and in its environment.

Duma, O., et al. (2011). "[Medical-social aspects of medical staff migration]." Rev Med Chir Soc Med Nat Iasi **115**(2): 507-511.

The migration of the medical staff represents an increasingly worring reason for romanian health policy-makers. According to the Ministry of Health, in 2009 year, the human resources indicators pointed out 26.5 physicians/ 10,000 inhabitants (whereas the European Union average was 32.8) and 60.4 nurses and midwives (whereas the European Union average was 108.5). Between 2007-2010, over 9000 physicians requested professional certificates in order to practice abroad and the majority have left the country. This phenomenon is related to the Romania's entrance in European Union and it is supposed to continue in the coming years. The direct consequences of the migration of the medical staff consist of significant differences between the country's regions in the health workforce distribution, the most affected by the critical shortage of health service providers being the North-Eastern region, especially in rural area. In order to limit the migration phenomenon, the Ministry of Health elaborated some strategies and workforce policies on medium and long-term, but the results will be difficult to assess.

Foulex, A., Robino, M. et Grira, M. (2018). "[New medical demography : challenges for international medical graduates]." Rev Med Suisse **14**(620): 1710-1713.

<< International Medical Graduates >> (IMGs) are medical doctors practicing abroad, in a country where they have not studied. Their number is increasing at the global level as well as in Switzerland. In this article we describe the challenges faced by IMGs : difficulties related to issues in communication, differences in medical education, variations in clinical practice and difficulties in dealing with specific categories of patients because of local societal values. These challenges demand a process of professional and cultural transition from these foreign medical doctors who constitute a real asset for the host countries. Indeed, they participate in solving the problem of medical shortage and bring to their host country their rich professional experience and recognized clinical skills.

Glinos, I. (2012). "Worrying about the wrong thing: patient mobility versus mobility of health care professionals." J Health Serv Res Policy **17**(4): 254-256.

Patients and health care professionals in the European Union (EU) benefit from legislation on the freedom of movement between Member States. In relative terms, many more doctors and nurses move within the EU than patients. Despite this, patient mobility has attracted more attention from policy-makers and the public while workforce mobility remains largely ignored. This is paradoxical and imprudent. On the one hand, the scope of patient mobility is narrow and self-limited. On the other hand, current and forecasted health care workforce shortages across the EU, global competition for health care professionals, and current economic pressures are all good reasons to start worrying about the mobility of health care professionals and its implications for health systems.

Heponiemi, T., Hietapakka, L., Kaihlanen, A., et al. (2019). "The turnover intentions and intentions to leave the country of foreign-born physicians in Finland: a cross-sectional questionnaire study." BMC Health Serv Res **19**(1): 624.

BACKGROUND: A physician shortage is a worldwide problem and foreign-born physicians fill in the shortage of physicians in many developed countries. One problem that is associated with the physician shortage is increased physician turnover. Also, regarding foreign-born physicians, migration can be costly. The present study aimed to examine the turnover intentions and intentions to leave the country of foreign-born physicians. We examined how demographics, discrimination, language problems, perceived employment barriers, satisfaction with living in Finland, team climate, job satisfaction and patient-related stress were associated with these factors. METHODS: The present study was a cross-sectional questionnaire study among 371 foreign-born physicians in Finland that were aged between 26 and 65 (65% women). Binary logistic regression analyses were conducted to examine the associations. RESULTS: Half of the respondents had turnover intentions and 14.5% had considered leaving the country. High satisfaction with living in Finland was associated with a lower likelihood of both turnover intentions and intentions to leave the country. High levels of discrimination

and employment barriers were associated with a high likelihood of turnover intentions whereas good team climate was associated with a low likelihood of turnover intentions. High levels of language problems were associated with a high likelihood of intentions to leave the country. CONCLUSIONS: The present study showed the importance of satisfaction with living in the host country, the prevention of discrimination and employment barriers, language skills and a good team climate for the retention of foreign-born physicians in their current job and in the host country. Thus, to keep their foreign-born physicians, health care organisations should implement measures to tackle these challenges. Organisations could arrange, for example, diversity training, self-assessment, team reflections, leadership coaching and culturally-specific networks. Moreover, internships associated with the qualification process could be utilised better in order to give a thorough introduction to the host country's health care environment and the possibilities for learning the language.

Heponiemi, T., Hietapakka, L., Lehtoaro, S., et al. (2018). "Foreign-born physicians' perceptions of discrimination and stress in Finland: a cross-sectional questionnaire study." BMC Health Serv Res **18**(1): 418.

BACKGROUND: Foreign-born physicians fill in the shortage of physicians in many developed countries. Labour market theory and previous studies suggest that foreign-born physicians may be a disadvantaged group with a higher likelihood of discrimination and less prestigious jobs. The present study examines foreign-born physicians' experiences of discrimination (coming from management, colleagues and patients separately) and patient-related stress and integration-related stress, and it examines how gender, age, employment sector, country of birth, years from getting a practicing license in Finland, language problems, cross-cultural training, cross-cultural empathy, team climate and skill discretion were associated with these factors. METHODS: The present study was a cross-sectional questionnaire study among 371 foreign-born physicians in Finland, aged between 26 and 65 (65% women). Analyses of covariance and logistic regression analyses were conducted to examine the associations. RESULTS: A good team climate and high cross-cultural empathy were associated with lower likelihoods of discrimination from all sources, patient-related stress and integration-related stress. Skill discretion was associated with lower levels of integration-related stress and discrimination from management and colleagues. Language problems were associated with higher levels of integration-related stress. The biggest sources of discrimination were patients and their relatives. CONCLUSIONS: The present study showed the importance of a good team climate, cross-cultural empathy and patience, skill discretion and language skills in regard to the proper integration of foreign-born health care employees into the workplace. Good job resources, such as a good team climate and the possibility to use one's skills, may help foreign-born employees, for instance by giving them support when needed and offering flexibility. Health care organizations should invest in continuous language training for foreign-born employees and also offer support when there are language problems. Moreover, it seems that training increasing cross-cultural empathy and patience might be beneficial.

Herfs, P. G. (2014). "Aspects of medical migration with particular reference to the United Kingdom and the Netherlands." Hum Resour Health **12**: 59.

BACKGROUND: In most countries of the European Economic Area (EEA), there is no large-scale migration of medical graduates with diplomas obtained outside the EEA, which are international medical graduates (IMGs). In the United Kingdom however, health care is in part dependent on the influx of IMGs. In 2005, of all the doctors practising in the UK, 31% were educated outside the country. In most EEA-countries, health care is not dependent on the influx of IMGs.The aim of this study is to present data relating to the changes in IMG migration in the UK since the extension of the European Union in May 2004. In addition, data are presented on IMG migration in the Netherlands. These migration flows show that migration patterns differ strongly within these two EU-countries. METHOD: This study makes use of registration data on migrating doctors from the General Medical Council (GMC) in the UK and from the Dutch Department of Health. Moreover, data on the ratio of medical doctors in relation to a country's population were extracted from the World Health Organization (WHO). RESULTS: The influx of IMGs in the UK has changed in recent years due to the extension of the European Union in 2004, the expansion of UK medical schools and changes in the policy towards non-EEA doctors.The influx of IMGs in the Netherlands is described in detail. In the Netherlands, many

IMGs come from Afghanistan, Iraq and Surinam. DISCUSSION AND CONCLUSIONS: There are clear differences between IMG immigration in the UK and in the Netherlands. In the UK, the National Health Service continues to be very reliant on immigration to fill shortage posts, whereas the number of immigrant doctors working in the Netherlands is much smaller. Both the UK and the Netherlands' regulatory bodies have shared great concerns about the linguistic and communication skills of both EEA and non-EEA doctors seeking to work in these countries. IMG migration is a global and intricate problem. The source countries, not only those where English is the first or second language, experience massive IMG migration flows.

Humphries, N., Creese, J., Byrne, J. P., et al. (2021). "COVID-19 and doctor emigration: the case of Ireland." Hum Resour Health **19**(1): 29.

BACKGROUND: Since the 2008 recession, Ireland has experienced large-scale doctor emigration. This paper seeks to ascertain whether (and how) the COVID-19 pandemic might disrupt or reinforce existing patterns of doctor emigration. METHOD: This paper draws on qualitative interviews with 31 hospital doctors in Ireland, undertaken in June-July 2020. As the researchers were subject to a government mandated work-from-home order at that time, they utilised Twitter™ to contact potential respondents (snowball sampling); and conducted interviews via Zoom™ or telephone. FINDINGS: Two cohorts of doctors were identified; COVID Returners (N = 12) and COVID Would-be Emigrants (N = 19). COVID Returners are Irish-trained emigrant doctors who returned to Ireland in March 2020, just as global travel ground to a halt. They returned to be closer to home and in response to a pandemic-related recruitment call issued by the Irish government. COVID Would-be Emigrants are hospital doctors considering emigration. Some had experienced pandemic-related disruptions to their emigration plans as a result of travel restrictions and border closures. However, most of the drivers of emigration mentioned by respondents related to underlying problems in the Irish health system rather than to the pandemic, i.e. a culture of medical emigration, poor working conditions and the limited availability of posts in the Irish health system. DISCUSSION/CONCLUSION: This paper illustrates how the pandemic intensified and reinforced, rather than radically altered, the dynamics of doctor emigration from Ireland. Ireland must begin to prioritise doctor retention and return by developing a coherent policy response to the underlying drivers of doctor emigration.

Humphries, N., Crowe, S. et Brugha, R. (2018). "Failing to retain a new generation of doctors: qualitative insights from a high-income country." BMC Health Serv Res **18**(1): 144.

BACKGROUND: The failure of high-income countries, such as Ireland, to achieve a self-sufficient medical workforce has global implications, particularly for low-income, source countries. In the past decade, Ireland has doubled the number of doctors it trains annually, but because of its failure to retain doctors, it remains heavily reliant on internationally trained doctors to staff its health system. To halve its dependence on internationally trained doctors by 2030, in line with World Health Organisation (WHO) recommendations, Ireland must become more adept at retaining doctors. METHOD: This paper presents findings from in-depth interviews conducted with 50 early career doctors between May and July 2015. The paper explores the generational component of Ireland's failure to retain doctors and makes recommendations for retention policy and practice. RESULTS: Interviews revealed that a new generation of doctors differ from previous generations in several distinct ways. Their early experiences of training and practice have been in an over-stretched, under-staffed health system and this shapes their decision to remain in Ireland, or to leave. Perhaps as a result of the distinct challenges they have faced in an austerity-constrained health system and their awareness of the working conditions available globally, they challenge the traditional view of medicine as a vocation that should be prioritised before family and other commitments. A new generation of doctors have career options that are also strongly shaped by globalisation and by the opportunities presented by emigration. DISCUSSION: Understanding the medical workforce from a generational perspective requires that the health system address the issues of concern to a new generation of doctors, in terms of working conditions and training structures and also in terms of their desire for a more acceptable balance between work and life. This will be an important step towards future-proofing the medical workforce and is essential to achieving medical workforce self-sufficiency.

Humphries, N., et al. (2013). "A cycle of brain gain, waste and drain - a qualitative study of non-EU migrant doctors in Ireland." Hum Resour Health **11**: 63.

BACKGROUND: Ireland is heavily reliant on non-EU migrant health workers to staff its health system. Shortages of locally trained health workers and policies which facilitate health worker migration have contributed to this trend. This paper provides insight into the experiences of non-EU migrant doctors in the Irish health workforce. METHOD: In-depth interviews were conducted with 37 non-EU migrant doctors in Ireland in 2011/2012. RESULTS: Respondents believed they had been recruited to fill junior hospital doctor 'service' posts. These posts are unpopular with locally trained doctors due to the limited career progression they provide. Respondents felt that their hopes for career progression and postgraduate training in Ireland had gone unrealised and that they were becoming de-skilled. As a result, most respondents were actively considering onward migration from Ireland. DISCUSSION & CONCLUSIONS: Failure to align the expectations of non-EU migrant doctors with the requirements of the health system has resulted in considerable frustration and a cycle of brain gain, waste and drain. The underlying reasons for high mobility into and out of the Irish medical workforce must be addressed if this cycle is to be broken. The heavy reliance on non-EU migrant doctors to staff the medical workforce has distracted from the underlying workforce challenges facing the Irish medical workforce.

Inoue, J. (2010). Migration of Nurses in the EU, the UK, and Japan: Regulatory Bodies and Push-Pull Factors in the International Mobility of Skilled Practitioners. Discussion Paper Series A No.526. Tokyo IRR**:** 23 , tabl., fig. https://hermes-ir.lib.hit-u.ac.jp/rs/bitstream/10086/18312/1/DP526.pdf

This paper examines the regulatory characteristics of the EU, the UK, and Japan concerning the accepting of nurses from overseas, by focusing on the interests of regulatory bodies and policies to promote or mitigate the impact of push-pull factors on the inflow of nurses. These cases show that verifying qualifications, assessing language skills, and admitting work permits are important, instant, and effective measures through which regulatory bodies can promote or mitigate the impact of push-pull factors on the inflow of nurses into their territories. The EU and the UK studies revealed that further research is required concerning the discrimination which is prohibited under EU law. Compared to Europe, Japan’s Economic Partnership Agreement (EPA) is a full-course regulatory arrangement that covers issues ranging from quantitative restriction, refusal of mutual recognition, refusal of verification of qualification valid in other countries, and language froficiency to work permit, due to ambivalent interests in a single regulatory framework.

Jourdain, A. et Pham, T. (2017). "[Mobility of physicians in Europe: health policies and health care provision]." Sante Publique **29**(1): 81-87.

Objective: To define the place of geographical mobility of physicians in medical demography policies in EU countries. Methods: Review of international migration assumptions in national projection models of numbers of physicians by broad categories of social protection systems in the EU. Results: Some countries fail to achieve medium-term projections of the number of physicians and those that do adopt the assumption of net migration, assume that they converge to zero. Migration is not considered to be a solution to the expected shortage of physicians, but rather a problem to be solved. Discussion: Three approaches to labour mobility are discussed: liberal, normative and ethical. The last approach appears to be the most popular by combining preservation of national interests with the World Health Organisation Global Code of Practice on the International Recruitment of Health Personnel.

Kaelin, L. (2011). "Care drain: the political making of health worker migration." J Public Health Policy **32**(4): 489-498.

Migration of formal and informal health-care workers is a global phenomenon - and, as this article demonstrates, one that is produced by government policies and practices. Nurses and lesser-trained caregivers migrate from many lower-income countries to richer ones (including from the Philippines to the United States, from South Africa to England, from Central Asia to Turkey). Using the Austrian

experience to illustrate how policies and lack of enforcement of labor laws lead to migration and mistreatment of health-care professionals and informal caregivers, this article recommends how to alleviate health-care staff shortages in Africa and elsewhere through policymaking in Europe and North America. Recognition of the political dimensions of health-care migration is the first step toward addressing ethical questions and damaging shortages of caregivers.

Kolcic, I., et al. (2014). "Emigration-related attitudes of the final year medical students in Croatia: a cross-sectional study at the dawn of the EU accession." Croat Med J **55**(5): 452-458.

AIM: To investigate the emigration-related attitudes of final year medical students in Croatia at the dawn of the EU accession in 2013. METHODS: All final-year medical students at four Croatian medical schools (Zagreb, Rijeka, Split, and Osijek) were invited to participate in a cross-sectional survey on emigration attitudes. RESULTS: Among 260 respondents (response rate 61%), 90 students (35%) reported readiness for permanent emigration, expecting better quality of life (N=22, 31%), better health care organization (N=17, 24%), more professional challenges (N=10, 14%), or simply to get a job (N=8, 11%), while the least common expectation were greater earnings (N=7, 10%). The most common target countries were Germany (N=36, 40%), USA and Canada (N=15, 17%), and UK (N=10, 11%). In a multivariate analysis, readiness for permanent emigration was associated with an interest in undertaking a temporary training abroad (odds ratio [OR] 6.87; 95% confidence interval [CI] 2.83-16.72), while the belief that the preferred specialty could be obtained in Croatia appeared protective against emigration (OR 0.26; 95% CI 0.12-0.59). CONCLUSION: Despite shortages of health care workers in Croatia, the percentage of students with emigration propensity was rather high. Prevalent negative perception of the Croatian health care and recent Croatian accession to the EU pose a threat of losing newly graduated physicians to EU countries.

Kollar, E. et Buyx, A. (2013). "Ethics and policy of medical brain drain: a review." Swiss Med Wkly **143**: w13845.

Health-worker migration, commonly called "medical brain drain", refers to the mass migration of trained and skilled health professionals (doctors, nurses, midwives) from low-income to high-income countries. This is currently leaving a significant number of poor countries, particularly in sub-Saharan Africa, with critical staff shortages in the healthcare sector. A broad consensus exists that, where medical brain drain exacerbates such shortages, it is unethical, and this review presents the main arguments underpinning this view. Notwithstanding the general agreement, which policies are justifiable on ethical grounds to tackle brain drain and how best to go about implementing them remains controversial. The review offers a discussion of the specific ethical issues that have to be taken into account when deciding which policy measures to prioritise and suggests a strategy of policy implementation to address medical brain drain as a matter of urgency.

Krajic, K. (2010). "Career entry and career perspectives of medical graduates in Austria." Cahiers De Sociologie Et De Demographie Medicales **50**: 23-41.

Kuusio, H., et al. (2014). "Inflows of foreign-born physicians and their access to employment and work experiences in health care in Finland: qualitative and quantitative study." Hum Resour Health **12**: 41.

BACKGROUND: In many developed countries, including Finland, health care authorities customarily consider the international mobility of physicians as a means for addressing the shortage of general practitioners (GPs). This study i) examined, based on register information, the numbers of foreign-born physicians migrating to Finland and their employment sector, ii) examined, based on qualitative interviews, the foreign-born GPs' experiences of accessing employment and work in primary care in Finland, and iii) compared experiences based on a survey of the psychosocial work environment among foreign-born physicians working in different health sectors (primary care, hospitals and private sectors). METHODS: Three different data sets were used: registers, theme interviews among foreign-born GPs (n = 12), and a survey for all (n = 1,292; response rate 42%) foreign-born physicians living in Finland. Methods used in the analyses were qualitative content analysis, analysis of covariance, and logistic regression analysis. RESULTS: The number of foreign-born physicians has increased dramatically in Finland since the year 2000. In 2000, a total of 980 foreign-born physicians held a

Finnish licence and lived in Finland, accounting for less than 4% of the total number of practising physicians. In 2009, their proportion of all physicians was 8%, and a total of 1,750 foreign-born practising physicians held a Finnish licence and lived in Finland. Non-EU/EEA physicians experienced the difficult licensing process as the main obstacle to accessing work as a physician. Most licensed foreign-born physicians worked in specialist care. Half of the foreign-born GPs could be classified as having an 'active' job profile (high job demands and high levels of job control combined) according to Karasek's demand-control model. In qualitative interviews, work in the Finnish primary health centres was described as multifaceted and challenging, but also stressful. CONCLUSIONS: Primary care may not be able in the long run to attract a sufficient number of foreign-born GPs to alleviate Finland's GP shortage, although speeding up the licensing process may bring in more foreign-born physicians to work, at least temporarily, in primary care. For physicians to be retained as active GPs there needs to be improvement in the psychosocial work environment within primary care.

Lambert, T. (2010). "Career entry and career course of medical graduates in the United Kingdom." Cahiers De Sociologie Et De Demographie Medicales **50**: 165-186.

Likupe, G. (2013). "The skills and brain drain what nurses say." J Clin Nurs **22**(9-10): 1372-1381.

AIMS AND OBJECTIVES: To explore sub-Saharan African nurses' reasons for moving to the UK, their views on the skills and brain drain, and what can be done to stem the situation. BACKGROUND: The UK and other developed nations such as the USA, Canada and Australia have been recruiting internationally qualified nurses including those from sub-Saharan African, which has raised concerns of skills and brain drain from these countries that are known to suffer from nurse shortages. METHODS: A purposeful sample of 30 nurses from sub-Saharan African was drawn from four National Health Service trusts in the north-east of England. Using focus group discussions and personal interviews, the study explored and examined nurses' views on their motivation to move to the developed countries and what can be done to reduce nurse migration from sub-Saharan African and give those countries a chance to develop their health systems by retaining their health personnel. RESULTS: Five main themes emerged from data analysis: poor remuneration, lack of professional development in the home countries, poor health care and systems, language and education similarities and easy availability of jobs and visas. CONCLUSION: Data indicate that migration motives for nurses are complex and inherent in historical links and in global values. Nurses stressed that they would like to stay in their own countries and help develop healthcare there, but reasons for moving were often strong and apparently not within their control. RELEVANCE TO CLINICAL PRACTICE: Nurse migration from sub-Saharan African has often been cited as a limitation in providing effective healthcare in those countries. Delineating motivational factors for nurses could help to stem this migration.

Lozano, M., et al. (2015). "International recruitment of health workers: British lessons for Europe? Emerging concerns and future research recommendations." Int J Health Serv **45**(2): 306-319.

Immigration as a solution to staff and skill shortages in the health system is increasingly on the agenda in the European Union. This article highlights the related social and policy dilemmas by comparing a new destination country with an old destination country: Spain and the United Kingdom. After describing the challenges met by the United Kingdom, we ask how well-prepared Spain is to face the same issues. In particular, attention is paid to the occupational mobility of health workers after entry and to how immigration as a staffing solution poses new political and social challenges. Through a review of background information regarding the immigration of health workers in the two countries and the preliminary analysis of 15 exploratory interviews, we aim to identify the primary trends and key concerns for future analysis. Although our interviews only allow us to draw tentative conclusions, they do highlight emerging issues to be explored in the near future. Our conclusions show that many of the problems traditionally encountered in the United Kingdom are now emerging in Spain, suggesting scope for further collaboration among government, employers, and other stakeholders across the European Union.

Magennis, P., Begley, A., Hölzle, F., et al. (2020). "United Kingdom immigration and emigration of oral and maxillofacial Surgery (OMFS) specialists 2000-2020: how might Brexit impact on OMFS?" Br J Oral Maxillofac Surg **58**(10): 1304-1309.

The United Kingdom left the European Union (EU) in January 2020. As it is unclear how many of the rights of OMFS surgeons to travel and work will remain after the transition period, we have reviewed how these rights have been used in the past. The OMFS specialist list from the GMC was compared with a database of current OMFS colleagues. Data were analysed using WinStat® (R. Fitch Software). Of 494 active surgeons on the OMFS specialist list, 23 (5%) completed their OMFS training outside the UK. Of these, 22 were specialists from Europe of whom 12 were substantive NHS consultants with others working as Fellows or visiting the UK occasionally. Two per cent of UK OMFS consultants are - specialists from Europe, the majority from Greece. Of the OMFS specialists who completed training in the UK since 1995, 24 are currently working outside the UK, and of them, 16 left the UK to return to their nation of origin (all 11 of those working in the European Economic Area [EEA] were born there). Of the seven UK-born specialists working overseas, none was working in the EEA. Twenty per cent of UK trainees whose primary degree was known (n = 117) received their primary qualification outside the UK, 38 in from the EU, and 79 from further afield. The majority of these UK trained specialists with non-UK first degrees (n = 101) stayed in the UK to work after training. The most significant impact of Brexit on OMFS could be a restriction on the opportunity for non-UK doctors and dentists to come to the UK to train and stay to work.

McAleese, S., et al. (2016). "Gone for good? An online survey of emigrant health professionals using Facebook as a recruitment tool." Hum Resour Health **14**(Suppl 1): 34.

BACKGROUND: Health professionals, particularly doctors, nurses and midwives, are in high demand worldwide. Therefore, it is important to assess the future plans and likelihood of return of emigrating health professionals. Nevertheless, health professionals are, by definition, a difficult population to track/survey. This exploratory study reports on the migration intentions of a sample of doctors, nurses and midwives who had emigrated from Ireland, a high-income country which has experienced particularly high outward and inward migration of health professionals since the year 2000. METHODS: Health professionals who had emigrated from Ireland were identified via snowball sampling through Facebook and invited to complete a short online survey composed of closed and open response questions. RESULTS: A total of 388 health professionals (307 doctors, 73 nurses and 8 midwives) who had previously worked in Ireland completed the survey. While over half had originally intended to spend less than 5 years in their destination country at the time of emigration, these intentions changed over time, with the desire to remain abroad on a permanent basis increasing from 10 to 34 % of doctor respondents. Only a quarter of doctors and a half of nurses and midwives intended to return to practice in Ireland in the future. CONCLUSIONS: The longer health professionals remain abroad, the less likely they are to return to their home countries. Countries should focus on the implementation of retention strategies if the 'carousel' of brain drain is to be interrupted. This would allow source countries to benefit from their investments in training health professionals, rather than relying on international recruitment to meet health system staffing needs. Improved data collection systems are also needed to track the migratory patterns and changing intentions of health professionals. Meanwhile, social networking platforms offer alternative methods of filling this information gap.

Novakova, M. (2015). Migration of health workers in the EU
http://www.iises.net/proceedings/international-academic-conference-rome/table-of-content

Migration of health workers for better opportunities either within the country or abroad creates global concern because of the burden of health systems in developing countries. Migration of healthworkers caused serious global health problem, which is reflected in all aspects of society -

Ognyanova, D., et al. (2012). "Mobility of health professionals pre and post 2004 and 2007 EU enlargements: evidence from the EU project PROMeTHEUS." Health Policy **108**(2-3): 122-132.

BACKGROUND: EU enlargement has facilitated the mobility of EU citizens, including health professionals, from the 2004 and 2007 EU accession states. Fears have been raised about a mass exodus of health professionals and the consequences for the operation of health systems. However, to date a systematic analysis of the EU enlargement's effects on the mobility of health professionals has been lacking. The aim of this article is to shed light on the changes in the scale of movement, trends and directions of flows pre and post 2004 and 2007 EU enlargements. METHODS: The study follows a pan-European secondary data analysis to (i) quantitatively and (ii) qualitatively analyse mobility before and after the EU enlargement. (i) The secondary data analysis covers 34 countries (including all EU Member States). (ii) Data were triangulated with the findings of 17 country case studies to qualitatively assess the effects of enlargement on health workforce mobility. RESULTS: The stock of health professionals from the new (EU-12) into the old EU Member States (EU-15) have increased following EU accession. The stock of medical doctors from the EU-12 in the EU-15 countries has more than doubled between 2003 and 2007. The available data suggest the same trend for dentists. The extremely limited data for nurses show that the stock of nurses has, in contrast, only slightly increased. However, while no reliable data is available evidence suggests that the number of undocumented or self-employed migrant nurses in the home-care sector has significantly increased. Health professionals trained in the EU-12 are becoming increasingly important in providing sufficient health care in some destination countries and regions facing staff shortages. CONCLUSION: A mass exodus of health professionals has not taken place after the 2004 and 2007 EU enlargements. The estimated annual outflows from the EU-12 countries have rarely exceeded 3% of the domestic workforce. This is partly due to labour market restrictions in the destination countries, but also to improvements in salaries and working conditions in some source countries. The overall mobility of health professionals is hence relatively moderate and in line with the overall movement of citizens within the EU. However, for some countries even losing small numbers of health professionals can have impacts in underserved regions.

Paina, L., et al. (2016). "Implementing the Code of Practice on International Recruitment in Romania - exploring the current state of implementation and what Romania is doing to retain its domestic health workforce." Hum Resour Health **14**(Suppl 1): 22.

BACKGROUND: The Romanian health system is struggling to retain its health workers, who are currently facing strong incentives for migration to Western European health systems. Retention issues, coupled with high levels of migration, complicate Romania's efforts in providing basic health services for rural, underserved, and marginalized populations, as well as in achieving equitable health access for all. The WHO Global Code of Practice on International Recruitment of Health Personnel (the Code) aims to promote ethical international recruitment and health systems strengthening. We explore Romania's implementation of the Code's principles and recommendations. METHODS: We analysed peer-reviewed and grey literature, in English and Romanian, and sought secondary data from the websites of Romania's largest medical universities. The analysis was guided by the following themes and recommendations in the Code: health personnel development and health systems sustainability, international cooperation, data gathering, information exchange, and implementation and monitoring of the Code. RESULTS: Romania's implementation of the Code was observed to be limited. Gaps were identified with regards to several aspects of the Romanian health system, including the lack of support to health personnel training, recruitment, and retention in order to increase the appeal for health providers to practice in Romania and in underserved areas. In terms of international cooperation, the Code recommends various policy instruments to guide recruitment, including bilateral agreements. However, we could not determine which of these instruments were used as a result of the Code and whether or not they were effective. We identified little evidence of initiatives for health workers' professional and personal support. Insufficient data and few information exchange platforms exist on health workforce issues, hindering active sharing of data on migration with European Union and WHO audiences. We could not identify any evidence of monitoring of the Code's implementation to date. CONCLUSIONS: In the absence of major system reforms, health workers will continue to migrate to urban areas and abroad. Romanian policymakers should address more of the Code's recommendations by developing a national policy for human resources for health, a central database to aid health workforce planning and management, stronger platforms for information exchange and civil society engagement, and updated and transparent bilateral agreements.

Pantenburg, B., Kitze, K., Luppa, M., et al. (2018). "Physician emigration from Germany: insights from a survey in Saxony, Germany." BMC Health Serv Res **18**(1): 341.

BACKGROUND: Physician migration has been gaining attention worldwide. In Germany, physician migration became a topic of interest in the context of the discussion about a shortage of physicians, for which one contributing factor may be physicians leaving the country. However, there is a lack of literature on "push" factors causing German physicians to leave. The present study seeks to provide current data in an effort to promote the identification of "push" factors motivating German physicians to emigrate. METHODS: In a cross-sectional survey, all physicians </=40 years of age registered with the State Chamber of Physicians of Saxony, Germany (n = 5956) were sent a paper-pencil questionnaire examining socio-demographics, job satisfaction, the wish to emigrate, and the likelihood of moving abroad in the near future. Variables associated with the wish to emigrate were assessed with multivariate logistic regression models. RESULTS: Approximately 30% of participants wished to emigrate. The favourite destination countries were Switzerland, Scandinavian countries, and Australia or New Zealand. Of participants wishing to emigrate, approximately 52% thought it likely to emigrate for a limited, and 15% for an unlimited period of time. Participants with the wish to emigrate were significantly less satisfied with their job situation as compared to physicians without the wish to emigrate, the one exception being their "relationship with patients". The three aspects with the highest difference in satisfaction were the overall work situation, followed by work load, and time for family, friends, and leisure activities. Being a woman, being in a relationship, and having children were associated with a lower chance for wishing to emigrate. Higher satisfaction with the factors "work load", "patient care", and "structural aspects" was also associated with a lower chance for wishing to emigrate. CONCLUSIONS: Emigration seems to be a viable option for at least a subset of physicians. Preventive measures should address modifiable determinants associated with an increased chance for wishing to emigrate, such as job satisfaction. Especially satisfaction with the factor "work load" seems to play a crucial role as a "push" factor for physician emigration.

Pinto da Costa, M., Moreira, C., Castro-de-Araujo, L. F. S., et al. (2021). "Migration of Junior Doctors: The Case of Psychiatric Trainees in Portugal." Acta Med Port **34**(7-8): 533-540.

INTRODUCTION: In the last few decades, the rates of international medical migration have continuously risen. In Psychiatry, there is great disparity in the workforce between high and low-income countries. Yet, little is known about the 'push' and 'pull' factors and the migratory intentions of trainees. This study aims to assess the factors impacting the decisions of psychiatric trainees in Portugal towards migration. MATERIAL AND METHODS: A questionnaire was developed in the Brain Drain study and was distributed to psychiatric trainees in Portugal. RESULTS: The sample consists of 104 psychiatric trainees (60.6% female). Overall, 40.4% of the trainees had prior experience of living abroad and the majority (96.9%) felt that this experience influenced their attitude towards migration in a positive way. About 75% of trainees had 'ever' considered leaving the country, but the majority (70.0%) had not taken any 'practical steps' towards migration. The main reasons to stay in Portugal were personal, while the main reason to leave was financial. The majority of the trainees (55.7%) were dissatisfied or very dissatisfied with their income, working conditions and academic opportunities. DISCUSSION: Working conditions, salaries and academic opportunities are the main triggers for the migration of psychiatric trainees from Portugal. CONCLUSION: These results may inform the decisions of stakeholders in the health and education sectors and point out the necessary investments required and the impact it may have on the workforce.

Rosenqvist, U. et Backlund, L. (2010). "Career entry and career perspectives of medical graduates in Sweden." Cahiers De Sociologie Et De Demographie Medicales **50**: 101-119.

Schmidt, S. et Gresser, U. (2014). "[Development and consequences of physician shortages in Bavaria]." Versicherungsmedizin **66**(1): 25-29.

AIM: Germany's growing shortage of doctors is a current topic of numerous discussions in healthcare policy. The objective of this study is to show the medical supply situation and migratory movement of

doctors in the outpatient and inpatient physician care sector, with particular emphasis on the immigration of foreign doctors to Germany and its consequences. SUBJECTS AND METHODS: The annual statistical reports from the Bavarian Medical Association and the Federal Medical Association were investigated with regard to foreign doctors and migratory movements. To establish Bavaria's situation regarding outpatient physician care, unpublished case reports and planning sheets of the Statutory Health Insurance Physicians in Bavaria (KVB) were analysed. A survey amongst Bavarian hospitals shows the current situation of the inpatient care sector. RESULTS: The trend of emigration by German doctors continues unabated, especially to Switzerland, UK, USA and Austria. In Bavaria, outpatient care by GPs or specialists is still standard or in oversupply. However, the survey was able to confirm a considerable lack of doctors for inpatient care. So far, it has been possible to compensate existing staff shortages in hospitals by employing foreign doctors, despite significant language deficits. DISCUSSION AND CONCLUSIONS: To resolve the shortage of doctors in future, a reform of the Medical Requirements Planning in combination with structural improvements and measures to integrate immigrant doctors is essential.

Starkiene, L., et al. (2013). "Retaining physicians in Lithuania: integrating research and health policy." Health Policy **110**(1): 39-48.

Many of the strategic planning studies worldwide have made recommendations to the policy makers on the steps to be taken in eliminating the perceived shortages of physician workforce or in improving their distribution and retention. Policy makers have also considered various policy interventions to ensure adequate numbers of physicians. This study reviewed the research evidence and health policy decisions taken from 2000 to 2010 in Lithuania and evaluated the chronological links over time between scientific recommendations and policy decisions. From the analysis it would seem that Lithuania's success in retaining physicians between 2000 and 2010 was influenced by the timely implementation of particular research recommendations, such as increased salaries and increased enrolment to physician training programmes. In addition were the health policy interventions such as health sector reform, change in the legal status of medical residents and establishment of professional re-entry programmes. Based on this evidence it is recommended that policy makers in Lithuania as well as in other countries should consider comprehensive and systematic health policy approaches that combine and address various aspects of physician training, retention, geographic mal-distribution and emigration. Implementation of such an inclusive policy however is impossible without the integration of research into strategic decision making in workforce planning and effective health policy interventions.

Sturesson, L. et Ohlander, M. (2019). "Migrant physicians' conceptions of working in rural and remote areas in Sweden: A qualitative study." PLoS One **14**(1): e0210598.

OBJECTIVE: To explore migrant physicians' conceptions about working in rural and remote areas in Sweden to understand what influences their motivation to work in these areas. METHOD AND MATERIAL: The study employed a qualitative approach with semi-structured interviews with 24 migrant physicians. Transcripts were thematically analysed. RESULTS: Conceptions were identified about foremost work content and tasks, and about living in rural and remote areas. Work content and tasks related to the health care systems, type of health care facility, duties, specialty, resources, patient population, colleagues, and professional development. Conceptions about living concerned geographical characteristics, people living in rural and remote areas, opportunities for travelling, family, leisure activities, social life, and language skills. Conceptions seemed to be influenced by individual, professional and societal aspects from both previous countries and Sweden. Conceptions and biographical aspects both appeared to affect motivation. DISCUSSION: Motivation regarding working in rural and remote areas appeared to be influenced by conceptions of these areas. A specific type of place could be understood as being able to provide (or not) the external conditions needed for fulfilling needs and reaching goals, whether professional or personal, and as a tool for reaching or facilitating the achievement of these. Conceptions of an area can hence affect motivation and choices for where to work and live. However, biographical aspects also impact motivation. Our results indicate that positive rural experience in the recipient country might be a predictor for motivation. CONCLUSION: Professional and personal life and are intertwined. Conceptions about an area influence

willingness to work there. Willingness is also affected by, and intertwined with, other aspects such as previous experiences, age, marital status and family circumstances.

Topsever, P. et Filiz, T. M. (2010). "Career entry and career perspectives of medical graduates in Turkey." Cahiers De Sociologie Et De Demographie Medicales **50**: 145-163.

Van den Bussche, H. et Du Moulin, M. (2010). "Career entry and career perspectives of medical graduates in Germany." Cahiers De Sociologie Et De Demographie Medicales **50**: 43-61.

Varga, J. (2017). "Out-Migration and Attrition of Physicians and Dentists before and after EU Accession (2003 and 2011): The Case of Hungary." European Journal of Health Economics **18**(9): 1079-1093.

This paper employs a large-scale, individual-level, panel dataset to analyse the effect of EU accession on the probability of out-migration on the part of Hungarian physicians and dentists between 2003 and 2011. The study uses event history modelling and competing risk models. The results show that EU accession did not at the time affect the probability of out-migration while after the end of the transitional period of restrictions on the free movement of labour from the new EU member states to Austria and Germany, the probability of doctors' migration increased considerably. Relative wages and peer pressure also exercise a significant role in the out-migration decisions of young medical doctors. We also find that more than half of those medical doctors who left the country during the observation period returned some time later. The data furthermore suggest a massive flow of doctors to domestic jobs outside the health care system.

Wang, S., et al. (2012). "Comparing the treatment provided by UK and non-UK trained health professionals: dentists in Scotland." J Health Serv Res Policy **17**(4): 227-232.

OBJECTIVES: To examine differences in the amount of treatment provided by UK and non-UK trained dentists in the Scottish National Health Service. METHODS: Using a unique administrative data set, we utilize multivariate fixed effects regression models that control for patient characteristics and unobserved heterogeneity across dentists to explore the extent of treatment delivered. RESULTS: Non-UK trained dentists initially provide more treatment than UK-trained dentists, but over approximately two years of practice their treatment converge. CONCLUSIONS: As with many OECD countries, the UK relies on foreign-trained health professionals to address workforce shortages and one concern is whether they provide equivalent health care to their domestically trained counterparts. Whilst there is a difference in the amount of treatment provided by UK and non-UK trained dentists, the effect is modest and transitory.

Wets, J. et De, B., T. (2011). La migration : la solution aux pénuries de personnel dans le secteur des soins et de la santé ? Bruxelles Fondation Roi Baudouin**:** 113 , tabl., fig.
https://lirias.kuleuven.be/handle/123456789/331046

Comme d'autres pays de l'Union européenne, la Belgique fait face à de grands défis dans le secteur des soins et de la santé. La demande de personnel soignant ne fait que croître sous l'effet du vieillissement de la population et les établissements de soins ont du mal à attirer suffisamment de travailleurs pour pourvoir aux postes vacants. Parmi les pistes qui peuvent être exploitées afin de pallier la pénurie de main-d'oeuvre dans le secteur figure le recrutement de personnel à l'étranger. Depuis plusieurs années, certains hôpitaux et maisons de soins font appel à du personnel étranger. A la demande de la Fondation Roi Baudouin, HIVA (KULeuven) a réalisé une étude visant à examiner ce phénomène de plus près. Qu'en est-il de la présence en Belgique de professionnels de la santé d'origine étrangère ? Quels sont les principaux pays dont ils proviennent et par quels canaux arrivent-ils sur notre marché du travail ? Quel est le rôle joué par les agences de recrutement ? Quel est l'impact sur les pays d?origine ? C?est notamment à ces questions que cette étude tente d?apporter une réponse.

Wismar, M. ‘éd.) et al. (2011). Health professional mobility and health systems: evidence from 17 European countries, Copenhague : OMS Bureau régional de l'Europe

http://www.euro.who.int/__data/assets/pdf_file/0017/152324/e95812.pdf

The mobility of health professionals affects the performance of health systems, and increasingly so since the European Union (EU) enlargements in 2004 and 2007. This publication presents research on the gaps in knowledge about the numbers, trends, impacts and policy responses to this dynamic situation, in particular in Austria, Belgium, Estonia, Finland, France, Germany, Hungary, Italy, Lithuania, Poland, Romania, Serbia, Slovakia, Slovenia, Spain, Turkey and the United Kingdom. Conducted within the framework of the European Commission's Health PROMeTHEUS project, the research posed and answered a set of questions of key interest to policy-makers, offering evidence of the nature and extent of health professionals mobility in the EU, analysing its impact on country health systems and outlining some major policy strategies to address mobility.

ÉTUDES INTERNATIONALES

Études comparées

Adovor, E., Czaika, M., Docquier, F., Moullan, Y. (2021). "Medical Brain Drain: How Many, Where and Why?" Journal of Health Economics **76**.

Chojnicki, X. et Moullan, Y. (2018). "Is there a 'pig cycle' in the labour supply of doctors? How training and immigration policies respond to physician shortages." Soc Sci Med **200**: 227-237.

Moullan, Y. et Bourgueil, Y. (2014). "Les migrations internationales de médecins : impacts et implications politiques." Questions D'economie De La Sante (Irdes)(203): 1-8.

Socha-Dietrich, K. et Dumont, J. C. (2021). International migration and movement of nursing personnel to and within OECD countries - 2000 to 2018: Developments in countries of destination and impact on countries of origin. OECD Health Working Papers ; 125. Paris OCDE**:** 41.

Abuagla, A. et Badr, E. (2016). "Challenges to implementation of the WHO Global Code of Practice on International Recruitment of Health Personnel: the case of Sudan." Hum Resour Health **14**(Suppl 1): 26.

> BACKGROUND: The WHO Global Code of Practice on the International Recruitment of Health Personnel (hereafter the WHO Code) was adopted by the World Health Assembly in 2010 as a voluntary instrument to address challenges of health worker migration worldwide. To ascertain its relevance and effectiveness, the implementation of the WHO Code needs to be assessed based on country experience; hence, this case study on Sudan. METHODS: This qualitative study depended mainly on documentary sources in addition to key informant interviews. Experiences of the authors has informed the analysis. RESULTS: Migration of Sudanese health workers represents a major health system challenge. Over half of Sudanese physicians practice abroad and new trends are showing involvement of other professions and increased feminization. Traditional destinations include Gulf States, especially Saudi Arabia and Libya, as well as the United Kingdom and the Republic of Ireland. Low salaries, poor work environment, and a lack of adequate professional development are the leading push factors. Massive emigration of skilled health workers has jeopardized coverage and quality of healthcare and health professional education. Poor evidence, lack of a national policy, and active recruitment in addition to labour market problems were barriers for effective migration management in Sudan. Response of destination countries in relation to cooperative arrangements with Sudan as a source country has always been suboptimal, demonstrating less attention to solidarity and ethical dimensions. The WHO Code boosted Sudan's efforts to address health worker migration and health workforce development in general. Improving migration evidence, fostering a national dialogue, and promoting bilateral agreements in addition to catalysing health worker retention strategies are some of the benefits accrued. There are, however, limitations in publicity of the WHO Code and its incorporation into national laws and regulatory frameworks for ethical recruitment. The outlook is bleak for Sudan unless the country designs and implements a robust national policy for migration management and unless prospects for source-destination country collaboration improve within a more sound version of the WHO Code. CONCLUSIONS: The WHO Code catalysed some vital steps in managing migration and strengthening the national health workforce in Sudan. Nevertheless, the country has not utilized the full potential of this instrument. Revisions of the WHO Code would benefit much from lessons of its application in the context of developing countries such as Sudan.

Adebayo, A. et Akinyemi, O. O. (2021). ""What Are You Really Doing in This Country?": Emigration Intentions of Nigerian Doctors and Their Policy Implications for Human Resource for Health Management." J Int Migr Integr: 1-20.

> The emigration of doctors from Nigeria has been on the increase in recent years, with no obvious efforts to manage or mitigate the negative impacts of this growing trend on the already weak health

system. This study assessed the emigration intentions of doctors undergoing residency training at the premier tertiary healthcare center in Nigeria and the factors that influence these intentions. This mixed-method study was cross-sectional in design. A semi-structured questionnaire was used to identify the factors that influence the emigration intentions of resident doctors at the University College Hospital, Ibadan, Southwest Nigeria. In-depth interviews (IDIs) were also conducted to further explore the push and pull factors identified from the survey and their migration preferences. A total of 244 resident doctors completed the questionnaires and 10 participated in the IDIs. Overall, 57.4% of the respondents had emigration intentions and 34.8% had made various attempts at emigrating. Major factors that encouraged resident doctors to emigrate to developed countries included better working and living conditions, good salary and the opportunity for career advancement in destination countries. Family ties was the single most important factor that deterred resident doctors from emigrating. The UK was found to be the top preferred destination. Strategic approaches and multisectoral collaborations will be required to address doctors' emigration from Nigeria. These efforts should be targeted at not just the health sector but should also include the social and economic aspects of the lives of resident doctors, to improve their living conditions.

Adovor, E., Czaika, M., Docquier, F., et al. (2021). "Medical Brain Drain: How Many, Where and Why?" Journal of Health Economics **76**.

https://www.sciencedirect.com/science/article/abs/pii/S0167629620310559?via%3Dihub
We build a new database documenting the evolution of physician migration over a period of 25 years (1990-2014), and use it to empirically shed light on its determinants. In relative terms, the highest emigration rates are observed in small island nations and low-income countries, where needs-based deficits of healthcare workers are often estimated to be most severe. Over time, we identify rising trends in Caribbean islands, Central Asia and Eastern Europe. On the contrary, despite increasing migration flows to Western Europe, physician migration rates from sub-Saharan Africa have been stable or even decreasing. Our empirical analysis reveals that physician migration is a complex phenomenon that results from a myriad of push, pull, and dyadic factors. It is strongly affected by the economic characteristics of origin and destination countries. The sensitivity to these push and pull factors is governed by linguistic and geographic ties between countries. Interestingly, we find that the evolution of medical brain drain is affected by immigration policies aimed at attracting high-skilled workers. In particular, physician migration is sensitive to visa restrictions, diploma recognition, points-based system, tax breaks towards migrants, and the option of obtaining a permanent resident status.

Bradby, H. (2014). "International medical migration: a critical conceptual review of the global movements of doctors and nurses." Health (London) **18**(6): 580-596.

This paper critically appraises the discourse around international medical migration at the turn of the 21st century. A critical narrative review of a range of English-language sources, including grey literature, books and research reports, traces the development and spread of specific causative models. The attribution of causative relations between the movement of skilled medical workers, the provision of health care and population health outcomes illustrates how the global reach of biomedicine has to be understood in the context of local conditions. The need to understand migration as an aspect of uneven global development, rather than a delimited issue of manpower services management, is illustrated with reference to debates about 'brain drain' of Africa's health-care professionals, task-shifting and the crisis in health-care human resources. The widespread presumed cause of shortages of skilled health-care staff in sub-Saharan Africa was overdetermined by a compelling narrative of rich countries stealing poor countries' trained health-care professionals. This narrative promotes medical professional interests and ignores historical patterns of underinvestment in health-care systems and structures. Sociological theories of medicalization suggest that the international marketization of medical recruitment is a key site where the uneven global development of capital is at work. A radical reconfiguration of medical staffing along the lines of 'task-shifting' in rich and poor countries' health-care systems alike offers one means of thinking about global equity in access to quality care.

Castel, O. C., et al. (2011). "Can outcome-based continuing medical education improve performance of immigrant physicians?" J Contin Educ Health Prof **31**(1): 34-42.

INTRODUCTION: Immigrant physicians are a valued resource for physician workforces in many countries. Few studies have explored the education and training needs of immigrant physicians and ways to facilitate their integration into the health care system in which they work. Using an educational program developed for immigrant civilian physicians working in military primary care clinics at the Israel Defence Force, we illustrate how an outcome-based CME program can address practicing physicians' needs for military-specific primary care education and improve patient care. METHODS: Following an extensive needs assessment, a 3-year curriculum was developed. The curriculum was delivered by a multidisciplinary educational team. Pre/post multiple-choice examinations, objective structured clinical examinations (OSCE), and end-of-program evaluations were administered for curriculum evaluation. To evaluate change in learners' performance, data from the 2003 (before-program) and 2006 (after-program) work-based assessments were retrieved retrospectively. Change in the performance of program participants was compared with that of immigrant physicians who did not participate in the program. RESULTS: Out of 28 learners, 23 (82%) completed the program. Learners did significantly better in the annual post-tests compared with the pretests ($p < .01$) and improved their OSCE scores ($p < .001$). Most program graduates (90%) rated overall satisfaction as very good or excellent. In comparison with nonparticipants, program graduates performed better on work-based assessments (Cohen's $d = .63$). DISCUSSION: Our intensive, outcome-based, longitudinal CME program has yielded encouraging results. Other medical educators, facing the challenge of integrating immigrant physicians to fit their health care system, may consider adapting our approach.

Chojnicki, X. et Oden-Defoort, C. (2010). "Is There a Medical Brain Drain?" International Economics **124**: 101-126.

This paper offers initial insights on the general circumstances under which a beneficial or a detrimental brain drain is obtained in the medical sector. For that purpose, we use an original dataset so as to analyze determinants of the evolution in the relative number of medical doctors in the world since the beginning of the 1990s. More precisely, we ask whether countries are converging or diverging in terms of the number of medical doctors and whether migration perspective gives an incentive to undergo medical studies. Our econometrics results show that (i) countries experience a (conditional) convergence process in their long-run equilibrium in terms of medical doctors per capita; (ii) the emigration rate of medical doctors has a positive and significant impact on education decision in the poorest countries. Some counterfactual experiments reveal that some African countries can benefit from the departure of their medical workers if emigration rates but under very restrictive conditions on medical doctors' emigration rates.

Chojnicki, X. et Moullan, Y. (2018). "Is there a 'pig cycle' in the labour supply of doctors? How training and immigration policies respond to physician shortages." Soc Sci Med **200**: 227-237.

Many OECD countries are faced with the considerable challenge of a physician shortage. This paper investigates the strategies that OECD governments adopt and determines whether these policies effectively address these medical shortages. Due to the amount of time medical training requires, it takes longer for an expansion in medical school capacity to have an effect than the recruitment of foreign-trained physicians. Using data obtained from the OECD (2014) and Bhargava et al. (2011), we constructed a unique country-level panel dataset that includes annual data for 17 OECD countries on physician shortages, the number of medical school graduates and immigration and emigration rates from 1991 to 2004. By calculating panel fixed-effect estimates, we find that after a period of medical shortages, OECD governments produce more medical graduates in the long run but in the short term, they primarily recruit from abroad; however, at the same time, certain practising physicians choose to emigrate. Simulation results show the limits of recruiting only abroad in the long term but also highlight its appropriateness for the short term when there is a recurrent cycle of shortages/surpluses in the labour supply of physicians (pig cycle theory).

Clarke, N., Crowe, S., Humphries, N., et al. (2017). "Factors influencing trainee doctor emigration in a high income country: a mixed methods study." Hum Resour Health **15**(1): 66.

Ferreira, P. L., Raposo, V., Tavares, A. I., et al. (2020). "Drivers for emigration among healthcare professionals: Testing an analytical model in a primary healthcare setting." Health Policy **124**(7): 751-757.

This paper aims to contribute to the discussion on health workforce migration, notably by testing an analytical model of the individual drivers for a professional to decide to emigrate. A large database was obtained from all primary health care units on mainland Portugal. A professional satisfaction survey was conducted and information on social-economic, labour and job satisfaction characteristics, including burnout, was obtained. Results showed that healthcare professionals who reported intention to emigrate are mostly male, young, not married, and more educated; they consider their income insufficient for their needs, and show higher levels of burnout at work and professional dissatisfaction. This profile is slightly different for GPs and nurses. The results obtained contribute to the discussion on what motivates primary health care professionals, including GPs and nurses, to emigrate. They also provide insight into the design of policy measures that may mitigate the intention of these healthcare professionals in general to emigrate.

Giraud, J., Poitou-Charentes, O., Favier, A., et al. (2016). Les mobilités internationales des professions de santé : flux entrants et sortants des médecin s, chirurgiens- dentistes, sages-femmes et pharmaciens, ONDPS**:** 185.

Grignon, M., et al. (2012). The International Migration of Health Professionals. IZA Working Paper; 6517. Bonn IZA**:** 39 , fig.
http://ftp.iza.org/dp6517.pdf

Health workforce shortages in developed countries are perceived to be central drivers of health professionals' international migration, one ramification being negative impacts on developing nations' healthcare delivery. After a descriptive international overview, selected economic issues are discussed for developed and developing countries. Health labour markets' unique characteristics imply great complexity in developed economies involving government intervention, licensure, regulation, and (quasi-)union activity. These features affect migrants' decisions, economic integration, and impacts on the receiving nations' health workforce and society. Developing countries sometimes educate citizens in expectation of emigration, while others pursue international treaties in attempts to manage migrant flows.

Grignon, M., et al. (2013). The International Migration of Health Professionals. International Handbook on the Economics of Migration. Constant, A. F. etZimmermann, K. F., Cheltenham, U.K. and Northampton, Mass.: Elgar**:** 75-97.

Humphries, N., et al. (2012). "Nurse migration and health workforce planning: Ireland as illustrative of international challenges." Health Policy **107**(1): 44-53.

Ireland began actively recruiting nurses internationally in 2000. Between 2000 and 2010, 35% of new recruits into the health system were non-EU migrant nurses. Ireland is more heavily reliant upon international nurse recruitment than the UK, New Zealand or Australia. This paper draws on in-depth interviews (N=21) conducted in 2007 with non-EU migrant nurses working in Ireland, a quantitative survey of non-EU migrant nurses (N=337) conducted in 2009 and in-depth interviews conducted with key stakeholders (N=12) in late 2009/early 2010. Available primary and secondary data indicate a fresh challenge for health workforce planning in Ireland as immigration slows and nurses (both non-EU and Irish trained) consider emigration. Successful international nurse recruitment campaigns obviated the need for health workforce planning in the short-term, however the assumption that international nurse recruitment had 'solved' the nursing shortage was short-lived and the current presumption that nurse migration (both emigration and immigration) will always 'work' for Ireland over-plays the reliability of migration as a health workforce planning tool. This article analyses Ireland's experience of international nurse recruitment 2000-2010, providing a case study which is illustrative of health workforce planning challenges faced internationally.

Hounsou, C. F. (2014). "En quête du métier de médecin." Hommes & migrations(1307): 105-114.

Les politiques d'immigration choisie mises en place par les pays du Nord ont accru la mobilité internationale des travailleurs hautement qualifiés. Dans le secteur du soin, elles s'accompagnent de logiques néolibérales visant à pour pallier le manque de main-d'œuvre. Le cas de la migration des médecins originaires d'Afrique de l'Ouest vers la France permet d'analyser les conditions de leur exercice en France. Si la question de leur retour dans leur pays d'origine continue de se poser, il est temps de s'affranchir du paradigme de la fuite des cerveaux.

Jourdain, A. et Pham, T. (2017). "Mobilité spatiale des médecins en Europe, politique de santé et offre de soins." Sante Publique **29**(1): 81-87.

Objectif : Définir la place de la mobilité géographique des professionnels dans les politiques relatives à la démographie médicale dans les pays de l'Union Européenne. Méthodes : Examen des hypothèses de migration internationale dans les modèles nationaux de projection du nombre de médecins par grandes catégories de systèmes de protection sociale dans l'UE. Résultats : Tous les pays ne réalisent pas de projections à moyen terme du nombre de médecins. Ceux qui le font retiennent l'hypothèse d'une migration nette qui converge à terme vers zéro. La migration n'est pas traitée comme une solution à la pénurie prévisible de médecins, mais plutôt comme un problème à traiter. Discussion : Trois approches de la mobilité professionnelle sont discutées : libérale, normative et éthique. La dernière semble la plus populaire, elle associe la préservation des intérêts nationaux au code global de l'Organisation mondiale de la santé sur le recrutement international des professionnels de santé.

Khadria, B. (2012). "Migration of Health Workers and Health of International Migrants: Framework for Bridging Some Knowledge Disjoints between Brain Drain and Brawn Drain." International Journal of Public Policy **8**(4-6): 266-280.

A paradox in knowledge management paradigms is posed: that leading to a dichotomy between factor-endowment and factor-use in the health sector of any given country. While investment in acquiring health knowledge embodied in overseas health workers from other countries could lead to better health and therefore higher productivity of the native workforce in the developed North countries, immigration of overseas non-health-workers, particularly those at the lower end of the skill spectrum, could neutralise that advantage if their health and therefore productivity is allowed to wither away. For the developing South countries, this adds a new question in the policy debate on brain drain - whether 'drain' of knowledge for the origin country as defined in terms of loss of benefits to the people physically left behind within its sovereign geographical territory, or a more inclusive and wider definition of 'drain' of knowledge for its people irrespective of their physical location in a globalised and interconnected world. The latter definition could have significant implications for bridging our knowledge disjoints between health policies involving migrants and migration policies involving health workers.

Lantz, A., Holmer, H., Finlayson, S. R. G., et al. (2020). "Measuring the migration of surgical specialists." Surgery **168**(3): 550-557.

BACKGROUND: The lack of access to essential surgical care in low-income countries is aggravated by emigration of locally-trained surgical specialists to more affluent regions. Yet, the global diaspora of surgeons, obstetricians, and anesthesiologists from low-income and middle-income countries has never been fully described and compared with those who have remained in their country of origin. It is also unclear whether the surgical workforce is more affected by international migration than other medical specialists. In this study, we aimed to quantify the proportion of surgical specialists originating from low-income and middle-income countries that currently work in high-income countries. METHODS: We retrieved surgical workforce data from 48 high-income countries and 102 low-income and middle-income countries using the database of the World Health Organization Global Surgical Workforce. We then compared this domestic workforce with more granular data on the country of initial medical qualification of all surgeons, anesthesiologists, and obstetricians made available for 14

selected high-income countries to calculate the proportion of surgical specialists working abroad. RESULTS: We identified 1,118,804 specialist surgeons, anesthesiologists, or obstetricians from 102 low-income and middle-income countries, of whom 33,021 (3.0%) worked in the 14 included high-income countries. The proportion of surgical specialists abroad was greatest for the African and South East Asian regions (12.8% and 12.1%). The proportion of specialists abroad was not greater for surgeons, anesthesiologists, or obstetricians than for physicians and other medical specialists (P = .465). Overall, the countries with the lowest remaining density of surgical specialists were also the countries from which the largest proportion of graduates were now working in high-income countries (P = .011). CONCLUSION: A substantial proportion of all surgeons, anesthesiologists, and obstetricians from low-income and middle-income countries currently work in high-income countries. In addition to decreasing migration from areas of surgical need, innovative strategies to retain and strengthen the surgical workforce could involve engaging this large international pool of surgical specialists and instructors.

Motala, M. I. et Van Wyk, J. M. (2019). "Experiences of foreign medical graduates (FMGs), international medical graduates (IMGs) and overseas trained graduates (OTGs) on entering developing or middle-income countries like South Africa: a scoping review." Hum Resour Health **17**(1): 7.

BACKGROUND: Foreign medical graduates (FMGs) have continued to render effective health care services to underserved communities in many high- and middle-income countries. In rural and disadvantaged areas of South Africa, FMGs have alleviated the critical shortage of doctors. FMGs experience challenges to adjust to new working environments as they have studied and obtained their medical qualifications in a country that differs from the one where they eventually choose to practise. OBJECTIVES: This scoping review synthesises literature about the experiences of FMGs upon entering a host country and the factors that facilitate their adjustment to the new context. METHODS: The systematic review was performed to analyse articles from an initial scoping of published literature on the experiences and adjustment of FMGs between 2000 and 2016. Searches were conducted through MEDLINE and PUBMED on keywords that included "foreign medical graduates", "experiences" "adjustment", "adaptation" and "assimilation". The database searches yielded 268 articles and a further 3 were identified through other sources. The number of articles was reduced to 20 after the removal of duplicates and the application of the exclusion criteria. A qualitative thematic analysis was performed. RESULTS: The searches revealed an overall lack of studies on the experiences and adjustment of FMGs from the African continent. FMGs faced professional barriers, lacked country-specific knowledge and experienced stress when practising in a new location. They attributed their successful adjustment to innate personal characteristics including a persistent attitude and the use of various coping strategies. Other facilitating factors included early orientation and professional and personal support. CONCLUSION: The review highlighted the need for research from developing and middle-income countries and for an increased awareness of the challenges and enablers to help FMGs adjust to new clinical settings.

Moullan, Y. (2013). "Can Foreign Health Assistance Reduce the Medical Brain Drain?" Journal of Development Studies **49**(10): 1436-1452.

In this article, we analyse the impact of foreign health aid on the emigration rates of physicians. The analysis is based on a dataset of physician emigration rates from 50 source countries between 1998 and 2004. First, we investigate the direct impact of health assistance using the generalised method of moments estimation, and we highlight the significant negative effect of foreign health assistance on the medical brain drain. Second, we show that this effect results more from technical assistance than from financial assistance. Finally, the robustness of our analysis is verified to confirm the validity of the results.

Moullan, Y. et Bourgueil, Y. (2014). "Les migrations internationales de médecins : impacts et implications politiques." Questions D'economie De La Sante (Irdes)(203): 1-8.
http://www.irdes.fr/recherche/questions-d-economie-de-la-sante/203-les-migrations-internationales-de-medecins-impacts-et-implications-politiques.pdf

Si la migration internationale des médecins a fait l'objet de débats autour de la « fuite des cerveaux », peu d'études ont abordé ce sujet dans sa globalité, du fait de l'absence de données statistiques suffisantes. Une base de données originale s'appuyant sur le lieu de formation des médecins – sur la période 1991-2004 –, a permis de dresser un panorama des flux migratoires de médecins, d'en étudier les impacts et d'en tirer des implications de politiques économiques. Les pays d'Asie sont ceux qui envoient le plus de médecins à l'étranger (Inde, Philippines) suivis du Canada et du Royaume-Uni, la France n'arrivant qu'en 25e position. L'Afrique subsaharienne a la densité médicale la plus faible au monde et connaît un taux d'émigration relativement élevé, de 19 % en moyenne en 2004. 60 % des médecins étrangers sont établis aux Etats-Unis en 2004, ce pays accueillant le plus de médecins au monde, et 20 % au Royaume-Uni. L'Australie, le Canada et l'Allemagne en accueillent chacun 3 %, la Belgique 2 % et la France 1,34 %. Quels sont les effets de ces migrations sur les pays de départ, tant du point de vue économique que sur celui des indicateurs de santé ? Quels sont les leviers d'action possibles et les politiques publiques envisageables pour faire face à l'émigration ? Quelle coopération internationale en matière de mobilité internationale des professionnels de santé ? Quels effets sur les politiques de régulation des professions de santé dans les pays d'accueil ?

Nwadiuko, J., Switzer, G. E., Stern, J., et al. (2021). "South African physician emigration and return migration, 1991-2017: a trend analysis." Health Policy Plan **36**(5): 630-638.

Although critical for understanding health labour market trends in low- and middle-income countries (LMICs), longitudinal LMIC health worker emigration and return migration trends are not routinely documented. This article seeks to better understand SA's trends in physician emigration and return migration and whether economic growth and related policies affect migration patterns. This study used physician registry data to analyse patterns of emigration and return migration only among SA-trained physicians registered to practice in top destination countries such as Australia, Canada, New Zealand, the USA or the UK between 1991 and 2017, which represent the top five emigration destinations for this group. A linear regression model analysed the relationship between migration trends (as dependent variables) and SA's economic growth, health financing and HIV prevalence (as independent variables). There has been a 6-fold decline in emigration rates from SA between 1991 and 2017 (from 1.8% to 0.3%/year), with declines in emigration to all five destination countries. About one in three (31.8% or 5095) SA physicians returned from destination countries as of 2017. Annual physician emigration fell by 0.16% for every $100 rise in SA GDP per capita (2011 international dollars) (95% confidence interval -0.60% to -0.086%). As of 2017, 21.6% (11 224) of all SA physicians had active registration in destination nations, down from a peak of 33.5% (16 366) in 2005, a decline largely due to return migration. Changes to the UK's licensing regulations likely affected migration patterns while the Global Code of Practice on International Recruitment contributed little to changes. A country's economic growth might influence physician emigration, with significant contribution from health workforce policy interventions. Return migration monitoring should be incorporated into health workforce planning.

Organisation de Coopération et de Développement Économiques (2020). Contribution of migrant doctors and nurses to tackling the Covid-19 crisis in OECD countries. Paris OCDE.
https://read.oecd-ilibrary.org/view/?ref=132_132856-kmg6jh3kvd&title=Contribution-of-migrant-doctors-and-nurses-to-tackling-COVID-19-crisis-in-OECD-countries

This brief focuses on the contribution of migrant doctors and nurses to OECD health systems and how OECD countries have adapted the recognition of foreign credentials to mobilise additional doctors and nurses with foreign degrees in response to COVID-19. It also highlights the potential impact on countries of origin, some of which were already facing severe shortages of skilled health workers before the COVID-19 pandemic, and the need for a global response to the global health worker shortage.

Organisation de Coopération et de Développement Économiques (2019). Recent Trends in International Migration of Doctors, Nurses and Medical Students. Paris : OCDE
https://www.oecd.org/health/recent-trends-in-international-migration-of-doctors-nurses-and-medical-students-5571ef48-en.htm

This report describes recent trends in the international migration of doctors and nurses in OECD countries. Over the past decade, the number of doctors and nurses has increased in many OECD countries, and foreign-born and foreign-trained doctors and nurses have contributed to a significant extent. New in-depth analysis of the internationalisation of medical education shows that in some countries (e.g. Israel, Norway, Sweden and the United States) a large and growing number of foreign-trained doctors are people born in these countries who obtained their first medical degree abroad before coming back. The report includes four case studies on the internationalisation of medical education in Europe (France, Ireland, Poland and Romania) as well as a case study on the integration of foreign-trained doctors in Canada.

Organisation de Coopération et de Développement Économiques (2010). "Les migrations internationales des personnels de santé. Améliorer la coopération internationale pour faire face à la crise mondiale." Syntheses: 8 , graph.
http://www.oecd.org/dataoecd/6/32/44786070.pdf

Cette Synthèse donne de nouvelles indications sur les tendances récentes concernant les migrations de médecins et de personnels infirmiers jusqu'en 2008, et examine les principales causes et conséquences de ces évolutions pour les pays d'accueil et pour les pays d?origine. Elle suggère des réactions possibles au niveau des politiques gouvernementales, soulignant l'importance de la coopération internationale pour traiter le problème du manque de personnels de santé au niveau mondial.

Organisation de Coopération et de Développement Économiques (2015). Changing patterns in the international migration of doctors and nurses to OECD countries. International Migration Outlook 2015., Paris : OCDE**:** 106-182, graph., tabl.
http://www.oecd-ilibrary.org/social-issues-migration-health/international-migration-outlook-2015/changing-patterns-in-the-international-migration-of-doctors-and-nurses-to-oecd-countries_migr_outlook-2015-6-en

Ce chapitre analyse l'évolution de la mobilité internationale des professionnels de santé vers les pays de l'OCDE depuis 2000 au regard des changements observés dans les politiques migratoires et de santé mais également des changements économiques et institutionnels. Dans un contexte d'accroissement des migrations qualifiées, on observe que les médecins et infirmiers immigrés représentent une part croissante des professionnels de santé exerçant dans les pays de l'OCDE, qui atteint respectivement 23 % pour les médecins et 14 % pour les infirmiers en 2010/11. La part des personnels de santé formés à l'étranger est cependant inférieure à celle des personnels nés à l'étranger, illustrant par là même le fait qu'une partie de la formation des migrants est délivrée dans le pays de destination. Ce chapitre met également en exergue l'effet de la crise économique de 2007/08 et de l'élargissement sur les migrations de médecins et d'infirmiers, notamment en Europe, et discute le rôle des politiques migratoires et des politiques de gestion des ressources humaines en santé. Une analyse approfondie des effets attendus sur les pays d'origine est proposée et inclut une mise à jour pour 2010/11 des taux d'émigration (brain drain) pour les médecins et les infirmiers pour plus de 120 pays d'origine dans le monde. Le chapitre se termine par une présentation des tendances récentes en ce qui concerne l'internationalisation des études médicales et d'infirmiers.

Organisation de Coopération et de Développement Économiques (2017). Panorama de la santé 2017. Indicateurs de l'OCDE. Paris OCDE**:** 221 , ann., graph., tabl.
http://www.oecd-ilibrary.org/social-issues-migration-health/panorama-de-la-sante-2017_health_glance-2017-fr

Cette nouvelle édition du Panorama de la santé présente les données comparables les plus récentes pour les principaux indicateurs relatifs à la santé et à la performance des systèmes de santé dans les pays de l'OCDE. Les pays candidats et les principaux pays partenaires (Afrique du Sud, Brésil, Chine, Colombie, Costa Rica, Fédération de Russie, Inde, Indonésie et Lituanie) ont également été inclus dans la mesure du possible. Sauf indication contraire, les données présentées dans cette publication sont

tirées des statistiques nationales officielles. Cette édition contient des nouveaux indicateurs, particulièrement dans le domaine des facteurs de risque pour la santé. Elle place aussi une plus grande emphase sur l'analyse des tendances temporelles. Parallèlement à l'analyse par indicateur, cette édition propose des instantanés et une série de tableaux de bord qui résument les performances comparatives des pays, ainsi qu'un chapitre spécial sur les principaux facteurs à l'origine des gains d'espérance de vie.

Organisation de Coopération et de Développement Économiques (2016). Health Workforce Policies in OECD Countries: Right Jobs, Right Skills, Right Places, OECD Health Policy Studies.
Paris and Washington, DC:

Six papers review key trends and policy priorities on health workforce across OECD countries, focusing on doctors and nurses given the preeminent role that they have traditionally played in health-service delivery. Papers discuss the analytical framework of health-labor markets; trends in health-labor markets and policy priorities to address workforce issues; education and training for doctors and nurses--what is happening with numerus clausus policies; trends and policies affecting the international migration of doctors and nurses to OECD countries; geographic imbalances in the distribution of doctors and health care services in OECD countries; and skills use and skills mismatch in the health sector--what we know and what can be done. No index.

Organisation Mondiale de la Santé (2010). Increasing access to health workers in remote and rural areas through improved retention. Global Policy Recommendations. Genève OMS**:** 72 , tabl., annexes.
http://whqlibdoc.who.int/publications/2010/9789241564014_eng.pdf

La prestation de services de santé efficaces et l'amélioration des résultats sanitaires supposent la présence de personnels de santé qualifiés et motivés en nombre suffisant, au bon endroit et en temps opportun. Une pénurie de personnels de santé qualifiés dans les zones rurales ou reculées prive une part importante de la population de l'accès à des services de soins de santé, ralentit les progrès sur la voie de la réalisation des objectifs du Millénaire pour le développement et contrarie les aspirations liées au but de la santé pour tous. Les recommandations, qui s'appuient sur des données factuelles, ont trait aux mouvements des personnels de santé à l'intérieur des frontières d'un pays et concernent uniquement les stratégies destinées à accroître la disponibilité des personnels de santé dans les zones rurales ou reculées en améliorant l'attraction, le recrutement et la fidélisation.

Organisation Mondiale de la Santé (2016). S'engager pour la santé et la croissance : Investir dans le personnel de santé. Genève OMS**:** 69 , ill., tab.
http://apps.who.int/iris/bitstream/10665/250100/3/9789242511307-fre.pdf

La Commission de haut niveau sur l'Emploi en Santé et la Croissance économique a été mise en place en mars 2016 par le Secrétaire général des Nations Unies Ban Ki-moon. Sa mission : formuler des recommandations pour stimuler et guider la création d'au moins 40 millions de nouveaux emplois dans le secteur sanitaire et social, et réduire la pénurie annoncée de 18 millions de professionnels de santé, principalement dans les pays à faible revenu et à revenu intermédiaire de la tranche inférieure, d'ici à 2030. Ce rapport présente le plaidoyer de la Commission pour des investissements plus nombreux et de meilleure qualité dans le personnel de santé.

Saluja, S., Rudolfson, N., Massenburg, B. B., et al. (2020). "The impact of physician migration on mortality in low and middle-income countries: an economic modelling study." BMJ Glob Health **5**(1): e001535.

BACKGROUND: The WHO estimates a global shortage of 2.8 million physicians, with severe deficiencies especially in low and middle-income countries (LMIC). The unequitable distribution of physicians worldwide is further exacerbated by the migration of physicians from LMICs to high-income countries (HIC). This large-scale migration has numerous economic consequences which include increased mortality associated with inadequate physician supply in LMICs. METHODS: We estimate the economic cost for LMICs due to excess mortality associated with physician migration. To do so, we use the concept of a value of statistical life and marginal mortality benefit provided by physicians.

Uncertainty of our estimates is evaluated with Monte Carlo analysis. RESULTS: We estimate that LMICs lose US$15.86 billion (95% CI $3.4 to $38.2) annually due to physician migration to HICs. The greatest total costs are incurred by India, Nigeria, Pakistan and South Africa. When these costs are considered as a per cent of gross national income, the cost is greatest in the WHO African region and in low-income countries. CONCLUSION: The movement of physicians from lower to higher income settings has substantial economic consequences. These are not simply the result of the movement of human capital, but also due to excess mortality associated with loss of physicians. Valuing these costs can inform international and domestic policy discussions that are meant to address this issue.

Sauneron, S. (2011). La migration des médecins africains vers les pays développés. Santé internationale, Presses de Sciences Po.

Shaffer, F. A., Rocco, G. et Stievano, A. (2020). "Nurse and health professional migration during COVID-19." Prof Inferm **73**(3): 129-130.

The COVID-19 pandemic has exposed the vulnerabilities of nursing supply flows, domestically and internationally. Its impact at the country-level has further highlighted preexisting nurse supply gaps and the effect of staffing shortages. Internationally, the pandemic has disrupted global supply chains. The world has witnessed the closing of borders, the interruption of travel, and, in some countries, the restriction of outflows. The State of the World's Nursing Report (SOWN) (WHO, 2020) noted a shortfall of almost six million nurses immediately pre-COVID-19, a shortage suffered particularly by low- and middle-income countries. This is of major concern given that increased international outflows of nurses in the new post-COVID era could undermine, even more than before, the readiness of those countries to meet healthcare demands (ICN, 2020). In this default scenario, some, but not all, highincome destination countries will continue to rely on international inflow of nurses to a significant extent, as they did pre-COVID- 19, further exacerbating the suffering of poor countries. Put simply, without country-level policy changes related to the nursing workforce and backed by international organisations, pre-COVID-19 trends of increased nurse flows from low- to high-income countries will likely continue. In this scenario, the iniquitous maldistribution of nurses may become more pronounced. This "do nothing" option risks undermining both country-level progress towards the attainment of Universal Health.

Simplice, A. (2014). "Globalization and Health Worker Crisis: What Do Wealth-Effects Tell Us?" International Journal of Social Economics **41**(12): 1243-1264.

Purpose--Owing to lack of relevant data on health human resource (HHR) migration, the empirical dimension of the health-worker crisis debate has remained void despite abundant theoretical literature. A health worker crisis is growing in the world. Shortages in health professionals are reaching staggering levels in many parts of the globe. The paper aims to discuss these issues. Design/methodology/approach--A quantile regression approach is used to examine the determinants of health-worker emigration throughout the conditional distributions of health-worker emigration. This provides an investigation of the determinants when existing emigrations levels matter. The author assesses the determinants of emigration in the health sector through-out the conditional distribution of HHR emigration. Findings--The findings have been presented in two main strands: when existing emigration levels are low and when existing emigration levels are high. In the former case (when existing emigration levels are low), wealth-effects have the following implications. First, while economic prosperity is a good tool against nurse brain drain in middle income countries (MICs), health expenditure is a good instrument against physician brain drain in low income countries (LICs). Second, whereas positive demographic change fuels the problem in LICs, it mitigates the issue in their MIC counterparts. Third, savings, government-effectiveness, foreign-aid and inflationary pressures only accentuate the problem for both income groups. Fourth, corruption-control becomes a vital tool for emigration-control in both income-brackets. Fifth, while trade openness mitigates physician emigration in LICs, financial openness has the opposite effect on nurse emigration. In the latter case (when existing immigration levels are high), the following conclusions have been drawn. First, While economic prosperity fights nurse emigration only in LICs, savings is a tool against physician emigration only in their MIC counterparts. Second, health expenditure and inflationary pressures are relevant

tools in the battle against physician resource flight. Third, whereas, government effectiveness is an important policy measure for mitigating emigration in LICs, human development plays a similar role in MICs. Fourth, democracy, press-freedom, foreign-aid and financial openness fuel emigration in either income strata. Fifth, population growth and trade openness are important tools in the fight against brain-drain. Sixth, the HIV infection rate is a deterrent only to nurse emigration. Originality/value--This paper complements existing literature by empirically investigating the World Health Organization hypothetical determinants of health-worker migration in the context of globalization when income-levels matter. In plainer terms, the work explores how the wealth of exporting countries play-out in the determinants of HHR emigration.

Socha-Dietrich, K. et Dumont, J. C. (2021). International migration and movement of nursing personnel to and within OECD countries - 2000 to 2018: Developments in countries of destination and impact on countries of origin. OECD Health Working Papers ; 125. Paris OCDE**:** 41.
https://www.oecd-ilibrary.org/docserver/b286a957-en.pdf

Ce document présente les données les plus récentes visant à montrer dans quelle mesure les infirmiers migrants contribuent à la main-d'œuvre de personnel infirmier dans les pays de l'OCDE ainsi que l'impact de ces flux migratoires réguliers sur les pays d'origine, y compris une analyse des évolutions depuis 2000. L'objectif de ce document est de fournir de nouvelles estimations pour nourrir le dialogue politique aux niveaux national et international. La part des infirmiers nés à l'étranger ou formés à l'étranger a continué d'augmenter au cours des deux dernières décennies dans les pays de l'OCDE, les migrations intra-OCDE représentant un tiers du volume des migrations. En ce qui concerne l'impact sur les pays d'origine, les taux d'émigration vers les pays de l'OCDE sont généralement modérés mais quelques pays connaissent des pertes importantes d'infirmiers (jugés nécessaires). Cependant, les sources des données ne permettent pas toujours d'identifier le pays de formation parmi les infirmiers formés à l'étranger. Par conséquent, certains des résultats sont probablement en deçà des chiffres réels. / This paper presents the most recent data on the extent to which migrant nurses contribute to the nursing workforce in the OECD countries as well as the impact these regular migration flows have on the countries of origin, including an analysis of the developments since 2000. The objective of this paper is to provide new data for policy dialogue at the national and international levels. The shares of foreign-born or foreign-trained nurses have continued to rise over the last two decades across the OECD countries, with intra-OECD migration making up a third of the migration volume. Regarding the impact on countries of origin, emigration rates to OECD countries are generally moderate but a few countries experience significant losses of (needed) nurses. However, for a significant share of the foreign-trained nurses, the data sources do not allow the identification of the country of training. Hence, some of the results should be treated as lower-bound estimates.

Socha-Dietrich, K. et Lafortune, G. (2019). Recent Trends in International Migration of Doctors, Nurses and Medical Students, Paris : OCDE
http://www.oecd.org/health/recent-trends-in-international-migration-of-doctors-nurses-and-medical-students-5571ef48-en.html

This report describes recent trends in the international migration of doctors and nurses in OECD countries. Over the past decade, the number of doctors and nurses has increased in many OECD countries, and foreign-born and foreign-trained doctors and nurses have contributed to a significant extent. New in-depth analysis of the internationalisation of medical education shows that in some countries (e.g. Israel, Norway, Sweden and the United States) a large and growing number of foreign-trained doctors are people born in these countries who obtained their first medical degree abroad before coming back. The report includes four case studies on the internationalisation of medical education in Europe (France, Ireland, Poland and Romania) as well as a case study on the integration of foreign-trained doctors in Canada.
Socha-Dietrich, K. et Dumont, J.-C. (2021). International migration and movement of doctors to and within OECD countries - 2000 to 2018: Developments in countries of destination and impact on countries of origin. Paris, OCDE.

This paper presents the most recent data on the number of migrant doctors in the health workforce in the OECD countries, as well as the impact these regular migration flows have on the countries of origin, including an analysis of the developments since 2000. The objective of this paper is to inform policy dialogue at the national and international levels. The share of migrant doctors has continued to rise over the last two decades across the OECD countries, with around two-thirds of all foreign-born or foreign-trained doctors originating from within the OECD area and upper-middle-income countries. The lower-middle-income countries account for around 30% and low-income countries for 3-4% of the foreign-born and 4% of the foreign-trained doctors. In countries of origin that are large, migration to (other) OECD countries has a moderate impact, but some of the relatively smaller countries or those with weak health systems experience significant losses of (needed) health professionals.

Tankwanchi, A. S., Hagopian, A. et Vermund, S. H. (2020). "African Physician Migration to High-Income Nations: Diverse Motives to Emigrate ("We Are not Florence Nightingale") or Stay in Africa ("There Is No Place Like Home") Comment on "Doctor Retention: A Cross-sectional Study of How Ireland Has Been Losing the Battle"." Int J Health Policy Manag.

Research in assessing the global and asymmetric flows of health workers in general, and international medical graduates in particular, is fraught with controversy. The complex goal of improving health status of the citizens of home nations while ensuring the right of health workers to migrate generates policy discussions and decisions that often are not adequately informed by evidence. In times of global public health crises like the current coronavirus disease 2019 (COVID-19) global pandemic, the need for equitable distribution and adequate training of health workers globally becomes even more pressing. Brugha et al report suboptimal training and working conditions among Irish and foreign medical doctors practicing in Ireland, while predicting large-scale outward migration. We comment on health personnel migration and retention based on our own experience in this area of research. Drawing from our examination of medical migration dynamics from sub-Saharan Africa, we argue for greater consideration of health workforce retention in research and policy related to resource-limited settings. The right to health suggests the need to retain healthcare providers whose education was typically subsidized by the home nation. The right to migrate may conflict with the right to health. Hence, a deeper understanding is needed as to healthcare worker motives based on interactions of psychosocial processes, economic and material determinants, and quality of work environments.

Tarrius, A. (2010). "Médecins circulants et consultations à distance : nouvelles pratiques de soin des transmigrants." Reseaux **159**(1): 111-126.

RésuméCertains travailleurs, notamment marocains, « transmigrants-migrants nomades » utilisent le téléphone mobile et Internet pour des transactions destinées mettre en place une stratégie de soins qui concerne à la fois les médecins « pendulaires » et les médicaments. Ce type de réseaux que les technologies n'ont pas inventé, mais reconfiguré, concerne aujourd'hui un nombre de personnes accru greffées à une économie parallèle que l'auteur considère comme de plus en plus fragmentée et de plus en plus démocratique. Quant aux itinéraires géographiques ils sont au nombre de six et partent des ex-républiques asiatiques de l'URSS, du Caucase, de La Géorgie, de l'Afghanistan et d'Asie du sud-est.

Williams, G. A., Jacob, G., Rakovac, I., et al. (2020). "Health professional mobility in the WHO European Region and the WHO Global Code of Practice: data from the joint OECD/EUROSTAT/WHO-Europe questionnaire." Eur J Public Health **30**(Suppl_4): iv5-iv11.

WHO Member States adopted the Global Code of Practice on the International Recruitment of Health Personnel 10 years ago. This study assesses adherence with the Code's principles and its continuing relevance in the WHO Europe region with regards to international recruitment of health workers. Data from the joint OECD/EUROSTAT/WHO-Europe questionnaire from 2010 to 2018 are analyzed to determine trends in intra- and inter-regional mobility of foreign-trained doctors and nurses working in case study destination countries in Europe. In 2018, foreign-trained doctors and nurses comprised over a quarter of the physician workforce and 5% of the nursing workforce in five of eight and four of five case study countries, respectively. Since 2010, the proportion of foreign-trained nurses and

doctors has risen faster than domestically trained professionals, with increased mobility driven by rising East-West and South-North intra-European migration, especially within the European Union. The number of nurses trained in developing countries but practising in case study countries declined by 26%. Although the number of doctors increased by 27%, this was driven by arrivals from countries experiencing conflict and volatility, suggesting countries generally are increasingly adhering to the Code's principles on ethical recruitment. To support ethical recruitment practices and sustainable workforce development in the region, data collection and monitoring on health worker mobility should be improved.

Zehnati, A. (2021). "L'émigration des médecins algériens : phénomène normal ou véritable exode ?" International Development Policy | Revue internationale de politique de développement(13.1).

L'objet de cet article est de tenter d'appréhender le phénomène de la migration médicale que connaît l'Algérie depuis au moins trois décennies. À partir de différentes sources de données, nous avons calculé des taux d'émigration à l'échelle globale et dans certaines spécialités. Nous nous sommes intéressés également aux niveaux de rémunération des médecins dans le secteur public pour évaluer s'ils sont bien ou mal rémunérés en comparaison avec les cadres du secteur économique et les médecins du secteur privé et ceux exerçant dans certains pays étrangers. D'après nos estimations, l'émigration de médecins algériens ne saurait être considérée comme un véritable exode si l'on s'intéresse à ceux qui ont obtenu leur diplôme en Algérie et exercent en France. Le ratio d'émigration de cette population s'élevait à 8,63 % en 2016. En revanche, si l'on considère le lieu de naissance, celui-ci s'élève à 23,35 %, un taux avoisinant ceux enregistrés par certains pays d'Afrique subsaharienne qui connaissent un exode inquiétant. Des pénuries de médecins menacent certaines spécialités particulièrement touchées par l'émigration à l'instar de la radiologie (24,69 %), de la néphrologie (24,85 %) mais surtout de la psychiatrie (40,27 %). Quels que soient leurs grades, les médecins du secteur public sont relativement mieux rémunérés que les cadres du secteur économique, mais beaucoup moins que les médecins exerçant dans le secteur privé et ceux exerçant dans certains pays étrangers. Le motif financier à lui seul ne peut expliquer la décision de migrer prise par de nombreux médecins algériens. Il y a donc lieu de chercher d'autres mobiles d'émigration.

Zerpa, O. (2020). "Migration of physicians and keys to success." Clin Dermatol **38**(5): 523-528.

There are currently nearly 1 billion migrants, of whom 259 million are international migrants, according to the World Health Organization. In the Americas, Venezuela has the highest migratory flow in the region in recent history. By September 2019, more than 4,300,000 people of all social classes had left the country. They included more than 24,000 doctors, who were fleeing the serious political, economic, and social crises affecting that nation. Others in the exodus are a large number of university faculty. The author's personal experience as a migrant doctor is presented, and job alternatives beyond medical practice/clinical medicine are described. The exodus of highly qualified personnel is not a new phenomenon but one that negatively affects the region or country of origin, whereas the receiving place benefits from the professionals who manage to join the workforce in their field of training. This, of course, is dependent on their complying with requirements to obtain legal residency and respective licensures, in addition to finding existing alternatives according to their expertise. To achieve this objective, they require a network of relatives, colleagues, and friends who can provide guidance on the steps to be followed; being fluent in the language of the new residence; and obtaining the necessary certifications to practice the profession either by taking the legally required examinations or by obtaining another degree from a university in the country.

AUTRES ETUDES : AUSTRALIE, CANADA, ÉTATS-UNIS, JAPON, NOUVELLE-ZELANDE

Abdel-Aziz, Y., Khan, Z., Barnett, W. R., et al. (2020). "H-1B Visa Sponsorship and Physician Trainee Retention: A Single Institution Experience." J Grad Med Educ **12**(2): 217-220.

BACKGROUND: International medical graduates (IMGs) form a significant portion of the physician workforce in the United States and are vital in filling training slots due to a shortage of American medical graduates. Most often, IMGs require visa sponsorship, which must be solidified before applying for a residency or fellowship. OBJECTIVE: We examined the association of H-1B visa sponsorship on retention of physician trainees within the state of Ohio. METHODS: This was a single institutional study that examined all visa-sponsored residency and fellowship graduates who entered fully licensed clinical practice between 2006 and 2015. Practice location was ascertained immediately upon completion of training and at follow-up to determine which visa group (H-1B or J-1) were more likely to initially practice in Ohio after graduation and remain within the state. RESULTS: Of 103 visa-sponsored residency and fellowship graduates, 42 were H-1B sponsored and 61 were J-1-sponsored. Fifty-two percent (22) of H-1B visa-sponsored trainees and 31% (19) of J-1 visa-sponsored trainees were retained in Ohio after graduation. At follow-up, 40% (17) of H-1B and 26% (16) of J-1 visa holders remained in the state. CONCLUSIONS: H-1B visa-sponsored trainees were more likely than those with J-1 visas to practice in the state of Ohio after graduation. Regardless of visa status, graduates tended not to change their geographical location over time.

Ahmed, A. A., Hwang, W. T., Thomas, C. R., Jr., et al. (2018). "International Medical Graduates in the US Physician Workforce and Graduate Medical Education: Current and Historical Trends." J Grad Med Educ **10**(2): 214-218.

Background : Data show that international medical graduates (IMGs), both US and foreign born, are more likely to enter primary care specialties and practice in underserved areas. Comprehensive assessments of representation trends for IMGs in the US physician workforce are limited. Objective : We reported current and historical representation trends for IMGs in the graduate medical education (GME) training pool and US practicing physician workforce. Methods : We compared representation for the total GME and active practicing physician pools with the 20 largest residency specialties. A 2-sided test was used for comparison, with P < .001 considered significant. To assess significant increases in IMG GME trainee representation for the total pool and each of the specialties from 1990-2015, the slope was estimated using simple linear regression. Results : IMGs showed significantly greater representation among active practicing physicians in 4 specialties: internal medicine (39%), neurology (31%), psychiatry (30%), and pediatrics (25%). IMGs in GME showed significantly greater representation in 5 specialties: pathology (39%), internal medicine (39%), neurology (36%), family medicine (32%), and psychiatry (31%; all P < .001). Over the past quarter century, IMG representation in GME has increased by 0.2% per year in the total GME pool, and 1.1% per year for family medicine, 0.5% for obstetrics and gynecology and general surgery, and 0.3% for internal medicine. Conclusions : IMGs make up nearly a quarter of the total GME pool and practicing physician workforce, with a disproportionate share, and larger increases over our study period in certain specialties.

Aiken, L. H. et Cheung, R. (2008). Nurse Workforce Challenges in the United States: Implications for Policy. OECD Health Working Paper; 35. Paris OCDE**:** 45 , tabl., fig., ann.
http://www.oecd.org/dataoecd/34/9/41431864.pdf

Les États-Unis comptent le plus grand nombre d'infirmiers(ères) diplômés au monde près de 3 millions mais ils n'en forment pas suffisamment pour répondre à une demande en augmentation. Il devrait manquer près d'un million d'infirmiers (ières) diplômés, aux États-Unis, d'ici 2020. Et le déficit de médecins qui commence d'apparaître ne fera qu'exacerber le problème car les deux pratiques professionnelles sont nécessairement interdépendantes. L'immigration d'infirmiers(ères) n'a cessé d'augmenter depuis 1990 et les États-Unis sont désormais le premier pays d'accueil d'infirmiers(ères) étrangers au monde. Cette vague d'immigration devrait se poursuivre mais la pénurie est trop importante pour pouvoir être résorbée par des recrutements à l'étranger sans que cela ponctionne gravement les ressources en personnel infirmier au niveau mondial. Par ailleurs, les personnes désireuses de suivre une formation d'infirmier(ère) dans le pays sont nombreuses mais des dizaines de milliers de postulants qualifiés sont refusés chaque année en raison du manque de personnel enseignant et de l'insuffisance des capacités d'accueil dans les écoles d'infirmiers(ères). On pourrait largement pallier ces insuffisances en intensifiant les investissements consacrés aux écoles d'infirmiers(ères) de façon à accroître de 25 % par an le nombre des diplômés, ce qui paraît réaliste au

regard du nombre actuel de candidats. Le manque de personnel enseignant et l'insuffisance des capacités de formation appellent l'intervention des pouvoirs publics. Précisément, des subventions publiques doivent aider à accroître le nombre d'infirmiers(ires) diplômés, ce qui élargira l'effectif au sein duquel on pourra recruter du personnel enseignant, des infirmiers(ères) cliniciens de haut niveau et des gestionnaires. Inciter les infirmiers(ères) à rester dans la profession est fondamental et cela nécessitera une amélioration significative des politiques de gestion des ressources humaines, la garantie d'un environnement de travail satisfaisant et des innovations technologiques pour alléger la charge physique que représente l'activité de soins. Compte tenu de l'importance des personnels infirmiers formés à l'étranger pour les États-Unis et des avantages qui résulteraient d'une amélioration générale de la santé publique, le pays devrait faire de l'investissement dans la formation d'infirmiers(ères) un des objectifs de l'action publique.

Barer, M. L., et al. (2014). "Two wings and a prayer: should Canada make it easier for Canadian doctors trained abroad to enter practice here?" Healthc Policy **9**(4): 12-19.

About 3,600 Canadians are currently studying medicine abroad (CSMAs). Most hope to return to practise in Canada. But the road back is not easy. These graduates must complete postgraduate residency training in Canada and alas, there are less openings than there are aspirants. One might have thought, amid the endless rhetoric of "physician shortages," that an obvious solution would be to increase the number of residency positions. But provincial governments are well aware, even if the media are not, that Canada is in the early stages of a dramatic expansion in physician supply fuelled by increased domestic training capacity. Last time the physician supply outpaced population growth, as it is doing today, governments choked off the entry of international graduates. It could happen again.

Buske, L. (2013). "First practice: family physicians initially locating in rural areas." Can J Rural Med **18**(3): 80-85.

INTRODUCTION: This paper quantifies the proportion of family physicians in rural practice and, in particular, initial rural practice. It examines differences between graduates of Canadian and international medical schools. METHODS: The Canadian Medical Association postal code master file was used to determine the distribution in rural practice of Canadian and international medical school graduates for every other year from 2000 to 2011. The master file maps practice postal codes into a census metropolitan area or census agglomeration; physicians practising outside these areas are considered rural. Initial practices were estimated based on year of undergraduate medical degree. RESULTS: Two-thirds of family physicians practising rural medicine in 2011 were graduates of Canadian medical SCHOOLS. However, between 2000 and 2011, a greater proportion of international medical graduates were practising in rural areas than graduates of Canadian medical schools. International graduates were more likely to initially locate in a rural area, but the drop-off rate was greater among them than with graduates of Canadian medical schools. The proportion of international medical graduates setting up rural practices was decreased among more recent graduation cohorts. The proportion of Canadian medical school graduates initially practising in rural areas was steady. CONCLUSION: The results of this study suggest that graduates of international and Canadian medical schools treat rural practice differently. International graduates may decide on a rural location as a means to set up practice in Canada or fulfill a return-of-service obligation, whereas graduates of Canadian medical schools may make a conscious choice to practise in rural locations. Decreasing proportions of international medical graduates in rural practice may be a result of increased opportunities for Canadian postgraduate training and full licensure.

Blain, M.-J., Fortin, S. et Alvarez, F. (2014). "Être médecin et immigrant au Québec : une identité professionnelle malmenée." Revue Européenne des Migrations Internationales **30**(3-4): 139-162.

Au Québec et au Canada, les politiques d'immigration visent à attirer « les meilleurs et les plus brillants ». Les médecins font partie de cette élite transnationale et leur « fuite » soulève des enjeux éthiques dans les zones mal desservies. Or, un second enjeu éthique apparaît au pays hôte : leur reconnaissance professionnelle parcellaire. Elle soulève là encore de nombreux défis pour ces médecins, dont celui d'une identité professionnelle malmenée, qui reste pourtant peu documentée. Le caractère dynamique et relationnel de l'identité professionnelle est mis en relief, mais surtout, la

puissance des conditions d'appartenance qui oblige à une flexibilité professionnelle et parfois au retrait de la profession ou du pays ; la notion de pouvoir et celle de reconnaissance sont au cœur de ces processus identitaires. Dans cet article les auteurs posent un regard critique sur les approches centrées sur l'individu qui ignorent les normes et les contraintes sociales.

Clarke, J. et Wright, D. (2013). "Too Many Doctors? Foreign Medical Graduates and the Debate over Health Care Accessibility in Canada, c.1976-1991." Can Bull Med Hist **30**(1): 167-188.

Although the last decade has been dominated by commentators lamenting the national shortage of medical practitioners, only a generation ago policy makers concluded that most Canadian provinces had too many doctors. As a consequence, provincial ministers of health placed new restrictions on the licensing of foreign-trained health professionals. Assisted by the 1976 Immigration Act, Canada suddenly witnessed a precipitous drop in the number of newly licensed, foreign-trained doctors, a dramatic reversal of the previous decade which had seen over 10,000 physicians immigrate and take up practice in this country. The 1980s was notable for a variety of health care initiatives aimed at relocating the diminishing number of foreign physicians to underserviced areas, some of which were struck down as contravening the new Charter of Rights and Freedoms. This paper will examine the period of 1976-91, when, after two decades of relatively liberal immigration and licencing policies, Canadian provinces introduced new measures to restrict the scope of practice of incoming foreign-trained doctors and to divert them to underserviced areas. The paper will explore these health policy debates in order to understand better the context of the landmark Barer-Stoddart Report (1991), which concluded that a new interprofessional mix of health care practitioners was needed to reform, and make more accessible, the Canadian health care system.

Cooper, R. A. (2008). The US Physician Workforce: Where Do We Stand? OECD Health Working Paper; 37. Paris OCDE**:** 66 , tabl., fig.
http://www.oecd.org/dataoecd/48/1/41500843.pdf

La présente étude consistait à observer l'évolution de l'offre de médecins aux États-Unis de 1980 à nos jours, en accordant une attention particulière aux médecins diplômés étrangers. On y examine la composition du corps médical, dont le nombre de médecins de famille, de spécialistes, de femmes médecins, ainsi que la question de son vieillissement. On y réfléchit sur l'évolution des flux d'entrées et de sorties de médecins en activité et, en particulier, sur la manière dont les migrations internationales, les départs à la retraite, l'exercice à temps partiel et la possibilité d'exercer un autre emploi ont influé sur cette population. L'étude recense les facteurs influant sur la demande de médecins, en insistant sur le développement économique, et analyse certains des obstacles en place susceptibles d'empêcher que, dans l'avenir, l'offre de médecins soit à la mesure de la demande (calculée par projections). L'étude analyse également la relation entre les dépenses de soins de santé et le PIB en tenant compte des variations selon la situation géographique et selon que les systèmes d'assurance-maladie sont publics ou privés. Par ailleurs, les efforts déployés dans le passé pour mesurer le besoin en médecins des États-Unis sont évalués. L'étude contient aussi des projections de la demande future de médecins et des dispositions à prendre pour étoffer cette population. Ces travaux conduisent à examiner les politiques et réglementations américaines en matière de diplômes conférant le droit d'exercer la médecine, en intéressant tout particulièrement aux médecins étrangers. L'ouvrage se termine par une réflexion sur les implications de la pénurie de médecins et le recrutement de médecins de l'étranger.'

Dumont, J. C., et al. (2008). International Mobility of Health Professionals and Health Workforce Management in Canada: Myths and Realities. OECD Health Working Paper; 40. Paris OCDE**:** 117.
http://www.oecd.org/dataoecd/7/59/41590427.pdf

Ce rapport examine le rôle joué par la migration de personnel de santé dans les effectifs de santé au Canada mais aussi les interactions entre les politiques migratoires, la formation et les politiques de gestion de ressources humaines. Le personnel de santé recruté à l'étranger contribue de façon significative aux effectifs de santé au Canada. En 2005-06, plus de 22 % des médecins au Canada sont formés à l'étranger et 37 % d'entre eux sont nés à l'étranger. Respectivement pour les infirmières, la

part des personnes formées à l'étranger est de 7.7 % et celle des personnes nées à l'étranger de 20%. Les médecins formés à l'étranger jouent un rôle important dans des zones rurales ayant contribué à réduire au manque d'effectif dans les zones rurales. En 2004, dans la plupart des zones rurales, en moyenne 30 % des médecins sont formés à l'étranger. Au cours des dernières décennies, l'évolution des effectifs de santé au Canada a été marquée notamment par un net déclin de la densité des infirmières et par une densité stable des médecins, ce qui contraste avec les tendances observées dans les pays de l'OCDE. Cette évolution est largement due aux mesures adoptées à la fin des années 80 et au début des années 90 afin de répondre au surplus perçu d'effectif de personnel de santé. Pendant cette période, des restrictions conséquentes des dépenses de santé, des réductions du nombre de places en école de médecine et d'infirmière ainsi que des licenciements massifs d'infirmière ont eu lieu. De plus, entre 1986 et 2002, les politiques d'immigration plus restrictives ont été adoptées en ce qui concerne les médecins et les infirmières et des procédures d'inscription plus contraignantes ont été mises en place pour le personnel de santé étranger. Plus récemment, des préoccupations concernant les pénuries de personnel de santé sont apparues et diverses mesures ont été adoptées pour étendre et renforcer l'offre de personnel de santé. Ces mesures comprennent un investissement plus important dans la formation d'infirmières et de médecins, la mise en place de nouveaux modèles de soins, un ensemble de politiques pour améliorer la rétention particulièrement pour les infirmières, l'augmentation en internat du nombre de places en médecine générale ainsi que la mise en place du cadre de planification concertée des ressources humaines de la santé à l'échelle pancanadienne. Les politiques migratoires concernant les médecins et les infirmières ont été également plus favorables. Entre 2002 et 2006, la migration permanente de médecins a triplé et la migration temporaire a augmenté de plus de 10 % alors que pour les infirmières, la migration permanente a augmenté de près de 40 % et la migration temporaire a diminué de 35 %. De plus, des efforts conséquents ont été fournis aussi bien à un niveau fédéral que provincial pour faciliter la procédure d'inscription de personnel formé à l'étranger. Les pays d'origine du personnel de santé étranger ont peu changé au cours du temps. Le Royaume-Uni est devenu moins important alors que la part de personnel de santé originaire de pays comme l'Afrique du Sud pour les médecins et les Philippines pour les infirmières s'est accrue. Bien qu'un consensus grandissant ait émergé pour atteindre l'objectif d'autosuffisance en termes de personnel de santé, cet objectif doit être mesuré au regard du rôle joué par la migration dans la construction de la société canadienne. Se doter de personnel de santé viable requiert des engagements financiers à long terme, un suivi continu du marché de l'emploi du personnel de santé, une coordination entre les parties prenantes ainsi qu'une attention particulière aux politiques apportées en réponse aux problématiques.

Dywili, S., et al. (2012). "Experience of overseas-trained health professionals in rural and remote areas of destination countries: a literature review." Aust J Rural Health **20**(4): 175-184.

This study aimed to review and synthesise existing literature that investigated the experience of overseas-trained health professionals (OTHPs) in rural and remote areas of destination countries. A systematic literature review was conducted using electronic databases and manual search of studies published from January 2004 to February 2011. Data were analysed from the final 17 original report articles that met the inclusion criteria. The reviewed research studies were conducted in Australia, Canada, New Zealand, the UK and the USA. Overseas-trained medical practitioners were the most frequently researched (n = 14); two studies involved nurses and one study included several health professionals. Three main themes emerged from the review and these were: (i) expectations; (ii) cultural diversity; and (iii) orientation and integration to rural and remote health work environment. The OTHPs were expected to possess the appropriate professional and cultural skills while they themselves expected recognition of their previous experiences and adequate organisational orientation and support. A welcoming and accepting community coupled with a relaxed rural lifestyle and the joy of continued patient care resulted in successful integration and contributed to increased staff retention rates. Recognition of expectations and cultural diversity by all parties and comprehensive orientation with sufficient organisational support are important elements in the integration of OTHPs and subsequent delivery of quality health care to people living in rural and remote areas.

Edge, J. S. et Hoffman, S. J. (2013). "Empirical impact evaluation of the WHO Global Code of Practice on the International Recruitment of Health Personnel in Australia, Canada, UK and USA." Global Health **9**: 60.

> BACKGROUND: The active recruitment of health workers from developing countries to developed countries has become a major threat to global health. In an effort to manage this migration, the 63rd World Health Assembly adopted the World Health Organization (WHO) Global Code of Practice on the International Recruitment of Health Personnel in May 2010. While the Code has been lauded as the first globally-applicable regulatory framework for health worker recruitment, its impact has yet to be evaluated. We offer the first empirical evaluation of the Code's impact on national and sub-national actors in Australia, Canada, United Kingdom and United States of America, which are the English-speaking developed countries with the greatest number of migrant health workers. METHODS: 42 key informants from across government, civil society and private sectors were surveyed to measure their awareness of the Code, knowledge of specific changes resulting from it, overall opinion on the effectiveness of non-binding codes, and suggestions to improve this Code's implementation. RESULTS: 60% of respondents believed their colleagues were not aware of the Code, and 93% reported that no specific changes had been observed in their work as a result of the Code. 86% reported that the Code has not had any meaningful impact on policies, practices or regulations in their countries. CONCLUSIONS: This suggests a gap between awareness of the Code among stakeholders at global forums and the awareness and behaviour of national and sub-national actors. Advocacy and technical guidance for implementing the Code are needed to improve its impact on national decision-makers.

Han, G. S. (2010). "International medical graduates in Australian news: a media narrative analysis." J Health Organ Manag **24**(3): 237-257.

> PURPOSE: The paper aims to analyse how the medical profession, the pro-competition organisation, and the rural community have responded to the rural doctor shortage with reference to international medical graduates (IMGs) as reported in Australian newspapers. DESIGN/METHODOLOGY/APPROACH: Utilising the commercially available database LexisNexis during 2003, the author keyed in "overseas trained doctors" and retrieved 641 Australian newspaper articles. The qualitative data analysis software NVivo2 has assisted the author to organise the data, informed by critical realism and narrative analysis. FINDINGS: While the medical profession is undoubtedly committed to serving the health needs of the Australian public, the medical community is less than united in addressing the rural doctor shortage, especially through the employment of large numbers of IMGs. The handling of IMGs has led to tensions not only between the locally trained and IMGs, but also between rural and non-rural doctors, and between younger and established doctors. The medical professional institutions seemed relatively detached from the adverse consequences of the shortage of doctors in the rural community. This contrasts the efforts demonstrated by the Rural Doctors Association and the rural community. ORIGINALITY/VALUE: This paper concludes with a critical realist and narrative analysis and resolving of the rural doctor shortage and recommends close communication and consultation among the diverse interest groups rather than their engaging in blaming one another. This would be an obvious starting point to address the rural doctor shortage, which may partly be achieved by the effective use of services by IMGs.

Hefley, J., et al. (2010). "Internationally educated healthcare workers: focus on physicians in ontario." Healthc Pap **10**(2): 41-45; discussion 51-45.

> The issue of access to licensure for internationally educated health professionals is a critical one, and the impact of inadequate healthcare resources has a profound impact on patients. As the body that licenses doctors in Ontario, issues related to the provincial doctor shortage and problems with access to licensure for international medical graduates (IMGs) have been significant areas of focus for the College of Physicians and Surgeons of Ontario (CPSO). In February 2002, the CPSO Council approved the establishment of the first Physician Resources Task Force. Its mandate was to "find creative ways to meet physician resource needs without compromising registration standards." For the first time, the key stakeholders--regulators, government and educators--were all at the table to try to address the complex issues and processes involved in licensing physicians.

Holmes, G. M. et Fraher, E. P. (2017). "Developing Physician Migration Estimates for Workforce Models." Health Serv Res **52 Suppl 1**: 529-545.

OBJECTIVE: To understand factors affecting specialty heterogeneity in physician migration. DATA SOURCES/STUDY SETTING: Physicians in the 2009 American Medical Association Masterfile data were matched to those in the 2013 file. Office locations were geocoded in both years to one of 293 areas of the country. Estimated utilization, calculated for each specialty, was used as the primary predictor of migration. Physician characteristics (e.g., specialty, age, sex) were obtained from the 2009 file. Area characteristics and other factors influencing physician migration (e.g., rurality, presence of teaching hospital) were obtained from various sources. STUDY DESIGN: We modeled physician location decisions as a two-part process: First, the physician decides whether to move. Second, conditional on moving, a conditional logit model estimates the probability a physician moved to a particular area. Separate models were estimated by specialty and whether the physician was a resident. PRINCIPAL FINDINGS: Results differed between specialties and according to whether the physician was a resident in 2009, indicating heterogeneity in responsiveness to policies. Physician migration was higher between geographically proximate states with higher utilization for that specialty. CONCLUSIONS: Models can be used to estimate specialty-specific migration patterns for more accurate workforce modeling, including simulations to model the effect of policy changes.

Janus, K. (2010). "Career entry and career perspectives of medical graduates in the USA." Cahiers De Sociologie Et De Demographie Medicales **50**: 187-201.

Karan, A., et al. (2016). "Medical "Brain Drain" and Health Care Worker Shortages: How Should International Training Programs Respond?" AMA J Ethics **18**(7): 665-675.

The movement of health care workers from countries with resource scarcity and immense need ("source" countries) to areas of resource abundance and greater personal opportunity ("destination" countries) presents a complex set of decisions and relationships that affect the development of international health care systems. We explore the extent to which ethical quandaries arising from this movement are the responsibility of the said actors and the implications of these ethical quandaries for patients, governments, and physicians through the case of Dr. R, a surgeon from Nigeria who is considering working in the United States, where he is being trained to help develop surgical capacity in his country. We suggest how Dr. R, the United States, and Nigeria all contribute to "brain drain" in different but complementary ways.

Laurence, C. O., et al. (2016). "Personality characteristics and attributes of international medical graduates in general practice training: Implications for supporting this valued Australian workforce." Aust J Rural Health **24**(5): 333-339.

OBJECTIVES: To describe the personality profiles of International Medical Graduates (IMGs) undertaking General Practice (GP) training in Australia. A better understanding of the personal characteristics of IMGs may inform their training and enhance support for their vital contribution to the Australian rural workforce. DESIGN: Cross-sectional self-report questionnaires. Independent variables included socio-demographics, prior training, the Temperament and Character Inventory, and the Resilience Scale. SETTING AND PARTICIPANTS: GP registrars (IMGs = 102; AMGs = 350) training in the Australian General Practice Training rural and general pathway and the Australian College of Rural and Remote Medicine independent pathway. MAIN OUTCOME MEASURES: Univariate analysis explored the differences in levels of traits between IMG and AMG registrars. RESULTS: Compared to the general population both groups have moderately high resilience, and well-organised characters with high Self-directedness, high Cooperativeness and low Self-transcendence, supported by temperaments which were high in Persistence and Reward Dependence. IMGs were different than AMGs in two temperament traits, Novelty Seeking and Persistence and two character traits, Self-directedness and Cooperativeness. CONCLUSIONS: Factors such as cultural and training backgrounds, personal and professional expectations, and adjustments necessary to assimilate to a new lifestyle and health system are likely to be responsible for differences found between groups. Understanding the

personality profiles of IMGs provides opportunities for targeted training and support which may in turn impact on their retention in rural areas.

Leung, T. I., Biskup, E. et DeWitt, D. (2020). "Facilitating credentialing and engagement of international physician-migrants during the COVID-19 crisis and beyond." Rural Remote Health **20**(3): 6027.

CONTEXT: Physicians who migrate globally face a daunting series of time-consuming, labor- and resource-intensive procedures to prove their clinical competency before being allowed to practice medicine in a new country. ISSUES: In this commentary, we describe licensing barriers faced by physician-migrants based on the authors' experiences, and reflect also on rapidly implemented measures to address COVID-19 pandemic related workforce shortages. We offer recommendations for potential reductions in bureaucratic regulatory barriers that prohibit mobilization of international medical graduate talent. LESSONS LEARNED: Licensing boards and authorities should strive for standardized, competency-based basic professional recognition. Professional medical societies are well-positioned to guide such competency-based recognition as a more organized, international collaborative effort across specialties. The COVID-19 pandemic facilitated cross-state and international licensing in some regions, highlighting a key opportunity: streamlining professional recognition requirements is achievable.

McDonald, J. T. et Worswick, C. (2012). "The migration decisions of physicians in Canada: the roles of immigrant status and spousal characteristics." Soc Sci Med **75**(9): 1581-1588.

Around 25% of practicing physicians in Canada are graduates of medical schools outside of Canada. These physicians are more likely to be working in rural communities, and in particular account for more than half of new physicians starting practice in rural regions. The extent to which particular health regions and provinces are able to retain their physicians is crucial if shortages in the delivery of physician and surgeon services in both the short and longer terms are to be avoided. In this paper, we use data from the confidential master files of the Canadian Census over the years 1991-2006 to study the geographic mobility of immigrant and non-immigrant physicians who are already resident in Canada. We consider both inter- and intra-provincial migration, with a particular focus on migration to and from rural areas of Canada. We exploit the fact that it is possible to link individuals within families in the Census files in order to investigate the impact on the migration decision of the characteristics of a married physician's spouse. Our results indicate that the magnitude of outflows is substantial and that the retention of immigrant physicians in rural areas and in some provinces will continue to be difficult. We find strong evidence that migration is a family decision, and spousal characteristics (education, age, years in Canada for immigrants) are important. As well, we find that large Canadian cities (mainly in Ontario) are the likely destination for the types of immigrant physicians typically able to be recruited to other areas, implying recruitment efforts of smaller provinces may have significant implications for the size of health care costs in larger provinces.

McGrail, M. R., et al. (2012). "International medical graduates mandated to practise in rural Australia are highly unsatisfied: results from a national survey of doctors." Health Policy **108**(2-3): 133-139.

OBJECTIVES: Rural communities worldwide are increasingly reliant on international medical graduates (IMGs) to provide health care access, with many countries utilising health policies which mandate IMGs to practise only in rural designated areas of (medical) workforce shortage for many years. The objective of this study is to analyse the satisfaction of IMGs in their current work location, particularly in relation to the effect of mandating IMGs to small rural communities. METHODS: We used data of 3502 general practitioners (GPs) from Wave 2 of the Medicine in Australia: Balancing Employment and Life (MABEL) longitudinal study of Australian doctors. The main outcome measures were the level of professional and non-professional satisfaction expressed by GPs with respect to various job and social aspects. RESULTS: We found that non-professional satisfaction of mandated IMGs was significantly lower across all social aspects, whilst professional satisfaction was also significantly lower for most job aspects relating to their professional autonomy. In contrast, non-mandated IMGs were similarly satisfied compared to Australian trained GPs. CONCLUSIONS: Mandated IMGs are currently filling a critical shortage in rural areas of Australia. However, long-term success of this policy is problematic

unless outstanding issues affecting their significantly reduced professional and non-professional satisfaction can be addressed.

McGrath, P., et al. (2011). "Canadian and Australian licensing policies for international medical graduates: a web-based comparison." Educ Health (Abingdon) **24**(1): 452.

CONTEXT: The increasing global mobility of physicians and severe physician shortages of many countries has led to an increasing reliance on International Medical Graduates (IMGs) by countries including Australia and Canada. OBJECTIVES: A web-based comparison of licensing policies for IMGs in Australia and Canada to inform and improve policies in each country. METHODS: The research involved identification of relevant government and medical regulatory bodies' official websites documenting information on the licensing process for IMGs from each respective country; in-depth examination and comparison of the licensing processes outlined on these sites; and compilation of a comprehensive list of similarities and differences. FINDINGS: While difficult entry requirements are imposed in Canada, once full registration is achieved IMGs have the same membership rights as Canadian medical graduates and their separate status (nominally) ends. In Australia, IMGs are allowed relatively easy access to temporary or conditional licenses, especially in designated underserviced areas or areas of need in order to fulfil resource demands. However IMGs are predominantly restricted to practise in limited and less prestigious positions within the medical hierarchy. DISCUSSION: The Canadian process for recertifying IMGs can be characterized as being based on the integration/assimilation of IMGs with domestically trained doctors. In contrast, Australia has pursued a different strategy of parallelism of its IMGs. CONCLUSIONS: The findings provide insights into how each country balances national licensing requirements with physician shortages in a globalized environment in order to provide healthcare for its citizens.

Mowat, S., et al. (2017). "Retention in a 10-year cohort of internationally trained family physicians licensed in Manitoba." Can J Rural Med **22**(1): 13-19.

INTRODUCTION: International medical graduates (IMGs) seeking licensure in Canada have been recruited to practise in medically underserviced areas, but retention of these physicians remains a concern. This study explored retention of IMG family physicians in Manitoba and its predictors. METHODS: We used data from the University of Manitoba, provincial registries and Manitoba Health. Inclusion criteria were IMGs who completed University of Manitoba IMG training or assessment programs, and their return-of-service. Practice location, certification and licensure status were examined. We used logistic regression to consider the effects of a mentorship program, Manitoba residency at application, IMG program and years since program graduation on retention. RESULTS: A total of 197 IMGs met the inclusion criteria. Most IMGs (63.5%) remained in Manitoba, and 59.2% of this group practised outside of Winnipeg. Of those remaining in Manitoba, most (69.6%) held full provincial licensure and national certification. The regression model was significant (chi(2)4 = 13.94, p = 0.007), explaining 10% of the variance in retention. Two predictors were significant: years since program graduation and Manitoba residency at the time of application. CONCLUSION: Long-term retention of IMG physicians remains a concern. Potential interventions likely to increase retention, such as Manitoba residency at application and a focus on mentorship programs, should be further explored.

Macneill, C. S., Wardley, L. J. et Odartey-Wellington, F. (2020). "Nova Scotia Needs Doctors: How Do We Attract and Keep Them?" Healthc Q **22**(4): 48-54.

Recruitment and retention of physicians, especially in rural communities, are severe public health policy problems in Canadian hospitals. This characterizes the situation in Nova Scotia. This study explored the Eastern Zone of the Nova Scotia Health Authority to determine ways to overcome the physician shortage. Six participants, all working in physician recruitment in Nova Scotia, were asked semi-structured, in-depth questions about the current recruitment process in their respective zones. The research participants presented many parallel perspectives on problems and solutions. It was determined that the biggest obstacles faced by recruiters are bureaucracy, a lack of clear communication channels, failure to track return on investment, a lack of community integration

(including spousal employment supports) and a lack of clearly defined roles and responsibilities within the Eastern Zone. This study is timely given the salience of the subject, especially on the Canadian public agenda.

Malau-Aduli, B. S., Smith, A. M., Young, L., et al. (2020). "To stay or go? Unpacking the decision-making process and coping strategies of International Medical Graduates practising in rural, remote, and regional Queensland, Australia." PLoS One **15**(6): e0234620.

Australia is one of many countries to rely on International Medical Graduates (IMGs) to fill general practitioner (GP) positions throughout its regional, rural, and remote (RRR) communities. Current government initiatives requiring IMGs to work for specified periods in RRR areas offer only short-term solutions. The need to improve the long-term retention of IMGs practising in RRR areas has motivated this research to improve our understanding of how IMGs make decisions about where to practise. Specifically, this study sought to: (a) identify the factors that influence an IMG's decision to remain working in RRR areas, and (b) develop a theory, grounded in the data, to explain how these factors are prioritised, evaluated and used to inform a decision to remain working in RRR areas. This study adopted a qualitative approach and employed grounded theory methods. Data collection and analysis occurred concurrently, using constant, comparative analysis, guided by theoretical sampling and data saturation. Data sources were transcripts from semi-structured interviews with IMG registrars (n = 20) and supervisors (n = 5), interviewers' notes and analytic memos. Interviewees were all currently working in RRR areas of Queensland, Australia. The analysis involved a three-phase coding process, progressing from specific, inductive coding to abstract, abductive coding. The analysis revealed that the IMG decision-making process involves a complex, dynamic, and iterative process of balancing life goals based on life stage. Many factors are considered when assessing the balance of three main life goals: satisfaction with work, family, and lifestyle. The prioritisation and balance of these life goals can vary as the IMG moves through varying work-, family-, and age-related life stages. It is hoped that having this understanding of the complexity of the IMG decision-making process, will better equip medical educators, policy makers and support service providers to tailor services to encourage IMGs to continue practising in these regions.

Marcus, K., Purwaningrum, F. et Short, S. (2021). "Towards more effective health workforce governance: The case of overseas-trained doctors." Aust J Rural Health **29**(1): 52-60.

OBJECTIVE: The over-reliance on overseas-trained doctors remains a pressing problem in a handful of countries. This study aimed to explore the experience of rural and remote overseas-trained doctors as regards to their migration, recruitment and ongoing support in Australia as the basis for more effective health workforce governance. DESIGN: Qualitative interviews were undertaken with overseas-trained doctors in rural and remote Australia. Interview questions focused on the experiences of overseas-trained doctors. SETTING: Migrant doctors working in general practice in rural and remote Australia. PARTICIPANTS: Overseas-trained doctors who met inclusion criteria participated in interviews (n=14), which were digitally recorded and transcribed. Thematic coding and analysis were conducted with input from the study's Expert Policy Stakeholder Group. RESULTS: Overseas-trained doctors enjoyed the relative autonomy of working in rural or remote general practice and were grateful to be in Australia. Specialised rural and remote skills such as cultural competence in matters of Indigenous health and specialised emergency rural skills was a key finding as was the deskilling or lack of career development opportunities. Our analysis pointed to the mismatch in expectations and experiences between overseas-trained doctors, policy-makers and employers, as some doctors experienced obstacles with registration, or the location was not ideal, or there was a lack of awareness of Indigenous-related health and cultural challenges. CONCLUSIONS: In the context of Australia's continuing reliance on overseas-trained doctors, this study revealed the need for improved communication and coordination between overseas-trained doctors, policy-makers (education, health, employment and immigration) and employers, as a basis for more effective health workforce governance.

Negin, J., et al. (2013). "Foreign-born health workers in Australia: an analysis of census data." Hum Resour Health **11**: 69.

BACKGROUND: Provide an up-to-date national picture of the medical, midwifery and nursing workforce distribution in Australia with a focus on overseas immigration and on production sustainability challenges. METHODS: Using 2006 and 2011 Australian census data, analysis was conducted on medical practitioners (doctors) and on midwifery and nursing professionals. RESULTS: Of the 70,231 medical practitioners in Australia in 2011, 32,919 (47.3%) were Australian-born, with the next largest groups bring born in South Asia and Southeast Asia. In 2006, 51.9% of medical practitioners were born in Australia. Of the 239,924 midwifery and nursing professionals in Australia, 127,911 (66.8%) were born in Australia, with the next largest groups being born in the United Kingdom and Ireland and in Southeast Asia. In 2006, 69.8% of midwifery and nursing professionals were born in Australia. Western Australia has the highest percentage of foreign-born health workers. There is a higher percentage of Australia-born health workers in rural areas than in urban areas (82% of midwifery and nursing professional in rural areas are Australian-born versus 59% in urban areas). Of the 15,168 additional medical practitioners in Australia between the 2006 and 2011 censuses, 10,452 (68.9%) were foreign-born, including large increases from such countries as India, Nepal, Philippines, and Zimbabwe. We estimate that Australia has saved US$1.7 billion in medical education costs through the arrival of foreign-born medical practitioners over the past five years. CONCLUSIONS: The Australian health system is increasingly reliant on foreign-born health workers. This raises questions of medical education sustainability in Australia and on Australia's recruitment from countries facing critical shortages of health workers.

Nelson, S., et al. (2011). "The shifting landscape of immigration policy in Canada: implications for health human resources." Healthc Policy **7**(2): 60-67.

For many years, Canada has relied on international migration to compensate for cyclical shortages in its skilled labour force. This paper reports on recent changes in Canadian immigration policy, namely, the introduction of new immigration programs focused on skilled workers, along with the implementation of domestic mobility agreements. With specific reference to the case of nursing, the paper highlights the necessity for integrated policy across multiple government levels and stakeholder groups, as well as the need to promote the development of evidence-based policy in the fields of immigration and health human resources.

Ogbolu, M. N., et al. (2014). "Efficiency, Equity, and Voice: Perspectives on Foreign Nurse Sourcing." Journal of International Business and Economics **14**(3): 131-140.

Developed nations, such as the United States and United Kingdom are currently facing serious nursing shortages and are resorting to overseas recruitment of foreign nurses. This issue of nurse migration from poor countries to address nursing shortage in developed economies has vexed citizens in both source and destination countries. The debate about its ethical and human resource ramification has been heating up for some time. The political controversy has prompted the World Health Organization (WHO) to pass a resolution that urges its member nations to develop strategies to mitigate the adverse effects of migration of health professionals and minimize its negative impact on health systems. In the present paper, the arguments of advocates and opponents of nurse migration are considered employing Budd's (2004) efficiency, equity, and voice framework, a useful prism for examining employment relations.

Peterson, B. D., et al. (2014). "Doctors with Borders: Occupational Licensing as an Implicit Barrier to High Skill Migration." Public Choice **160**(1-2): 45-63.

Research on the political economy of immigration overlooks the specificity of human capital in skilled occupations and its implications for immigration preferences and policymaking. Conclusions that skilled Americans are unconcerned about labor market competition from skilled migrants build on a simple dichotomy between high and low skill migrants. In this article we show that natives turn to occupational licensing regulations as occupation-specific protectionist barriers to skilled migrant labor competition. In practice, high skill natives face labor market competition only from those high-skill migrants who share their occupation-specific skills. Licensure regulations ostensibly serve the public

interest by certifying competence, but they can simultaneously be formidable barriers to entry by skilled migrants. From a collective action perspective, skilled natives can more easily secure sub-national, occupation-specific policies than influence national immigration policy. We exploit the unique structure of the American medical profession that allows us to distinguish between public interest and protectionist motives for migrant physician licensure regulations. We show that over the 1973-2010 period states with greater physician control over licensure requirements imposed more stringent requirements for migrant physician licensure and, as a consequence, received fewer new migrant physicians. By our estimates over a third of all US states could reduce their physician shortages by at least 10 percent within 5 years just by equalizing migrant and native licensure requirements. This article advances research on the political economy of immigration and highlights an overlooked dimension of international economic integration: regulatory rent-seeking as a barrier to the cross-national mobility of human capital, and the public policy implications of such barriers.

Pittman, P., et al. (2014). "International recruitment of allied health professionals to the United States: piecing together the picture with imperfect data." J Allied Health **43**(2): 79-87.

BACKGROUND: Research on the international recruitment of health professionals to the U.S. has focused almost exclusively on physicians and nurses; we are aware of no research on the migration of allied health professionals. OBJECTIVE: We examined the strengths and weaknesses of various public and private data sources on foreign-educated allied health professions in the U.S. and patched together a picture of these migrants. We focus on pharmacists, physical therapists (PTs), occupational therapists (OTs), speech language pathologists (SLPs), and medical and clinical laboratory technicians (lab techs). FINDINGS: Based on the American Community Survey, we found that 12% of PTs, 12% of lab techs, 8% of pharmacists, 4% of OTs, and 3% of SLPs are foreign-born and entered the U.S. at age 21 or older. Among foreign-born PTs, about half remain as non-citizens, suggesting the highest proportion of recent arrivals among the five professions. CONCLUSIONS: As Congress debates comprehensive immigration reform, one of the much need changes to the system is better immigration data, disaggregated by occupation.

Roy, K., Solenkova, N. et Mehta, P. (2021). "A Wasted Opportunity During a Pandemic: The Foreign Medical Graduates in the USA." J Immigr Minor Health **23**(6): 1364-1368.

In this brief note from the field, we address an essential issue of non-inclusion of Foreign Medical Graduates (FMG) practicing in the US into the healthcare disaster response in the current pandemic. Because FMGs represent a significant share of the entire country's physician workforce, it seems not prudent to ignore the need to address the current immigration barriers affecting the crucial healthcare needs during this pandemic. Being subjects of the ongoing complex bureaucracy complicated by recent anti-immigrant steps, FMGs that practice for years on temporary (H1B) visas cannot fully join COVID-19 forces. In addition, these physicians face multiple challenges related to their health protection, protection of their immediate family, job security, and the potential risk of being deported. We believe that physicians' immigration status should no longer be disregarded outside of academic interest. It carries the same importance as other public health issues, especially in severe healthcare crises like this pandemic.

Sanchez, G., et al. (2015). "Latino Physicians in the United States, 1980-2010: A Thirty-Year Overview From the Censuses." Acad Med **90**(7): 906-912.

PURPOSE: To update and extend a 2000 study on the California Latino physician workforce, the authors examined the Latino physician workforce in the 30-year time frame spanning 1980 to 2010, comparing changes in the rates of physicians per 100,000 population for the Latino and non-Hispanic white (NHW) populations in the United States as a whole and in the five states with (in 2010) the largest Latino populations. METHOD: The authors used detailed data from the U.S. Census (Public Use Microdata Samples for 1980-2010) to identify total population, total number of physicians, and Spanish-language ability for both the Latino and NHW populations. They examined nativity for only Latinos. RESULTS: At the national level, the NHW physician rate per 100,000 of the NHW population increased from 211 in 1980 to 315 in 2010 while the Latino physician rate per 100,000 of the Latino

population dropped over the same period from 135 to 105. With small variations, the same trend occurred in all five of the states examined. At the national and state levels, Latino physicians were far more likely to speak Spanish than NHW physicians. Over the 30-year period, the Latino physician population has evolved from being primarily foreign born to being about evenly split between foreign born and U.S. born. CONCLUSIONS: The Latino physician shortage has worsened over the past 30 years. The authors recommend immediate action on the national and local level to increase the supply of Latino physicians.

Seal, A., Harding, C. et McGirr, J. (2020). "What influences trainee decisions to practise in rural and regional Australia?" Aust J Prim Health **26**(6): 520-525.

Although international medical graduates (IMGs) make up a substantial part of the Australian rural general practice workforce, most research on factors associated with rural practice has focused on Australian medical graduates (AMGs). This study aimed to determine whether there were differences between IMGs and AMGs in terms of these factors. Registrars in training and recent fellows (Fellowship of the Royal Australian College of General Practitioners/Fellowship of the Australian College of Rural and Remote Medicine) who participated in training in rural and regional Australia were surveyed about practice models and rural practice. Almost two-thirds of participants were practicing or intending to practice in rural areas, with no difference between AMGs and IMGs. None of the variables associated with rural practice for AMGs was found to be associated with rural practice in IMGs in univariate binary regression analysis. Two key variables that are strongly associated with rural medical practice in the current literature, namely rural background and rural exposure, were not significant predictors of rural practice among IMGs. Due to the significant number of IMGs in regional training programs, any future incentives designed to improve rural recruitment and retention need to address factors relevant to IMGs.

Shaffer, F. A., Bakhshi, M. A., Farrell, N., et al. (2020). "CE: Original Research: The Recruitment Experience of Foreign-Educated Health Professionals to the United States." Am J Nurs **120**(1): 28-38.

BACKGROUND: In 2007 AcademyHealth published a landmark report on the U.S.-based international nurse recruitment industry. This article provides an update to that report, describing the current state of recruitment of foreign-educated health professionals (FEHPs), in particular foreign-educated nurses (FENs), to the United States. Areas covered include the regulatory landscape, economic issues, recruitment industry changes, and current demographic and migration trends. PURPOSE: To learn more, CGFNS International, Inc., formerly known as the Commission on Graduates of Foreign Nursing Schools, and its Alliance for Ethical International Recruitment Practices division conducted a study designed to elicit qualitative and quantitative data that would further illuminate the recruitment experience. METHODS: Researchers conducted a survey of FEHPs, recruited from those who used VisaScreen services between 2015 and 2017, designed to assess their recruitment experiences. They also conducted interviews with a smaller sample of FENs and recruiters to elicit greater detail. RESULTS: While there was evidence of progress relative to the ethical recruitment of FEHPs, issues such as high breach fees, inadequate orientation, and misalignment of expectations regarding work environment and location were also revealed. CONCLUSION: Given that FEHP migration to the United States is likely to continue its upward trajectory, better strategies to implement market-wide practices that ensure the safe, orderly, and ethical recruitment of FEHPs are needed.

Shaffer, F. A., et al. (2016). "Code for ethical international recruitment practices: the CGFNS alliance case study." Hum Resour Health **14**(Suppl 1): 31.

Projections indicate a global workforce shortage of approximately 4.3 million across the health professions. The need to ensure an adequate supply of health workers worldwide has created a context for the increased global migration of these professionals. The global trend in the migration of health professionals has given rise to the international recruitment industry to facilitate the passage of health workers from source to destination countries. This is particularly the case in the United States, where the majority of immigrant health professionals have come by way of the recruiting industry. This industry is largely unregulated in the United States as well as in many other countries, for which

voluntary codes have been used as a means to increase transparency of the recruitment process, shape professional conduct, and mitigate harm to foreign-educated health workers. The CGFNS Alliance case study presented herein describes a multi-stakeholder effort in the United States to promote ethical recruitment practices. Such codes not only complement the WHO Global Code of Practice but are necessary to maximize the impact of these global standards on local settings. This case study offers both a historical perspective and a conceptual framework for examining the multiplicity of factors affecting the migration of human resources for health. The lessons learned provide critical insights into the factors pertaining to the relevancy and effectiveness of the WHO Code from the perspectives of both source and destination countries. This study provides a conceptual model for examining the usefulness of the WHO Code as well as how best to ensure its viability, sustainability, relevancy, and effectiveness in the global environment. This case study concludes with recommendations for evolving business models that need to be in place to strengthen the effectiveness of the WHO Code in the marketplace and to ensure its impact on the international recruitment industry in advancing ethical practices. These recommendations include using effective screening mechanisms to determine health professionals' readiness for migration as well as implementing certification processes to raise the practice standards for those directly involved in recruiting skilled workers and managing the migration flow.

Shinjo, D. et Aramaki, T. (2012). "Geographic distribution of healthcare resources, healthcare service provision, and patient flow in Japan: A cross sectional study." Soc Sci.Med **75**(11): 1954-1963.

Healthcare systems in developed countries are facing the challenge of dealing with changing social structures as a result of rapidly aging populations. This study examines the relationship among the geographical distribution of healthcare resources, healthcare service provision, and interregional patient flow in Japan. A cross-sectional study was performed using data from healthcare-related public surveys conducted in 2008, together with social, economic, and environmental variables. The geographical units of analysis were 348 Secondary Healthcare Service Areas, which provide and manage most healthcare services in Japan. The equity of the distribution of physicians among hospitals and clinics was evaluated using the Lorenz curve and the Gini coefficient. Multiple regression analysis was used to examine the relationships between the inpatient flow ratio and selected variables. Next, the 348 Secondary Healthcare Service Areas were divided into tertiles according to the inpatient flow ratio, and differences among these variables were examined using Bonferroni's correction for multiple comparisons. The Gini coefficient for physician distribution among hospitals was 0.209 and was 0.165 among clinics. Multiple regression analysis showed that hospital physician density, the elderly ratio, and hospital bed density were all correlated with the inpatient flow ratio (beta = 0.396, -0.576, 0.425, respectively; R(2) = 0.622, all ps < 0.001). Healthcare resources were significantly more scarce in the lowest tertile (outflow group) than in other groups in both hospitals and clinics. The provision of healthcare services was also imbalanced among tertiles. Our results imply that there is a need for reconstituting the geographical distribution of healthcare resources in Japan. Further research and healthcare-related databases are also needed to facilitate the creation of a more balanced geographical distribution and of a more effective healthcare system in Japan

Tankwanchi, A. B., et al. (2015). "Monitoring Sub-Saharan African physician migration and recruitment post-adoption of the WHO code of practice: temporal and geographic patterns in the United States." PLoS One **10**(4): e0124734.

Data monitoring is a key recommendation of the WHO Global Code of Practice on the International Recruitment of Health Personnel, a global framework adopted in May 2010 to address health workforce retention in resource-limited countries and the ethics of international migration. Using data on African-born and African-educated physicians in the 2013 American Medical Association Physician Masterfile (AMA Masterfile), we monitored Sub-Saharan African (SSA) physician recruitment into the physician workforce of the United States (US) post-adoption of the WHO Code of Practice. From the observed data, we projected to 2015 with linear regression, and we mapped migrant physicians' locations using GPS Visualizer and ArcGIS. The 2013 AMA Masterfile identified 11,787 active SSA-origin physicians, representing barely 1.3% (11,787/940,456) of the 2013 US physician workforce, but exceeding the total number of physicians reported by WHO in 34 SSA countries (N = 11,519). We

estimated that 15.7% (1,849/11,787) entered the US physician workforce after the Code of Practice was adopted. Compared to pre-Code estimates from 2002 (N = 7,830) and 2010 (N = 9,938), the annual admission rate of SSA emigres into the US physician workforce is increasing. This increase is due in large part to the growing number of SSA-born physicians attending medical schools outside SSA, representing a trend towards younger migrants. Projection estimates suggest that there will be 12,846 SSA migrant physicians in the US physician workforce in 2015, and over 2,900 of them will be post-Code recruits. Most SSA migrant physicians are locating to large urban US areas where physician densities are already the highest. The Code of Practice has not slowed the SSA-to-US physician migration. To stem the physician "brain drain", it is essential to incentivize professional practice in SSA and diminish the appeal of US migration with bolder interventions targeting primarily early-career (age </= 35) SSA physicians.

Virani, S., Mitra, S., Grullón, M. A., et al. (2021). "International Medical Graduate Resident Physicians in Psychiatry: Decreasing Numbers, Geographic Variation, Community Correlations, and Implications." Acad Psychiatry **45**(1): 7-12.

OBJECTIVES: The number of International Medical Graduate (IMG) physicians matching into categorical psychiatry decreased steadily over the past decade. The authors sought to understand if this trend was occurring in other specialties, if US IMG physicians and non-US IMG physicians were equally affected, and if certain regions of the USA were more affected by this decrease than others. Finally, the authors compared the proportion of foreign-born individuals within a US census region to the proportion of non-US IMG physicians within that region. METHODS: The authors analyzed data from the National Resident Matching Program from the years 2014-2020. Statewide data was aggregated into nine geographic regions, as per the US Census Bureau. The number of foreign-born individuals within each US census region was calculated from the 2018 American Community Survey data. RESULTS: In comparison to eight other specialties, psychiatry saw the greatest decrease (46.3%) in IMG physicians matching into PGY-1 positions. Both US IMG physicians and non-US IMG physicians were equally affected. The percentage of IMG physicians decreased in each of the nine US census regions. In six out of nine geographic regions, non-US IMG physicians were under-represented when comparing their proportion to the number of foreign-born people that lived within that region. CONCLUSIONS: Decreasing numbers of IMG physicians in psychiatry training may have long-term implications for cultural competency, serving underserved populations, and fellowship recruitment. We advocate for program directors to recognize IMG physicians as an important source of diversity and to recruit residents that reflect the communities they serve.

Wick, K. H. (2015). "International medical graduates as physician assistants." Jaapa **28**(7): 43-46.

UNLABELLED: This study describes the MEDEX physician assistant (PA) program's experience with screening, educating, and graduating PA students who were international medical graduates (IMGs). METHODS: The study reviewed IMG-PA demographics including country of origin; prior primary care practice; and current practice location, specialty, and medically underserved designation. Descriptive statistics and chi-square analysis or Fisher exact test summarize outcomes. RESULTS: Thirty-nine IMG-PAs were graduated from 1991 through 2013. IMGs came from central and eastern Europe (48.7%), Asia (33.3%), and other regions. Most (69.2%) are women. Almost all (91.7%) practice in urban settings, 55.6% are in primary care, and 30.6% work in medically underserved areas. IMG-PAs in primary care were more likely to practice in underserved areas (P=0.009). CONCLUSION: MEDEX has graduated IMG-PAs who possess appropriate clinical and professional PA skills.

Wyonch, R. (2021). Help Wanted: How to Address Labour Shortages in Healthcare and Improve Patient Access. Commentary; 392. Toronto CD Howe Institute**:** 36 , tabl., graph.
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3820955&dgcid=ejournal_htmlemail_demand:supply:in:health:economics:ejournal_abstractlink

To address a pandemic, preserving and maintaining the healthcare system’s capacity is critical. This Commentary evaluates factors contributing to healthcare labour shortages and investigates the inter-relationships between access to health services, the number of healthcare providers, compensation

rates and migration patterns. Addressing healthcare access challenges likely requires increasing the number of healthcare providers and also addressing inefficiencies in the combination of inputs – the mix of providers, facilities, tools and equipment. Overall, the results suggest a critical and strategic examination of fee schedules for physician services, with the goal of reducing the average cost per service but strategically increasing remuneration for difficult-to-access services. Nurses and other care providers can increase the efficiency of healthcare delivery through expanding scopes of practice or filling gaps when there is a shortage of family or specialist physicians. However, there are, as well, shortages of nurses and other healthcare providers. Another example of increasing the efficiency of healthcare services is the shift toward team-based care. A critical feature of both expanding scopes of practice and team-based care is effective communication and knowledge transfer between supervising specialists and care providers. The time and costs associated with training new physicians make it infeasible to address labour shortages arising from a crisis or an unexpected population need simply through training more of the needed physicians. However, shifting methods and modes of care delivery, or adapting scopes of practice, are tools to address short-term healthcare labour supply gaps. Over the longer term, increasing the efficiency and supply of healthcare labour will require adapting medical education policies, remuneration and entry pathways to practising medical professions, as well as continuing to modernize care delivery methods, coordination and health data accessibility.

Wright, A., et al. (2012). "Supporting international medical graduates in rural Australia: a mixed methods evaluation." Rural Remote Health **12**: 1897.

INTRODUCTION: In Australia, international medical graduates (IMGs) make a substantial contribution to rural medical workforces. They often face significant communication, language, professional and cultural barriers, in addition to the other challenges of rural clinical practice. The Gippsland Inspiring Professional Standards among International Experts (GIPSIE) program was designed to provide educational support to IMGs across a large geographical region using innovative educational methods to ultimately build capacity in the provision of rural medical education. GIPSIE offered 5 sessions over 3 months. Simulation-based training was a prominent theme and addressed clinical knowledge, attitudes and skills and included a range of activities (eg procedural skills training with benchtop models, management of the acutely ill patient with SimMan, patient assessment skills with simulated patients). Diverse clinical communication skills were explored (eg teamwork, handover, telephone, critical information). Audiovisual review of performance was enabled through the use of iPod nano devices. GIPSIE was underpinned by a website offering diverse learning resources. Content experts were invited to lead sessions that integrated knowledge and skills reflecting local practice. METHODS: IMGs were recruited from hospitals (n = 15) and general practices (n = 2) across the region. It was aimed to evaluate the impact of GIPSIE on the clinical practice of IMG participants. Evaluation measures included pre- and post-program 15 item multisource feedback (MSF), post-program questionnaires and, in order to address retention, telephone interviews exploring participants' responses 3 months after the program finished. RESULTS: Fifteen participants completed GIPSIE and rated the program highly, especially the simulation-based activities with feedback and later audiovisual review on iPods and the GIPSIE website. Suggestions were made to improve several aspects of the program. Participants reported increased knowledge, skills and professionalism after the program. Although overall MSF scores showed no statistically significant changes, there were positive directional changes for the items 'technical skills appropriate to current practice', 'willingness and effectiveness when teaching/training colleagues' and 'communication with carers and family'. These developments were also supported in free-text comments. Learning was reported to be sustained 3 months after the program. CONCLUSIONS: GIPSIE was highly valued by participants who reported improvements in clinical knowledge and skills. A range of professional issues were raised and addressed. GIPSIE seemed to provide a platform for further development. Although new to many participants, simulation was embraced as an educational method. The relationship between regional clinicians and the medical school was pivotal to success. A feature of the study was tracking improvements in clinical practice as a consequence of participating in the GIPSIE program. Future work needs to focus on further promoting the transfer of learning to the workplace. However the sustainability of these programs requires significant commitment.

Zaidi, Z., Dewan, M. et Norcini, J. (2020). "International Medical Graduates: Promoting Equity and Belonging." Acad Med **95**(12S Addressing Harmful Bias and Eliminating Discrimination in Health Professions Learning Environments): S82-s87.

> International medical school graduates (IMGs) play a vital role in the health care system of the United States. They constitute roughly one-quarter of the physician workforce, comprising a significant proportion of the primary care providers in high-need rural and urban areas, where they provide equal and, in some instances, better care than U.S. graduates. Nonetheless, they face a series of hurdles in entering U.S. residency programs and throughout their training experiences.IMGs must expend significant resources to obtain Education Commission for Foreign Medical Graduates certification, which includes Steps 1, 2 Clinical Knowledge and 2 Clinical Skills of the United States Medical Licensing Examination. They encounter the uncertainty of matching and, if successful, obtaining a visa to enter the United States. Once here, they need to adapt to the complexities of the health care system and familiarize themselves with the cultural nuances, professional behaviors, and communication skills of another country. They encounter biases and microaggressions and lack support groups and mentors. Those who choose an academic career are less likely to obtain leadership positions.This Perspective provides an overview of these challenges and highlights opportunities for change at local and national levels. Specifically, it identifies strategies that would assist IMGs before entry, at entry, during training, at the transition to practice, and in practice. The current COVID-19 pandemic highlights the shortage of physicians in the United States and illustrates the importance of ensuring that IMGs, who are essential health care workers, feel welcome, valued, and recognized for their contributions.

Zehmati, A. (2021). "L'émigration des médecins algériens : phénomène normal ou véritable exode ?" Revue International de Politique de Développement(13;1).
https://doi.org/10.4000/poldev.4432

The purpose of this paper is to explore the phenomenon of medical migration in Algeria for at least three decades. Using different data sources, we have calculated emigration rates on a global scale and in some specialities. We have also looked at the doctor's salaries in the public sector in order to find out whether they are well or poorly paid in comparison with executives' managers in the economic sector, private healthcare and those practising in certain foreign countries. According to our estimates, the emigration of Algerian doctors cannot be considered as a real exodus if we look at doctors practising in France who have obtained their diploma in Algeria. The emigration ratio of this population was 8.63% in 2016. Differently, when the place of birth is considered, the estimated emigration ratio was 23.35%; a rate close to those recorded by some Sub-Saharan African countries which are experiencing a worrying exodus. In the future, shortages may concern certain specialities particularly affected by emigration, such as radiology (24.69%), nephrology (24.85%) but above all psychiatry (40.27%). Doctors, whatever their rank, are relatively better paid than executives' managers in the economic sector, but far from the emoluments in the private sector and those practising in certain foreign countries. Financial motives alone cannot explain the reasons for emigration. It is therefore necessary to look for other reasons that may be strong motives in the emigration decision of Algerian doctors.

Zurn, P. et Dumont, J. C. (2008). Health Workforce and International Migration: Can New Zealand Compete? OECD Health Working Paper; 33. Paris OCDE**:** 58.
http://www.oecd.org/dataoecd/46/41/40673065.pdf

> This paper examines health workforce and migration policies in New Zealand, with a special focus on the international recruitment of doctors and nurses. The health workforce in New Zealand, as in all OECD countries, plays a central role in the health system. Nonetheless, maybe more than for any other OECD country, the health workforce in New Zealand cannot be considered without taking into account its international dimension. New Zealand has the highest proportion of migrant doctors among OECD countries, and one of the highest for nurses. There is no specific immigration policy for health professionals, although the permanent and temporary routes make it relatively easy for doctors and nurses who can get their qualification recognised to immigrate in New Zealand. At the same time, New Zealand also has high emigration rates of health workers, mainly to other OECD countries. International migration is thus at the same time an opportunity and a challenge for the management of the human resources for health (HRH) in New Zealand. Increasing international competition for

highly skilled workers raises important issues such as sustainability and ability to compete in a global market. In this context, new approaches to improve the international recruitment of health workers, as well as developing alternative policies, may need to be considered. As for international recruitment, better coordination and stronger collaboration between main stakeholders could contribute to more effective and pertinent international recruitment.

La délégation de soins et le transfert de compétences entre professionnels de santé : des éléments positifs

Les anglo-saxons utilisent le terme de « ***skill mix*** » pour décrire la variété des professionnels qui composent une équipe de soins, et la répartition des tâches entre ces professionnels. Cette problématique, que l'on traduira par « répartition des compétences », renvoie en France aux questions posées en termes de partage des tâches et des compétences, ainsi que de définition du contenu et des frontières des métiers. La répartition des compétences est très liée au contexte spécifique de chaque pays ; le partage des tâches s'intègre dans une organisation ou un système de santé donné, en référence à un processus de soins défini[17]. **La délégation / substitution** traduit le transfert de tâches antérieurement réalisées par une catégorie de professionnels à une autre catégorie de professionnels, ou à un autre grade dans la même catégorie. Ce transfert de compétences a d'abord été expérimenté aux États-Unis et au Canada, dès les années soixante dans un contexte de rationalisation du système de soins. De nouveaux métiers sont alors apparus tels que les infirmières praticiennes (*nurse practitioners*) ou les auxiliaires médicaux (*physicians' assistants*). Aux États-Unis, l'intensification de la concurrence entre réseaux de soins (Health Maintenance Organizations, Preferred Provider Organizations) a accéléré ce processus impulsé par la recherche de gains de productivité. Les expériences menées au Royaume-Uni s'inscrivent elles aussi dans un objectif d'efficience collective, mais elles procèdent également d'un objectif d'amélioration de l'accès aux soins, dans un contexte de saturation des médecins généralistes. À la suite du rapport Berland[18], le ministre de la santé français, Jean-François Mattéi a souhaité le lancement, en décembre 2003, d'expérimentations devant s'inscrire dans un cadre législatif et réglementaire précis. Les cinq expérimentations qui ont fait l'objet du premier arrêté concernaient le traitement de l'insuffisance rénale chronique par hémodialyse, le suivi des patients traités pour hépatite chronique C, la radiothérapie, l'ophtalmologie et le suivi des patients diabétiques[19]. Le concept a ensuite fait son chemin en France avec la publication des différents rapports du Haut Conseil pour l'avenir de l'assurance maladie (HCAAM) sur la coopération entre professionnels de santé[20]. Des études récentes parlementaires ou émanant de l'Igas s'interrogent sur l'élargissement de la délégation de soins entre personnels médicaux et non médicaux[21][22] ou réfléchissent sur l'opportunité ou non de créer une profession de santé intermédiaire pour apporter une réponse aux tensions portant sur la démographie médicale et aux besoins de santé croissants[23][24]. Par ailleur, en 2019, la profession d'assistant médicala été créée pour aider le médecin dans certaines de ses fonctions[25].

REVUES DE LITTERATURE

Aquino, M. R., Olander, E. K., Needle, J. J., et al. (2016). "Midwives' and health visitors' collaborative relationships: A systematic review of qualitative and quantitative studies." Int J Nurs Stud **62**: 193-206.

> OBJECTIVES: Interprofessional collaboration between midwives and health visitors working in maternal and child health services is widely encouraged. This systematic review aimed to identify existing and potential areas for collaboration between midwives and health visitors; explore the methods through which collaboration is and can be achieved; assess the effectiveness of this relationship between these groups, and ascertain whether the identified examples of collaboration

[17] Midy, F. (2003). "Efficacité et efficience de la délégation d'actes des médecins généralistes aux infirmières : revue de la littérature 1970-2002." Questions D'economie De La Sante (Credes)(65): 4.
[18] Berland, Y. (2003). Coopération des professions de santé : le transfert de tâches et de compétences. Paris Ministère chargé de la santé.
[19] Berland, Y. et Bourgueil, Y. (2006). Rapport "Cinq expérimentations de coopération et de délégation de tâches entre professions de santé". Paris ONDPS.
[20] HCAAM (2014). Avis sur la coopération entre professionnels de santé : annexes 1 à 5.
[21] L'arrêté du 7 novembre 2019 précise les fonctions de l'assistant médical.
[22] Mainguy, P., Viossat, L. C., Baba, J., et al. (2021). Evaluation de la filière auditive. 2 vol. Paris Igas
Jourdan, J. R., Viossat, L. C., Zantman, F., et al. (2020). La filière visuelle : modes d'exercice, pratiques professionnelles et formation. Paris Igas
[23] Bohic, N., Josselin, A., Sandeau-Bruber, A. C., et al. (2021). Trajectoires pour de nouveaux partages de compétences entre professionnels de santé. 2 tomes. Paris Igas.
[24] Isaac-Sibille, C. (2021). L'organisation des professions de santé : quelle vision dans dix ans et comment y parvenir ? Paris Assemblée Nationale
[25]

are in line with clinical guidelines and policy. DESIGN: A narrative synthesis of qualitative and quantitative studies. DATA SOURCES: Fourteen electronic databases, research mailing lists, recommendations from key authors and reference lists and citations of included papers. REVIEW METHODS: Papers were included if they explored one or a combination of: the areas of practice in which midwives and health visitors worked collaboratively; the methods that midwives and health visitors employed when communicating and collaborating with each other; the effectiveness of collaboration between midwives and health visitors; and whether collaborative practice between midwives and health visitors meet clinical guidelines. Papers were assessed for study quality. RESULTS: Eighteen papers (sixteen studies) met the inclusion criteria. The studies found that midwives and health visitors reported valuing interprofessional collaboration, however this was rare in practice. Findings show that collaboration could be useful across the service continuum, from antenatal care, transition of care/handover, to postnatal care. Evidence for the effectiveness of collaboration between these two groups was equivocal and based on self-reported data. In relation, multiple enablers and barriers to collaboration were identified. Communication was reportedly key to interprofessional collaboration. CONCLUSIONS: Interprofessional collaboration was valuable according to both midwives and health visitors, however, this was made challenging by several barriers such as poor communication, limited resources, and poor understanding of each other's role. Structural barriers such as physical distance also featured as a challenge to interprofessional collaboration. Although the findings are limited by variable methodological quality, these were consistent across time, geographical locations, and health settings, indicating transferability and reliability.

Ashcroft, R. et Kourgiantakis, T. (2017). "Social work's scope of practice in the provision of primary mental health care: protocol for a scoping review." **7**(11): e019384.

INTRODUCTION: Social work is a key member of interprofessional primary healthcare teams and foundational to primary healthcare reforms that aim to improve the provision of mental healthcare. Little is known, however, about social work's scope of practice within primary healthcare settings, particularly in the provision of mental healthcare. The objective of this study is to identify and describe social work's scope of practice as it relates to mental healthcare in primary healthcare settings. METHODS AND ANALYSIS: A scoping review will be conducted using the methodology established by Arksey and O'Malley. We will search electronic databases (MEDLINE, Embase, PsycINFO, CINAHL, Social Services Abstracts and Social Work Abstracts) to identify studies appropriate for inclusion. One reviewer will independently screen all abstracts and full-text studies for inclusion, with supervision by lead investigator. We will include any study that focuses on social work and mental healthcare within primary healthcare settings. All bibliographic data, study characteristics and range of social work practice activities will be collected and analysed using a tool developed by the research team. ETHICS AND DISSEMINATION: The scoping review will synthesise social work's scope of practice in the provision of mental healthcare within primary healthcare settings. This review will be the first step to formally develop guidelines for social work practice in primary healthcare. The results will be disseminated through a peer-reviewed publication and conference presentations.

Baldwin, A., Harvey, C., Willis, E., et al. (2019). "Transitioning across professional boundaries in midwifery models of care: A literature review." Women Birth **32**(3): 195-203.

BACKGROUND: High-risk pregnancy, or one with escalating complexities, requires the inclusion of numerous health professions in care provision. A strategy of midwife navigators to facilitate the smooth transition across models of care and service providers has now been in place in Queensland, Australia, for over twelve months, and a formal review process will soon begin. Navigators are experienced nurses or midwives who have the expertise and authority to support childbearing women with chronic or complex problems through the health system so that it is co-ordinated and they can transition to self-care. This includes ensuring a logical sequence in tests and procedures, providing education, or facilitating access to specialist care. The navigator evaluation included a review of existing models of care that support women with chronic and complex needs during their pregnancy. This paper describes the integrative literature review that explored the transitioning of care models. METHODS: The review followed formal Preferred Reporting Items for Systematic Reviews and Meta-analyses guidelines, utilised the Critical Appraisal Skills Program tools and analysed a final 33 papers,

published from 2000 onwards in professional, peer-reviewed journals and databases. RESULTS/CONCLUSIONS: Four key themes of communication, context, visibility and frames were identified, discussed in depth, and considered in the current body of knowledge. The outcomes refer clearly to 'property rights' or turf protected by invisible fences and gatekeeping by midwives and other health professionals. This review may inform development of future frameworks and practice review to better address the needs of pregnant women.

Collister, D., Pyne, L., Cunningham, J., et al. (2019). "Multidisciplinary Chronic Kidney Disease Clinic Practices: A Scoping Review." Can J Kidney Health Dis **6**: 2054358119882667.

Background: Multidisciplinary chronic kidney disease (CKD) clinics improve patient outcomes but their optimal design is unclear. Objective: To perform a scoping review to identify and describe current practices (structure, function) associated with multidisciplinary CKD clinics. Design: Scoping review. Setting: Databases included Medline, EMBASE, Cochrane, and CINAHL. Patients: Patients followed in multidisciplinary CKD clinics globally. Measurements: Multidisciplinary CKD clinic composition, entry criteria, follow-up, and outcomes. Methods: We systematically searched the literature to identify randomized controlled trials, non-randomized interventional studies, or observational studies of multidisciplinary CKD clinics defined by an outpatient setting where two or more allied health members (with or without a nephrologist) provided longitudinal care to 50 or more adult or pediatric patients with CKD. Included studies were from 2002 to present. Searches were completed on August 10, 2018. Title, abstracts, and full texts were screened independently by two reviewers with disagreements resolved by a third. We abstracted data from included studies to summarize multidisciplinary CKD clinic team composition, entry criteria, follow-up, and processes. Results: 40 studies (8 randomized controlled trials and 32 non-randomized interventional studies or observational studies) involving 23 230 individuals receiving multidisciplinary CKD care in 12 countries were included. Thirty-eight focused on adults (27 with CKD, 10 incident dialysis patients, one conservative therapy) while two studies focused on adolescents or children with CKD. The multidisciplinary team included a mean of 4.6 (SD 1.5) members consisting of a nephrologist, nurse, dietician, social worker, and pharmacist in 97.4%, 86.8%, 84.2%, 57.9%, and 42.1% of studies respectively. Entry criteria to multidisciplinary CKD clinics ranged from glomerular filtration rates of 20 to 70 mL/min/1.73m(2) or CKD stages 1 to 5 without any proteinuria or risk equation-based criteria. Frequency of follow-up was variable by severity of kidney disease. Team member roles and standardized operating procedures were infrequently reported. Limitations: Unstandardized definition of multidisciplinary CKD care, studies limited to CKD defined by glomerular filtration rate, and lack of representation from countries other than Canada, Taiwan, the United States, and the United Kingdom. Conclusions: There is heterogeneity in multidisciplinary CKD team composition, entry criteria, follow-up, and processes with inadequate reporting of this complex intervention. Additional research is needed to determine the best model for multidisciplinary CKD clinics. Trial registration: Not applicable.

Currie, V., Harvey, G., West, E., et al. (2005). "Relationship between quality of care, staffing levels, skill mix and nurse autonomy: literature review." J Adv Nurs **51**(1): 73-82.

AIMS: This paper reports a literature review exploring the relationship between quality of care and selected organizational variables through a consideration of what is meant by perceptions of quality, whose perceptions are accorded prominence, and whether changes in staffing, skill mix and autonomy affect perceptions of quality. BACKGROUND: Three basic ideas underpin this literature review: the growing focus on quality improvement in health care, concerns about the quality of care, and the move towards patient involvement and consultation. Of particular interest is the way in which changes in nurse staffing, skill mix and autonomy may affect the delivery of quality patient care. METHODS: A search was conducted using the CINAHL, Medline and Embase databases. Key words used were quality of health care; quality of nursing care; nurse; patient; skill mix; nurse-patient ratio; outcomes; adverse health care events and autonomy. The objective was to draw together a diverse collection of literature related to the field of health care quality. Papers were included for their relevance to the field of enquiry. The original search was conducted in 2003 and updated in 2004. FINDINGS: Quality of care is a complex, multi-dimensional concept which presents researchers with a challenge when attempting to evaluate it. Traditional nursing assessment tools have fallen out of use, partly because they have

failed to provide opportunities to engage with and access the views of patients or nurses. There is also evidence that patient satisfaction as an indicator of quality is compromised on a number of fronts. There is conflicting information on how nurses and patients think about quality. Research looking at the relationship between the selected organizational variables and perceptions of quality also suffers from a number of limitations. We argue that there is a requirement for more patient-centred research exploring perceptions of quality and differences in nurse staffing, skill mix and autonomy.

Dennis, S., May, J., Perkins, D., et al. (2009). "What evidence is there to support skill mix changes between GPs, pharmacists and practice nurses in the care of elderly people living in the community?" Aust New Zealand Health Policy **6**: 23.

BACKGROUND: Workforce shortages in Australia are occurring across a range of health disciplines but are most acute in general practice. Skill mix change such as task substitution is one solution to workforce shortages. The aim of this systematic review was to explore the evidence for the effectiveness of task substitution between GPs and pharmacists and GPs and nurses for the care of older people with chronic disease. Published, peer reviewed (black) and non-peer reviewed (grey) literature were included in the review if they met the inclusion criteria. RESULTS: Forty-six articles were included in the review. Task substitution between pharmacists and GPs and nurses and GPs resulted in an improved process of care and patient outcomes, such as improved disease control. The interventions were either health promotion or disease management according to guidelines or use of protocols, or a mixture of both. The results of this review indicate that pharmacists and nurses can effectively provide disease management and/or health promotion for older people with chronic disease in primary care. While there were improvements in patient outcomes no reduction in health service use was evident. CONCLUSION: When implementing skill mix changes such as task substitution it is important that the health professionals' roles are complementary otherwise they may simply duplicate the task performed by other health professionals. This has implications for the way in which multidisciplinary teams are organised in initiatives such as the GP Super Clinics.

Dierick-van Daele, A. T., Spreeuwenberg, C., Derckx, E. W., et al. (2008). "Critical appraisal of the literature on economic evaluations of substitution of skills between professionals: a systematic literature review." J Eval Clin Pract **14**(4): 481-492.

OBJECTIVE: Substitution of skills has been introduced to increase health service efficiency, but little evidence is available about its cost-effectiveness. This systematic review aims to identify economic evaluations of substitution between professionals, to assess the quality of the study methods applied and to value the results for decision making. METHODS: Publications between January 1996 and November 2006 were searched in Medline, Cochrane, Cinahl, database of Health Technology Assessments, EPOC and Embase. Randomized controlled trials (RCTs), cost-benefit analysis, interrupted time series design and systematic reviews were selected. The methodological quality of the papers was reviewed, using the critical appraisal of Drummond and the EPOC list. RESULTS: Eleven studies were finally included of 7605 studies: three cost-effectiveness studies, three cost-minimization studies and five studies related to partial economic evaluations. Small numbers of participating professionals and several limitations in the cost valuation and the measurement of costs were identified. CONCLUSIONS: Several potential limitations influence the validity and generalizability. Full economic evaluations per se are of limited value for making decisions about substitution of skills. The tenuous relationship between structural, process and outcome variables is not sufficient investigated. For meaningfully placing the costs and consequences of substitution of skills in the context of health care and generating relevant data for decision making, it is strongly recommended to combine an economic evaluation (RCT) with an observational longitudinal study.

Duncan, E. A. et Murray, J. (2012). "The barriers and facilitators to routine outcome measurement by allied health professionals in practice: a systematic review." Bmc Health Services Research **1**(96): (18), fig.

BACKGROUND: Allied Health Professionals today are required, more than ever before, to demonstrate the impact of their practice. However, despite at least 20 years of expectation, many services fail to deliver routine outcome measurement in practice. This systematic review investigates what helps and

hinders routine outcome measurement of allied health professionals practice. METHODS: A systematic review protocol was developed comprising: a defined search strategy for PsycINFO, MEDLINE and CINHAL databases and inclusion criteria and systematic procedures for data extraction and quality appraisal. Studies were included if they were published in English and investigated facilitators and/or barriers to routine outcome measurement by allied health professionals. No restrictions were placed on publication type, design, country, or year of publication. Reference lists of included publications were searched to identify additional papers. Descriptive methods were used to synthesise the findings. RESULTS: 960 papers were retrieved; 15 met the inclusion criteria. Professional groups represented were Physiotherapy, Occupational Therapy, and Speech and Language Therapy. The included literature varied in quality and design. Facilitators and barriers to routine outcome measurement exist at individual, managerial and organisational levels. Key factors affecting professionals' use of routine outcome measurement include: professionals' level of knowledge and confidence about using outcome measures, and the degree of organisational and peer-support professionals received with a view to promoting their work in practice. CONCLUSIONS: Whilst the importance of routinely measuring outcomes within the allied health professions is well recognised, it has largely failed to be delivered in practice. Factors that influence clinicians' ability and desire to undertake routine outcome measurement are bi-directional: they can act as either facilitators or barriers. Routine outcome measurement may only be deliverable if appropriate action is taken at individual therapist, team, and organisational levels of an organisation.

Flodgren, G., Bidonde, J. et Berg, R. C. (2017). NIPH Systematic Reviews: Executive Summaries. Impact of a High Proportion of Unskilled Personnel on Quality of Care and Patient Safety in the Healthcare Services: A Systematic Review. Oslo, Norway, Knowledge Centre for the Health Services at The Norwegian Institute of Public Health (NIPH)

In Norway around 25% of personnel working in the municipal health and care services lack a relevant health-related education (i.e. are unskilled), while at the same time the care need of patients in the community is increasing. We know little about how this affects the quality of services and the safety of patients. In addition, we know little about the consequences of changes in skill mix, e.g. when higher qualified personnel are replaced with personnel with lower qualifications. With skill mix we mean the composition of the various categories of nursing staff providing direct patient care. With the aim to summarise the evidence in the field in a systematic review, we searched for studies that evaluate the effects on quality of care and patient safety of a high proportion of unskilled personnel working directly with patients and the effects of changes in skill mix. We found no studies that evaluated the impact on quality of care and patient safety of a high proportion of unskilled personnel working in direct patient care. Nor did we find any eligible studies that evaluated the impact on quality of care and patient safety of a change in skill mix. This review highlights the lack of high quality evidence from studies with robust study designs, on this important and current research topic.

Fung, L., Boet, S., Bould, M. D., et al. (2015). "Impact of crisis resource management simulation-based training for interprofessional and interdisciplinary teams: A systematic review." J Interprof Care **29**(5): 433-444.

Crisis resource management (CRM) abilities are important for different healthcare providers to effectively manage critical clinical events. This study aims to review the effectiveness of simulation-based CRM training for interprofessional and interdisciplinary teams compared to other instructional methods (e.g., didactics). Interprofessional teams are composed of several professions (e.g., nurse, physician, midwife) while interdisciplinary teams are composed of several disciplines from the same profession (e.g., cardiologist, anaesthesiologist, orthopaedist). Medline, EMBASE, CINAHL, Cochrane Central Register of Controlled Trials, and ERIC were searched using terms related to CRM, crisis management, crew resource management, teamwork, and simulation. Trials comparing simulation-based CRM team training versus any other methods of education were included. The educational interventions involved interprofessional or interdisciplinary healthcare teams. The initial search identified 7456 publications; 12 studies were included. Simulation-based CRM team training was associated with significant improvements in CRM skill acquisition in all but two studies when compared to didactic case-based CRM training or simulation without CRM training. Of the 12 included studies, one showed significant improvements in team behaviours in the workplace, while two studies

demonstrated sustained reductions in adverse patient outcomes after a single simulation-based CRM team intervention. In conclusion, CRM simulation-based training for interprofessional and interdisciplinary teams show promise in teaching CRM in the simulator when compared to didactic case-based CRM education or simulation without CRM teaching. More research, however, is required to demonstrate transfer of learning to workplaces and potential impact on patient outcomes.

Gafni, A., Birch, S. et Buckley, G. (2011). Economic Analysis of Physician Assistants in Ontario: Literature Review and Feasibility Study. Chepa working paper series ; 11-03. Hamilton McMaster University. http://www.chepa.org/Libraries/PDFs/CHEPA_WP_11-03.sflb.ashx

This paper consists in a literature review of studies on Physician Assistants working in a variety of settings and found few evaluation studies on the costs and/or effectiveness of Physician Assistants in primary care practices, Emergency Departments and in hospital settings other than Emergency Departments. The existing literature is limited because of the non-Canadian settings in which most studies have been performed and because of the non-experimental study designs, which are subject to potential bias. In addition, the research questions that have been addressed have tended to ignore what would appear to be the most important comparison: that between Physician Assistants and other non-physician providers such as Nurse Practitioners. The evidence we found on the cost-effectiveness of PAs is anecdotal and difficult to translate in the Ontario context. We conclude that it is difficult to make use of the existing literature. We recommend that MOHLTC consider options for funding a randomized control trial that might involve several trial arms in the particular sectors of relevance to the PA program, for example: physician only; physician and PA; physician and NP; and physician, NP and PA. The purpose of this would be to explore the difference in costs and effects on the different service modalities. This would also provide sufficient information to support modelling the short-run effects that could be expected from allocating the same amount of resources to the different service modalities as well as the implications for physician resources planning.

Garrard, J. W., Cox, N. J., Dodds, R. M., et al. (2019). "Comprehensive geriatric assessment in primary care: a systematic review." Aging Clin Exp Res.

BACKGROUND: Comprehensive geriatric assessment (CGA) involves the multidimensional assessment and management of an older person. It is well described in hospital and home-based settings. A novel approach could be to perform CGA within primary healthcare, the initial community located healthcare setting for patients, improving accessibility to a co-located multidisciplinary team. AIM: To appraise the evidence on CGA implemented within the primary care practice. METHODS: The review followed PRISMA recommendations. Eligible studies reported CGA on persons aged >/= 65 in a primary care practice. Studies focusing on a single condition were excluded. Searches were run in five databases; reference lists and publications were screened. Two researchers independently screened for eligibility and assessed study quality. All study outcomes were reviewed. RESULTS: The authors screened 9003 titles, 145 abstracts and 97 full texts. Four studies were included. Limited study bias was observed. Studies were heterogeneous in design and reported outcomes. CGAs were led by a geriatrician (n = 3) or nurse practitioner (n = 1), with varied length and extent of follow-up (12-48 months). Post-intervention hospital admission rates showed mixed results, with improved adherence to medication modifications. No improvement in survival or functional outcomes was observed. Interventions were widely accepted and potentially cost-effective. DISCUSSION: The four studies demonstrated that CGA was acceptable and provided variable outcome benefit. Further research is needed to identify the most effective strategy for implementing CGA in primary care. Particular questions include identification of patients suitable for CGA within primary care CGA, a consensus list of outcome measures, and the role of different healthcare professionals in delivering CGA.

Goryakin, Y., Griffiths, P. et Maben, J. (2011). "Economic evaluation of nurse staffing and nurse substitution in health care: a scoping review." Int J Nurs Stud **48**(4): 501-512.

OBJECTIVE: Several systematic reviews have suggested that greater nurse staffing as well as a greater proportion of registered nurses in the health workforce is associated with better patient outcomes. Others have found that nurses can substitute for doctors safely and effectively in a variety of settings.

However, these reviews do not generally consider the effect of nurse staff on both patient outcomes and costs of care, and therefore say little about the cost-effectiveness of nurse-provided care. Therefore, we conducted a scoping literature review of economic evaluation studies which consider the link between nurse staffing, skill mix within the nursing team and between nurses and other medical staff to determine the nature of the available economic evidence. DESIGN: Scoping literature review. DATA SOURCES: English-language manuscripts, published between 1989 and 2009, focussing on the relationship between costs and effects of care and the level of registered nurse staffing or nurse-physician substitution/nursing skill mix in the clinical team, using cost-effectiveness, cost-utility, or cost-benefit analysis. Articles selected for the review were identified through Medline, CINAHL, Cochrane Database of Systematic Reviews, Database of Abstracts of Reviews of Effects and Google Scholar database searches. REVIEW METHODS: After selecting 17 articles representing 16 unique studies for review, we summarized their main findings, and assessed their methodological quality using criteria derived from recommendations from the guidelines proposed by the Panel on Cost-Effectiveness in Health Care. RESULTS: In general, it was found that nurses can provide cost effective care, compared to other health professionals. On the other hand, more intensive nurse staffing was associated with both better outcomes and more expensive care, and therefore cost effectiveness was not easy to assess. CONCLUSIONS: Although considerable progress in economic evaluation studies has been reached in recent years, a number of methodological issues remain. In the future, nurse researchers should be more actively engaged in the design and implementation of economic evaluation studies of the services they provide.

House, S. et Havens, D. (2017). "Nurses' and Physicians' Perceptions of Nurse-Physician Collaboration: A Systematic Review." J Nurs Adm **47**(3): 165-171.

The purpose of this systematic review was to explore nurses' and physicians' perceptions of nurse-physician collaboration and the factors that influence their perceptions. Overall, nurses and physicians held different perceptions of nurse-physician collaboration. Shared decision making, teamwork, and communication were reoccurring themes in reports of perceptions about nurse-physician collaboration. These findings have implications for more interprofessional educational courses and more intervention studies that focus on ways to improve nurse-physician collaboration.

Hurlock-Chorostecki, C., Forchuk, C., Orchard, C., et al. (2014). "Hospital-based nurse practitioner roles and interprofessional practice: a scoping review." Nurs Health Sci **16**(3): 403-410.

This scoping review provides current global understanding of the rapidly evolving nurse practitioner role within hospital settings, and considers the level of understanding of its enactment within interprofessional teamwork. Arksey and O'Malley's framework was used to explore recent primary research, reviews, and gray literature in two ways. First, hospital-based nurse practitioner literature was mapped to country of origin, and thematically summarized. Second, clearly developed and consistently defined key interprofessional concepts were identified in the interprofessional literature then conceptually mapped to the nurse practitioner studies by their operationalization. The nurse practitioner review located 103 abstracts. Twenty-nine, originating from four countries, met the inclusion criteria. The interprofessional concept review identified a total of 137 relevant abstracts, however, only ten met the inclusion criteria. Understanding the nurse practitioner role within hospital teams remains limited due to a small number of countries producing evidence, the lack of nurse practitioner role title standardization hindering consistent knowledgebase development, and limited application and inconsistent operationalization of concepts within nurse practitioner research. Research focused on role enactment is needed to understand the uniqueness of the hospital-based nurse practitioner role.

Johansson, G., Eklund, K. et Gosman-Hedstrom, G. (2010). "Multidisciplinary team, working with elderly persons living in the community: a systematic literature review." Scand J Occup Ther **17**(2): 101-116.

As the number of elderly persons with complex health needs is increasing, teams for their care have been recommended as a means of meeting these needs, particularly in the case of elderly persons with multi-diseases. Occupational therapists, in their role as team members, exert significant influence

in guiding team recommendations. However, it has been emphasized that there is a lack of sound research to show the impact of teamwork from the perspective of elderly persons. The aim of this paper was to explore literature concerning multidisciplinary teams that work with elderly persons living in the community. The research method was a systematic literature review and a total of 37 articles was analysed. The result describes team organisation, team intervention and outcome, and factors that influence teamwork. Working in a team is multifaceted and complex. It is important to enhance awareness about factors that influence teamwork. The team process itself is also of great importance. Clinical implications for developing effective and efficient teamwork are also presented and discussed.

Johnson, J. M. et Carragher, R. (2018). "Interprofessional collaboration and the care and management of type 2 diabetic patients in the Middle East: A systematic review." J Interprof Care **32**(5): 621-628.

The World Health Organization has ranked the Middle East (ME) as the second most prevalent region globally for type 2 diabetes. Currently, treatment options initiated by physicians focus mainly on pharmaceuticals; however, lifestyle factors also have a tremendous impact on a patient's wellness or illness. A potential solution to this issue is to use an interprofessional team approach when caring for this patient population. The purpose of this systematic review is to look at the present literature involving the use of an interprofessional team approach to the care and maintenance of people with type 2 diabetes in the ME. A PRISMA flow diagram demonstrates the authors' literature search and screening process. The systematic review includes nine studies with mixed-methodologies performed in the Middle Eastern region in an outpatient or primary care setting, and demonstrates the use of interprofessional collaboration when providing care for type 2 diabetic patients. A meta-analysis was not included due to the heterogeneity of the studies; however, data analysis is discussed and results are demonstrated through an extraction tool developed by the authors based on The Cochrane Collaboration's data collection form. The aim of this review is to construct meaning surrounding the use and effectiveness of this collaborative approach with the adult and geriatric Middle Eastern diabetic patient population. Recommendations include continued support from multiple healthcare professions, involving nurses, pharmacists, dietitians, and physicians to promote holistic and patient-centred-care leading to fewer type 2 diabetes complications and hospital admissions.

Jones, M. L. (2005). "Role development and effective practice in specialist and advanced practice roles in acute hospital settings: systematic review and meta-synthesis." J Adv Nurs **49**(2): 191-209.

AIMS: This paper reports a study whose aim was to identify and synthesize qualitative research studies reporting barriers or facilitators to role development and/or effective practice in specialist and advanced nursing roles in acute hospital settings. BACKGROUND: The number of clinical nurse specialist, nurse practitioner, advanced nurse practitioner and consultant nurse roles has grown substantially in recent years. Research has shown that nurses working in innovative roles encounter a range of barriers and facilitators to effective practice. METHODS: Systematic literature searches were undertaken, and relevant studies identified using specific inclusion and exclusion criteria. The selected studies were appraised, and their findings synthesized using Ritchie and Spencer's 'Framework' approach. RESULTS: Fourteen relevant studies were identified, mostly from the UK. They described a range of barriers and facilitators affecting specialist and advanced nursing practice. These related to the practitioner's personal characteristics and previous experience, professional and educational issues, managerial and organizational issues, relationships with other health care professionals, and resources. The factors most widely identified as important were relationships with other key personnel, and role definitions and expectations. CONCLUSIONS: Relationships with other staff groups and role ambiguity are the most important factors which hinder or facilitate the implementation of specialist and advanced nursing roles. These factors seem interlinked, and the associated problems do not appear to resolve spontaneously when staff become familiar with the new roles. In order to reduce role ambiguity and the consequent likelihood of negative responses we recommend that, when specialist and advanced nursing roles are introduced, clear role definitions and objectives are developed and communicated to relevant staff groups; these definitions and objectives should be updated as necessary.

Karacsony, S., Chang, E., Johnson, A., et al. (2015). "Measuring nursing assistants' knowledge, skills and attitudes in a palliative approach: A literature review." Nurse Educ Today **35**(12): 1232-1239.

BACKGROUND: Nursing assistants are the largest aged care workforce providing care to older people in residential aged care facilities. Although studies have focused on their training and development needs when providing a palliative approach, a valid and reliable instrument to evaluate their knowledge, skills and attitudes is required. AIMS: To examine what instruments have been used to evaluate nursing assistants' knowledge of, skills in and attitudes towards a palliative approach in residential aged care facilities, critically evaluate development processes, and discuss the strengths and limitations of existing instruments for this population. METHODS: CINAHL, the Cochrane Library, ERIC, MEDLINE, PubMed, Scopus and Web of Science were searched using key words. Selected articles were published in English in the period 2004-2014 and included instruments which evaluated nursing assistants and a palliative approach. RESULTS: Ten studies using seven instruments met the inclusion criteria. One of these instruments measured nursing assistants' level of comfort in providing end-of-life care. The six remaining instruments measured palliative care knowledge, palliative care practice, self-efficacy, knowledge and attitudes towards people with advanced dementia, beliefs and attitudes to death, dying, palliative and interdisciplinary care across the aged care workforce. CONCLUSION: Seven instruments have been used to evaluate nursing assistants' knowledge, skills and attitudes in a palliative approach. Instrument design and recommended psychometric processes for development limit specificity and usefulness of these instruments for nursing assistants' scope of practice. Adhering to recommended psychometric processes will increase the validity and reliability of an instrument tailored to this population and a palliative approach.

Karam, M., Brault, I., Van Durme, T., et al. (2018). "Comparing interprofessional and interorganizational collaboration in healthcare: A systematic review of the qualitative research." Int J Nurs Stud **79**: 70-83.

BACKGROUND: Interprofessional and interorganizational collaboration have become important components of a well-functioning healthcare system, all the more so given limited financial resources, aging populations, and comorbid chronic diseases. The nursing role in working alongside other healthcare professionals is critical. By their leadership, nurses can create a culture that encourages values and role models that favour collaborative work within a team context. OBJECTIVES: To clarify the specific features of conceptual frameworks of interprofessional and interorganizational collaboration in the healthcare field. This review, accordingly, offers insights into the key challenges facing policymakers, managers, healthcare professionals, and nurse leaders in planning, implementing, or evaluating interprofessional collaboration. DESIGN: This systematic review of qualitative research is based on the Joanna Briggs Institute's methodology for conducting synthesis. DATA SOURCES: Cochrane, JBI, CINAHL, Embase, Medline, Scopus, Academic Search Premier, Sociological Abstract, PsycInfo, and ProQuest were searched, using terms such as professionals, organizations, collaboration, and frameworks. METHODS: Qualitative studies of all research design types describing a conceptual framework of interprofessional or interorganizational collaboration in the healthcare field were included. They had to be written in French or English and published in the ten years between 2004 and 2014. RESULTS: Sixteen qualitative articles were included in the synthesis. Several concepts were found to be common to interprofessional and interorganizational collaboration, such as communication, trust, respect, mutual acquaintanceship, power, patient-centredness, task characteristics, and environment. Other concepts are of particular importance either to interorganizational collaboration, such as the need for formalization and the need for professional role clarification, or to interprofessional collaboration, such as the role of individuals and team identity. Promoting interorganizational collaboration was found to face greater challenges, such as achieving a sense of belonging among professionals when differences exist between corporate cultures, geographical distance, the multitude of processes, and formal paths of communication. CONCLUSIONS: This review sets a direction to follow for implementing changes that meet the challenge of a changing healthcare system and the transition towards non-institutional care. It also shows that collaboration between nurses and healthcare professionals from different healthcare organizations is still poorly explored. This is a major limitation in the existing scientific literature, especially given the potential role that could be played by nurses in enhancing interorganizational collaboration.

Karimi-Shahanjarini, A., Shakibazadeh, E., Rashidian, A., et al. (2019). "Barriers and facilitators to the implementation of doctor-nurse substitution strategies in primary care: a qualitative evidence synthesis." Cochrane Database Syst Rev **4**: Cd010412.

BACKGROUND: Having nurses take on tasks that are typically conducted by doctors (doctor-nurse substitution, a form of 'task-shifting') may help to address doctor shortages and reduce doctors' workload and human resource costs. A Cochrane Review of effectiveness studies suggested that nurse-led care probably leads to similar healthcare outcomes as care delivered by doctors. This finding highlights the need to explore the factors that affect the implementation of strategies to substitute doctors with nurses in primary care. In our qualitative evidence synthesis (QES), we focused on studies of nurses taking on tasks that are typically conducted by doctors working in primary care, including substituting doctors with nurses or expanding nurses' roles. OBJECTIVES: (1) To identify factors influencing implementation of interventions to substitute doctors with nurses in primary care. (2) To explore how our synthesis findings related to, and helped to explain, the findings of the Cochrane intervention review of the effectiveness of substituting doctors with nurses. (3) To identify hypotheses for subgroup analyses for future updates of the Cochrane intervention review. SEARCH METHODS: We searched CINAHL and PubMed, contacted experts in the field, scanned the reference lists of relevant studies and conducted forward citation searches for key articles in the Social Science Citation Index and Science Citation Index databases, and 'related article' searches in PubMed. SELECTION CRITERIA: We constructed a maximum variation sample (exploring variables such as country level of development, aspects of care covered and the types of participants) from studies that had collected and analysed qualitative data related to the factors influencing implementation of doctor-nurse substitution and the expansion of nurses' tasks in community or primary care worldwide. We included perspectives of doctors, nurses, patients and their families/carers, policymakers, programme managers, other health workers and any others directly involved in or affected by the substitution. We excluded studies that collected data using qualitative methods but did not analyse the data qualitatively. DATA COLLECTION AND ANALYSIS: We identified factors influencing implementation of doctor-nurse substitution strategies using a framework thematic synthesis approach. Two review authors independently assessed the methodological strengths and limitations of included studies using a modified Critical Appraisal Skills Programme (CASP) tool. We assessed confidence in the evidence for the QES findings using the GRADE-CERQual approach. We integrated our findings with the evidence from the effectiveness review of doctor-nurse substitution using a matrix model. Finally, we identified hypotheses for subgroup analyses for updates of the review of effectiveness. MAIN RESULTS: We included 66 studies (69 papers), 11 from low- or middle-income countries and 55 from high-income countries. These studies found several factors that appeared to influence the implementation of doctor-nurse substitution strategies. The following factors were based on findings that we assessed as moderate or high confidence. Patients in many studies knew little about nurses' roles and the difference between nurse-led and doctor-led care. They also had mixed views about the type of tasks that nurses should deliver. They preferred doctors when the tasks were more 'medical' but accepted nurses for preventive care and follow-ups. Doctors in most studies also preferred that nurses performed only 'non-medical' tasks. Nurses were comfortable with, and believed they were competent to deliver a wide range of tasks, but particularly emphasised tasks that were more health promotive/preventive in nature. Patients in most studies thought that nurses were more easily accessible than doctors. Doctors and nurses also saw nurse-doctor substitution and collaboration as a way of increasing people's access to care, and improving the quality and continuity of care. Nurses thought that close doctor-nurse relationships and doctor's trust in and acceptance of nurses was important for shaping their roles. But nurses working alone sometimes found it difficult to communicate with doctors. Nurses felt they had gained new skills when taking on new tasks. But nurses wanted more and better training. They thought this would increase their skills, job satisfaction and motivation, and would make them more independent. Nurses taking on doctors' tasks saw this as an opportunity to develop personally, to gain more respect and to improve the quality of care they could offer to patients. Better working conditions and financial incentives also motivated nurses to take on new tasks. Doctors valued collaborating with nurses when this reduced their own workload. Doctors and nurses pointed to the importance of having access to resources, such as enough staff, equipment and supplies; good referral systems; experienced leaders; clear roles; and adequate

training and supervision. But they often had problems with these issues. They also pointed to the huge number of documents they needed to complete when tasks were moved from doctors to nurses. AUTHORS' CONCLUSIONS: Patients, doctors and nurses may accept the use of nurses to deliver services that are usually delivered by doctors. But this is likely to depend on the type of services. Nurses taking on extra tasks want respect and collaboration from doctors; as well as proper resources; good referral systems; experienced leaders; clear roles; and adequate incentives, training and supervision. However, these needs are not always met.

Kilpatrick, K., Kaasalainen, S., Donald, F., et al. (2014). "The effectiveness and cost-effectiveness of clinical nurse specialists in outpatient roles: a systematic review." J Eval Clin Pract **20**(6): 1106-1123. https://www.ncbi.nlm.nih.gov/pubmed/25040492

RATIONALE, AIMS AND OBJECTIVES: Increasing numbers of clinical nurse specialists (CNSs) are working in outpatient settings. The objective of this paper is to describe a systematic review of randomized controlled trials (RCTs) evaluating the cost-effectiveness of CNSs delivering outpatient care in alternative or complementary provider roles. METHODS: We searched CINAHL, MEDLINE, EMBASE and seven other electronic databases, 1980 to July 2012 and hand-searched bibliographies and key journals. RCTs that evaluated formally trained CNSs and health system outcomes were included. Study quality was assessed using the Cochrane risk of bias tool and the Quality of Health Economic Studies instrument. We used the Grading of Recommendations Assessment, Development and Evaluation to assess quality of evidence for individual outcomes. RESULTS: Eleven RCTs, four evaluating alternative provider (n = 683 participants) and seven evaluating complementary provider roles (n = 1464 participants), were identified. Results of the alternative provider RCTs (low-to-moderate quality evidence) were fairly consistent across study populations with similar patient outcomes to usual care, some evidence of reduced resource use and costs, and two economic analyses (one fair and one high quality) favouring CNS care. Results of the complementary provider RCTs (low-to-moderate quality evidence) were also fairly consistent across study populations with similar or improved patient outcomes and mostly similar health system outcomes when compared with usual care; however, the economic analyses were weak. CONCLUSIONS: Low-to-moderate quality evidence supports the effectiveness and two fair-to-high quality economic analyses support the cost-effectiveness of outpatient alternative provider CNSs. Low-to-moderate quality evidence supports the effectiveness of outpatient complementary provider CNSs; however, robust economic evaluations are needed to address cost-effectiveness.

King, A., Long, L. et Lisy, K. (2015). "Effectiveness of team nursing compared with total patient care on staff wellbeing when organizing nursing work in acute care wards: a systematic review." JBI Database System Rev Implement Rep **13**(11): 128-168.

BACKGROUND: The organization of the work of nurses, according to recognized models of care, can have a significant impact on the wellbeing and performance of nurses and nursing teams. This review focuses on two models of nursing care delivery, namely, team and total patient care, and their effect on nurses' wellbeing. OBJECTIVES: To examine the effectiveness of team nursing compared to total patient care on staff wellbeing when organizing nursing work in acute care wards. INCLUSION CRITERIA: Participants were nurses working on wards in acute care hospitals. The intervention was the use of a team nursing model when organizing nursing work. The comparator was the use of a total patient care model. This review considered quantitative study designs for inclusion in the review.The outcome of interest was staff wellbeing which was measured by staff outcomes in relation to job satisfaction, turnover, absenteeism, stress levels and burnout. SEARCH STRATEGY: The search strategy aimed to find both published and unpublished studies from 1995 to April 21, 2014. METHODOLOGICAL QUALITY: Quantitative papers selected for retrieval were assessed by two independent reviewers for methodological validity prior to inclusion in the review using standardized critical appraisal instruments from the Joanna Briggs Institute. DATA EXTRACTION: Data was extracted from papers included in the review using the standardized data extraction tool from the Joanna Briggs Institute. The data extracted included specific details about the interventions, populations, study methods and outcomes of significance to the review question and its specific objectives. DATA SYNTHESIS: Due to the heterogeneity of the included quantitative studies, meta-analysis was not possible. Results have

been presented in a narrative form. RESULTS: The database search returned 10,067 records. Forty-three full text titles were assessed, and of these 40 were excluded, resulting in three studies being included in the review. Two of the studies were quasi experimental designs and the other was considered an uncontrolled before and after experimental study. There were no statistically significant differences observed in any study in the overall job satisfaction of nurses using a team nursing model compared with a total patient care model. Some differences in job satisfaction were however observed within different subgroups of nurses. There were no statistically significant differences in either stress or job tension. Within the selected studies, the specific outcomes of absenteeism and burnout were not addressed. CONCLUSIONS: Due to the limited number of quantitative studies identified for inclusion in this systematic review it is not possible to determine whether organizing nursing work in a team nursing or total patient care model is more effective in terms of staff wellbeing in acute care settings. Neither a team nursing or total patient care model had a significant influence on nurses' overall job satisfaction, stress levels or staff turnover. This review could not ascertain if the type of model of care affects absenteeism or burnout as these were not addressed in any of the identified studies. Caution should be taken when evaluating which model of care is appropriate and the decision needs to incorporate staff experience levels and staff skill mix. There needs to be clear definition of nursing roles. This review demonstrates the need for further quantitative studies of these models of care that are well designed with sufficient sample sizes to allow for attrition of participants, and that explore the impact each model has on nurse's wellbeing, in particular, studies that address burnout and absenteeism. There is a need for consistent terminology to allow for future comparison and research to occur at an international level. Future studies on models of care should include economic analysis to fully inform policy and practice.

Laurant, M., Reeves, D., Hermens, R., et al. (2005). "Substitution of doctors by nurses in primary care." Cochrane Database Syst Rev(2): Cd001271.

BACKGROUND: Demand for primary care services has increased in developed countries due to population ageing, rising patient expectations, and reforms that shift care from hospitals to the community. At the same time, the supply of physicians is constrained and there is increasing pressure to contain costs. Shifting care from physicians to nurses is one possible response to these challenges. The expectation is that nurse-doctor substitution will reduce cost and physician workload while maintaining quality of care. OBJECTIVES: Our aim was to evaluate the impact of doctor-nurse substitution in primary care on patient outcomes, process of care, and resource utilisation including cost. Patient outcomes included: morbidity; mortality; satisfaction; compliance; and preference. Process of care outcomes included: practitioner adherence to clinical guidelines; standards or quality of care; and practitioner health care activity (e.g. provision of advice). Resource utilisation was assessed by: frequency and length of consultations; return visits; prescriptions; tests and investigations; referral to other services; and direct or indirect costs. SEARCH STRATEGY: The following databases were searched for the period 1966 to 2002: Medline; Cinahl; Bids, Embase; Social Science Citation Index; British Nursing Index; HMIC; EPOC Register; and Cochrane Controlled Trial Register. Search terms specified the setting (primary care), professional (nurse), study design (randomised controlled trial, controlled before-and-after-study, interrupted time series), and subject (e.g. skill mix). SELECTION CRITERIA: Studies were included if nurses were compared to doctors providing a similar primary health care service (excluding accident and emergency services). Primary care doctors included: general practitioners, family physicians, paediatricians, general internists or geriatricians. Primary care nurses included: practice nurses, nurse practitioners, clinical nurse specialists, or advanced practice nurses. DATA COLLECTION AND ANALYSIS: Study selection and data extraction was conducted independently by two reviewers with differences resolved through discussion. Meta-analysis was applied to outcomes for which there was adequate reporting of intervention effects from at least three randomised controlled trials. Semi-quantitative methods were used to synthesize other outcomes. MAIN RESULTS: 4253 articles were screened of which 25 articles, relating to 16 studies, met our inclusion criteria. In seven studies the nurse assumed responsibility for first contact and ongoing care for all presenting patients. The outcomes investigated varied across studies so limiting the opportunity for data synthesis. In general, no appreciable differences were found between doctors and nurses in health outcomes for patients, process of care, resource utilisation or cost. In five studies the nurse assumed responsibility for first contact care for patients wanting urgent consultations

during office hours or out-of-hours. Patient health outcomes were similar for nurses and doctors but patient satisfaction was higher with nurse-led care. Nurses tended to provide longer consultations, give more information to patients and recall patients more frequently than did doctors. The impact on physician workload and direct cost of care was variable. In four studies the nurse took responsibility for the ongoing management of patients with particular chronic conditions. The outcomes investigated varied across studies so limiting the opportunity for data synthesis. In general, no appreciable differences were found between doctors and nurses in health outcomes for patients, process of care, resource utilisation or cost. AUTHORS' CONCLUSIONS: The findings suggest that appropriately trained nurses can produce as high quality care as primary care doctors and achieve as good health outcomes for patients. However, this conclusion should be viewed with caution given that only one study was powered to assess equivalence of care, many studies had methodological limitations, and patient follow-up was generally 12 months or less. While doctor-nurse substitution has the potential to reduce doctors' workload and direct healthcare costs, achieving such reductions depends on the particular context of care. Doctors' workload may remain unchanged either because nurses are deployed to meet previously unmet patient need or because nurses generate demand for care where previously there was none. Savings in cost depend on the magnitude of the salary differential between doctors and nurses, and may be offset by the lower productivity of nurses compared to doctors.

Laurant, M., van der Biezen, M., Wijers, N., et al. (2018). "Nurses as substitutes for doctors in primary care." Cochrane Database Syst Rev **7**: Cd001271.

BACKGROUND: Current and expected problems such as ageing, increased prevalence of chronic conditions and multi-morbidity, increased emphasis on healthy lifestyle and prevention, and substitution for care from hospitals by care provided in the community encourage countries worldwide to develop new models of primary care delivery. Owing to the fact that many tasks do not necessarily require the knowledge and skills of a doctor, interest in using nurses to expand the capacity of the primary care workforce is increasing. Substitution of nurses for doctors is one strategy used to improve access, efficiency, and quality of care. This is the first update of the Cochrane review published in 2005. OBJECTIVES: Our aim was to investigate the impact of nurses working as substitutes for primary care doctors on:* patient outcomes;* processes of care; and* utilisation, including volume and cost. SEARCH METHODS: We searched the Cochrane Central Register of Controlled Trials (CENTRAL), part of the Cochrane Library (www.cochranelibrary.com), as well as MEDLINE, Ovid, and the Cumulative Index to Nursing and Allied Health Literature (CINAHL) and EbscoHost (searched 20.01.2015). We searched for grey literature in the Grey Literature Report and OpenGrey (21.02.2017), and we searched the International Clinical Trials Registry Platform (ICTRP) and ClinicalTrials.gov trial registries (21.02.2017). We did a cited reference search for relevant studies (searched 27.01 2015) and checked reference lists of all included studies. We reran slightly revised strategies, limited to publication years between 2015 and 2017, for CENTRAL, MEDLINE, and CINAHL, in March 2017, and we have added one trial to 'Studies awaiting classification'. SELECTION CRITERIA: Randomised trials evaluating the outcomes of nurses working as substitutes for doctors. The review is limited to primary healthcare services that provide first contact and ongoing care for patients with all types of health problems, excluding mental health problems. Studies which evaluated nurses supplementing the work of primary care doctors were excluded. DATA COLLECTION AND ANALYSIS: Two review authors independently carried out data extraction and assessment of risk of bias of included studies. When feasible, we combined study results and determined an overall estimate of the effect. We evaluated other outcomes by completing a structured synthesis. MAIN RESULTS: For this review, we identified 18 randomised trials evaluating the impact of nurses working as substitutes for doctors. One study was conducted in a middle-income country, and all other studies in high-income countries. The nursing level was often unclear or varied between and even within studies. The studies looked at nurses involved in first contact care (including urgent care), ongoing care for physical complaints, and follow-up of patients with a particular chronic conditions such as diabetes. In many of the studies, nurses could get additional support or advice from a doctor. Nurse-doctor substitution for preventive services and health education in primary care has been less well studied. Study findings suggest that care delivered by nurses, compared to care delivered by doctors, probably generates similar or better health outcomes for a broad range of patient conditions (low- or moderate-certainty

evidence):* Nurse-led primary care may lead to slightly fewer deaths among certain groups of patients, compared to doctor-led care. However, the results vary and it is possible that nurse-led primary care makes little or no difference to the number of deaths (low-certainty evidence).* Blood pressure outcomes are probably slightly improved in nurse-led primary care. Other clinical or health status outcomes are probably similar (moderate-certainty evidence).* Patient satisfaction is probably slightly higher in nurse-led primary care (moderate-certainty evidence). Quality of life may be slightly higher (low-certainty evidence). We are uncertain of the effects of nurse-led care on process of care because the certainty of this evidence was assessed as very low.The effect of nurse-led care on utilisation of care is mixed and depends on the type of outcome. Consultations are probably longer in nurse-led primary care (moderate-certainty evidence), and numbers of attended return visits are slightly higher for nurses than for doctors (high-certainty evidence). We found little or no difference between nurses and doctors in the number of prescriptions and attendance at accident and emergency units (high-certainty evidence). There may be little or no difference in the number of tests and investigations, hospital referrals and hospital admissions between nurses and doctors (low-certainty evidence). We are uncertain of the effects of nurse-led care on the costs of care because the certainty of this evidence was assessed as very low. AUTHORS' CONCLUSIONS: This review shows that for some ongoing and urgent physical complaints and for chronic conditions, trained nurses, such as nurse practitioners, practice nurses, and registered nurses, probably provide equal or possibly even better quality of care compared to primary care doctors, and probably achieve equal or better health outcomes for patients. Nurses probably achieve higher levels of patient satisfaction, compared to primary care doctors. Furthermore, consultation length is probably longer when nurses deliver care and the frequency of attended return visits is probably slightly higher for nurses, compared to doctors. Other utilisation outcomes are probably the same. The effects of nurse-led care on process of care and the costs of care are uncertain, and we also cannot ascertain what level of nursing education leads to the best outcomes when nurses are substituted for doctors.

Lovink, M. H., Persoon, A., Koopmans, R., et al. (2017). "Effects of substituting nurse practitioners, physician assistants or nurses for physicians concerning healthcare for the ageing population: a systematic literature review." J Adv Nurs **73**(9): 2084-2102.

AIMS: To evaluate the effects of substituting nurse practitioners, physician assistants or nurses for physicians in long-term care facilities and primary healthcare for the ageing population (primary aim) and to describe what influences the implementation (secondary aim). BACKGROUND: Healthcare for the ageing population is undergoing major changes and physicians face heavy workloads. A solution to guarantee quality and contain costs might be to substitute nurse practitioners, physician assistants or nurses for physicians. DESIGN: A systematic literature review. DATA SOURCES: PubMed, EMBASE, CINAHL, PsycINFO, CENTRAL, Web of Science; searched January 1995-August 2015. REVIEW METHODS: Study selection, data extraction and quality appraisal were conducted independently by two reviewers. Outcomes collected: patient outcomes, care provider outcomes, process of care outcomes, resource use outcomes, costs and descriptions of the implementation. Data synthesis consisted of a narrative summary. RESULTS: Two studies used a randomized design and eight studies used other comparative designs. The evidence of the two randomized controlled trials showed no effect on approximately half of the outcomes and a positive effect on the other half of the outcomes. Results of eight other comparative study designs point towards the same direction. The implementation was influenced by factors on a social, organizational and individual level. CONCLUSION: Physician substitution in healthcare for the ageing population may achieve at least as good patient outcomes and process of care outcomes compared with care provided by physicians. Evidence about resource use and costs is too limited to draw conclusions.

Lovink, M. H., Persoon, A., van Vught, A. J., et al. (2015). "Physician substitution by mid-level providers in primary healthcare for older people and long-term care facilities: protocol for a systematic literature review." J Adv Nurs **71**(12): 2998-3005.

AIM: This protocol describes a systematic review that evaluates the effects of physician substitution by mid-level providers (nurse practitioners, physician assistants or nurses) in primary healthcare for older people and long-term care facilities. The secondary aim is to describe facilitators and barriers to the

implementation of physician substitution in these settings. BACKGROUND: Healthcare for older people is undergoing major changes, due to population ageing and reforms that shift care to the community. Besides, relatively few medical students are pursuing careers in healthcare for older people. Innovative solutions are needed to guarantee the quality of healthcare and to contain costs. A solution might be shifting care from physicians to mid-level providers. To date, no systematic review on this topic exits to guide policymaking. DESIGN: A quantitative systematic literature review using Cochrane methods. METHODS: The following databases will be searched for original research studies that quantitatively compare care provided by a physician to the same care provided by a mid-level provider: PubMed, EMBASE, CINAHL, PsycINFO, CENTRAL and Web of Science. Study selection, data extraction and quality appraisal will be conducted independently by two reviewers. Data synthesis will consist of a qualitative analysis of the data. Funding of the review was confirmed in August 2013 by the Ministry of Health, Welfare and Sport of the Netherlands. DISCUSSION: This review will contribute to the knowledge on effects of physician substitution in healthcare for older people and factors that influence the outcomes. This knowledge will guide professionals and policy administrators in their decisions to optimize healthcare for older people.

Lyness, E., Parker, J., Willcox, M. L., et al. (2021). "Experiences of out-of-hours task-shifting from GPs: a systematic review of qualitative studies." BJGP Open **5**(4).

BACKGROUND: The current GP workforce is insufficient to manage rising demand in patient care within out-of-hours (OOH) primary care services. To meet this challenge, non-medical practitioners (NMPs) are employed to fulfil tasks traditionally carried out by GPs. It is important to learn from experiences of task-shifting in this setting to inform optimal delivery of care. AIM: To synthesise qualitative evidence of experiences of task-shifting in the OOH primary care setting. DESIGN & SETTING: Systematic review of qualitative studies and thematic synthesis. METHOD: Electronic searches were conducted across CINAHL (Cumulative Index of Nursing and Allied Health Literature), PsychINFO, Cochrane, MEDLINE, Embase, and OpenGrey for qualitative studies of urgent or OOH primary care services, utilising task-shifting or role delegation. Included articles were quality appraised and key findings collated through thematic synthesis. RESULTS: A total of 2497 studies were screened, of which six met the inclusion criteria. These included interviews with 15 advanced nurse practitioners (ANPs), three physician assistants (PAs), two paramedics, and a focus group of 22 GPs, and focus groups with 33 nurses. Key findings highlight the importance of clearly defining and communicating the scope of practice of NMPs, and of building their confidence by appropriate training, support, and mentoring. CONCLUSION: While NMPs may have the potential to make a substantial contribution to OOH primary care services, there has been very little research on experiences of task-shifting. Evidence to date highlights the need for further training specific to OOH services. Mentorship and support to manage the sometimes challenging cases presenting to OOH could enable more effective OOH services and better patient care.

Macdonald, D., Snelgrove-Clarke, E., Campbell-Yeo, M., et al. (2015). "The experiences of midwives and nurses collaborating to provide birthing care: a systematic review." JBI Database System Rev Implement Rep **13**(11): 74-127.

BACKGROUND: Collaboration has been associated with improved health outcomes in maternity care. Collaborative relationships between midwives and physicians have been a focus of literature regarding collaboration in maternity care. However despite the front line role of nurses in the provision of maternity care, there has not yet been a systematic review conducted about the experiences of midwives and nurses collaborating to provide birthing care. OBJECTIVE: The objective of this review was to identify, appraise and synthesize qualitative evidence on the experiences of midwives and nurses collaborating to provide birthing care. Specifically, the review question was: what are the experiences of midwives and nurses collaborating to provide birthing care? INCLUSION CRITERIA: This review considered studies that included educated and licensed midwives and nurses with any length of practice. Nurses who work in labor and delivery, postpartum care, prenatal care, public health and community health were included in this systematic review. This review considered studies that investigated the experiences of midwives and nurses collaborating during the provision of birthing care. Experiences, of any duration, included any interactions between midwives and nurses working in collaboration to provide birthing care. Birthing care referred to: (a) supportive care throughout the pregnancy, labor, delivery and postpartum, (b) administrative tasks throughout the pregnancy, labor,

delivery and postpartum, and (c) clinical skills throughout the pregnancy, labor, delivery and postpartum. The postpartum period included the six weeks after delivery.The review considered English language studies that focused on qualitative data including, but not limited to, designs such as phenomenology, grounded theory, ethnography, action research and feminist research.This review considered qualitative studies that explored the experiences of collaboration in areas where midwives and nurses work together. Examples of these areas included: hospitals, birth centers, client homes, health clinics and other public or community health settings. These settings were located in any country, cultural context, or geographical location. SEARCH STRATEGY: A three-step search strategy was used to identify relevant published and unpublished studies. English papers from 1981 onwards were considered. The following databases were searched: Anthrosource, CENTRAL (The Cochrane Library), CINAHL, EMBASE, PsycINFO, PubMed, Social Services Abstracts and Sociological Abstracts. In addition to the databases, several grey literature sources were searched. METHODOLOGICAL QUALITY: Papers that were selected for retrieval were independently assessed for inclusion in the review by two JBI-trained reviewers. The two reviewers used a standardized critical appraisal instrument from the Joanna Briggs Institute Qualitative Assessment and Review Instrument. DATA EXTRACTION: Qualitative data were extracted from papers included in the review using the standardized data extraction tool from the Joanna Briggs Institute Qualitative Assessment and Review Instrument. DATA SYNTHESIS: Once qualitative studies were assessed using the the Joanna Briggs Institute Qualitative Assessment and Review Instrument critical appraisal tool, findings of the included studies were extracted. These findings were aggregated into categories according to their similarity in meaning. These categories were then subjected to a meta-synthesis to produce a comprehensive set of synthesized findings. RESULTS: Five studies were included in the review. Thirty-eight findings were extracted from the included studies and were aggregated into five categories. The five categories were synthesized into two synthesized findings. The two synthesized findings were: Synthesized finding1: Negative experiences of collaboration between nurses and midwives may be influenced by distrust, lack of clear roles, or unprofessional or inconsiderate behavior. Synthesized finding 2: If midwives and nurses have positive experiences collaborating thenthere is hope that the challenges of collaboration can be overcome. CONCLUSIONS: Qualitative evidence about the experiences of midwives and nurses collaborating to provide birthing care was identified, appraised and synthesized. Two synthesized findings were created from the findings of the five included studies. Midwives and nurses had negative experiences of collaboration which may be influenced by: distrust, unclear roles, or a lack of professionalism or consideration. Midwives and nurses had positive experiences of teamwork which can be a source of hope for overcoming the challenges of sharing care. There is clearly a gap in the literature about the collaborative experiences of midwives and nurses, given that only five studies were located for inclusion in the systematic review. More qualitative research exploring collaboration as a process and the interactional dynamics of midwives and nurses in a variety of practice and professional contexts is required. Distrust, unclear roles, and lack of professionalism and consideration must all be addressed. Strategies that address and minimize the occurrences of these three elements need to be developed and implemented in an effort to reduce negative collaborative experiences for midwives and nurses. Postive experiences of teamwork must be acknowleged and celebrated, and the challenges that sharing care present must be understood as a part of the collaborative process. More qualitative research is required to explore the collaborative process between midwives and nurses. Further exploration of their interactional dynamics, their relationship between power and collaboration, and the experiences of collaboration in a variety of professional and practice contexts is recommended.

Mahdizadeh, M., Heydari, A. et Karimi Moonaghi, H. (2015). "Clinical Interdisciplinary Collaboration Models and Frameworks From Similarities to Differences: A Systematic Review." Glob J Health Sci **7**(6): 170-180.

INTRODUCTION: So far, various models of interdisciplinary collaboration in clinical nursing have been presented, however, yet a comprehensive model is not available. The purpose of this study is to review the evidences that had presented model or framework with qualitative approach about interdisciplinary collaboration in clinical nursing. METHODS: All the articles and theses published from 1990 to 10 June 2014 which in both English and Persian models or frameworks of clinicians had presented model or framework of clinical collaboration were searched using databases of Proquest, Scopus, pub Med, Science Direct, and Iranian databases of Sid, Magiran, and Iranmedex. In this review,

for published articles and theses, keywords according with MESH such as nurse-physician relations, care team, collaboration, interdisciplinary relations and their Persian equivalents were used. RESULTS: In this study contexts, processes and outcomes of interdisciplinary collaboration as findings were extracted. One of the major components affecting on collaboration that most of the models had emphasized was background of collaboration. Most of studies suggested that the outcome of collaboration were improved care, doctors and nurses' satisfaction, controlling costs, reducing clinical errors and patient's safety. CONCLUSION: Models and frameworks had different structures, backgrounds, and conditions, but the outcomes were similar. Organizational structure, culture and social factors are important aspects of clinical collaboration. So it is necessary to improve the quality and effectiveness of clinical collaboration these factors to be considered.

Maier, C. B. et Aiken, L. H. (2016). "Task shifting from physicians to nurses in primary care in 39 countries: a cross-country comparative study." Eur J Public Health **26**(6): 927-934.

BACKGROUND: Primary care is in short supply in many countries. Task shifting from physicians to nurses is one strategy to improve access, but international research is scarce. We analysed the extent of task shifting in primary care and policy reforms in 39 countries. METHODS: Cross-country comparative research, based on an international expert survey, plus literature scoping review. A total of 93 country experts participated, covering Europe, USA, Canada, Australia and New Zealand (response rate: 85.3%). Experts were selected according to pre-defined criteria. Survey responses were triangulated with the literature and analysed using policy, thematic and descriptive methods to assess developments in country-specific contexts. RESULTS: Task shifting, where nurses take up advanced roles from physicians, was implemented in two-thirds of countries (N = 27, 69%), yet its extent varied. Three clusters emerged: 11 countries with extensive (Australia, Canada, England, Northern Ireland, Scotland, Wales, Finland, Ireland, Netherlands, New Zealand and USA), 16 countries with limited and 12 countries with no task shifting. The high number of policy, regulatory and educational reforms, such as on nurse prescribing, demonstrate an evolving trend internationally toward expanding nurses' scope-of-practice in primary care. CONCLUSIONS: Many countries have implemented task-shifting reforms to maximise workforce capacity. Reforms have focused on removing regulatory and to a lower extent, financial barriers, yet were often lengthy and controversial. Countries early on in the process are primarily reforming their education. From an international and particularly European Union perspective, developing standardised definitions, minimum educational and practice requirements would facilitate recognition procedures in increasingly connected labour markets.

Maier, C. B., Batenburg, R., Birch, S., et al. (2018). "Health workforce planning: which countries include nurse practitioners and physician assistants and to what effect?" Health Policy **122**(10): 1085-1092.

BACKGROUND: An increasing number of countries are introducing new health professions, such as Nurse Practitioners (NPs) and Physician Assistants (PAs). There is however limited evidence, on whether these new professions are included in countries' workforce planning. METHODS: A cross-country comparison of workforce planning methods. Countries with NPs and/or PAs were identified, workforce planning projections reviewed and differences in outcomes were analysed, based on a review of workforce planning models and a scoping review. Data on multi-professional (physicians/NPs/PAs) vs. physician-only models were extracted and compared descriptively. Analysis of policy implications was based on policy documents and grey literature. RESULTS: Of eight countries with NPs/PAs, three (Canada, the Netherlands, United States) included these professions in their workforce planning. In Canada, NPs were partially included in Ontario's needs-based projection, yet only as one parameter to enhance efficiency. In the United States and the Netherlands, NPs/PAs were covered as one of several scenarios. Compared with physician-only models, multi-professional models resulted in lower physician manpower projections, primarily in primary care. A weakness of the multi-professional models was the accuracy of data on substitution. Impacts on policy were limited, except for the Netherlands. CONCLUSIONS: Few countries have integrated NPs/PAs into workforce planning. Yet, those with multi-professional models reveal considerable differences in projected workforce outcomes. Countries should develop several scenarios with and without NPs/PAs to inform policy.

Marks, D., Comans, T., Bisset, L., et al. (2017). "Substitution of doctors with physiotherapists in the management of common musculoskeletal disorders: a systematic review." Physiotherapy **103**(4): 341-351.

BACKGROUND: There is large variation in models-of-care involving the professional substitution of doctors with physiotherapists. OBJECTIVE: To establish the impact upon patients and health services, of substituting doctors with physiotherapists in the management of common musculoskeletal disorders. DATA SOURCES: Medline, CINAHL and ABI Complete databases, and hand-searching of related studies. STUDY SELECTION: Randomised and non-randomised clinical trials, inter-rater reliability and comparative studies comparing the outcomes of usual care from doctors, with outcomes when the doctor was substituted with a physiotherapist. STUDY APPRAISAL AND SYNTHESIS METHODS: Two reviewers evaluated all studies using the Downs and Black Instrument. Meta-analysis was not possible due to study heterogeneity. A descriptive review was undertaken. RESULTS: 14 studies of moderate to low quality met the inclusion criteria. Professional substitution with a physiotherapist causes no significant change to health outcomes and inconsistent variation in the use of healthcare resources. There is insufficient health economic data to determine overall efficiency. In the selected presentations studied, physiotherapists made similar diagnostic and management decisions to orthopaedic surgeons and patients are as, or more satisfied with a physiotherapist. LIMITATIONS: Further high quality health and economic research is needed, in less selective patient populations, to determine the optimal role for physiotherapists. CONCLUSION AND IMPLICATIONS OF KEY FINDINGS: Physiotherapists provide a professional alternative to doctors for musculoskeletal disorders but the health economic implications of this model are presently unclear. Systematic Review Registration Number PROSPERO (Registration number CRD42015027671).

Martinez-Gonzalez, N. A., Djalali, S., Tandjung, R., et al. (2014). "Substitution of physicians by nurses in primary care: a systematic review and meta-analysis." BMC Health Serv Res **14**: 214.

BACKGROUND: In many countries, substitution of physicians by nurses has become common due to the shortage of physicians and the need for high-quality, affordable care, especially for chronic and multi-morbid patients. We examined the evidence on the clinical effectiveness and care costs of physician-nurse substitution in primary care. METHODS: We systematically searched OVID Medline and Embase, The Cochrane Library and CINAHL, up to August 2012; selected and critically appraised published randomised controlled trials (RCTs) that compared nurse-led care with care by primary care physicians on patient satisfaction, Quality of Life (QoL), hospital admission, mortality and costs of healthcare. We assessed the individual study risk of bias, calculated the study-specific and pooled relative risks (RR) or standardised mean differences (SMD); and performed fixed-effects meta-analyses. RESULTS: 24 RCTs (38,974 participants) and 2 economic studies met the inclusion criteria. Pooled analyses showed higher overall scores of patient satisfaction with nurse-led care (SMD 0.18, 95% CI 0.13 to 0.23), in RCTs of single contact or urgent care, short (less than 6 months) follow-up episodes and in small trials (N </= 200). Nurse-led care was effective at reducing the overall risk of hospital admission (RR 0.76, 95% CI 0.64 to 0.91), mortality (RR 0.89, 95% CI 0.84 to 0.96), in RCTs of on-going or non-urgent care, longer (at least 12 months) follow-up episodes and in larger (N > 200) RCTs. Higher quality RCTs (with better allocation concealment and less attrition) showed higher rates of hospital admissions and mortality with nurse-led care albeit less or not significant. The results seemed more consistent across nurse practitioners than with registered or licensed nurses. The effects of nurse-led care on QoL and costs were difficult to interpret due to heterogeneous outcome reporting, valuation of resources and the small number of studies. CONCLUSIONS: The available evidence continues to be limited by the quality of the research considered. Nurse-led care seems to have a positive effect on patient satisfaction, hospital admission and mortality. This important finding should be confirmed and the determinants of this effect should be assessed in further, larger and more methodically rigorous research.

Martinez-Gonzalez, N. A., Rosemann, T., Djalali, S., et al. (2015). "Task-Shifting From Physicians to Nurses in Primary Care and its Impact on Resource Utilization: A Systematic Review and Meta-Analysis of Randomized Controlled Trials." Med Care Res Rev **72**(4): 395-418.
http://www.ncbi.nlm.nih.gov/pubmed/25972383

Task-shifting from physicians to nurses has gained increasing interest in health policy but little is known about its efficiency. This systematic review was conducted to compare resource utilization with task-shifting from physicians to nurses in primary care. Literature searches yielded 4,589 citations. Twenty studies comprising 13,171 participants met the inclusion criteria. Meta-analyses showed nurses had more return consultations and longer consultations than physicians but were similar in their use of referrals, prescriptions, or investigations. The evidence has limitations, but suggests that the effects may be influenced by the utilization of resources, context of care, available guidance, and supervision. Cost data suggest physician-nurse salary and physician's time spent on supervision and delegation are important components of nurse-led care costs. More rigorous research involving a wider range of nurses from many countries is needed reporting detailed accounts of nurses' roles and competencies, qualifications, training, resources, time available for consultations, and all-cause costs.

Martinez-Gonzalez, N. A., Rosemann, T., Tandjung, R., et al. (2015). "The effect of physician-nurse substitution in primary care in chronic diseases: a systematic review." Swiss Med Wkly **145**: w14031.

BACKGROUND: Chronically ill and ageing populations demand increasing human resources who can provide on-going and frequent follow-up care. We performed a systematic review to assess the effect of physician-nurse substitution on process care outcomes. METHODS: We searched OVID Medline, Embase, CINAHL and The Cochrane Library for all available dates up to August 2012 and updated in February 2014. We selected and critically appraised published randomised controlled trials (RCT) and followed the PRISMA guidelines for the reporting of systematic reviews. RESULTS: A total of 14 RCTs comprising 10,743 participants met the inclusion criteria. Studies were generally small and suffered from attrition of >/=20% and selection biases. There were 53 process measurements investigated in the 14 RCTs, many of which were unique to specific conditions. Accounts of nurses' roles, responsibilities, tasks, qualifications and training content/components were not described in sufficient detail. Most study estimates showed no significant differences between nurse-led care and physician-led care while less than a half (~40%) favoured nurse-led care. CONCLUSIONS: Despite the methodological limitations and the varying nurses' roles and competencies across studies, specially trained nurses can provide care that is at least as equivalent to care provided by physicians for the management of chronic diseases, in terms of process of care. Future, larger studies with better quality methods are needed and should report and assess whether the differences in effects vary due to diversity in roles, qualifications, training competencies and characteristics of clinicians delivering substitution of care.

Martinez-Gonzalez, N. A., Tandjung, R., Djalali, S., et al. (2014). "Effects of physician-nurse substitution on clinical parameters: a systematic review and meta-analysis." PLoS One **9**(2): e89181.

BACKGROUND: Physicians' shortage in many countries and demands of high-quality and affordable care make physician-nurse substitution an appealing workforce strategy. The objective of this study is to conduct a systematic review and meta-analysis of randomised controlled trials (RCTs) assessing the impact of physician-nurse substitution in primary care on clinical parameters. METHODS: We systematically searched OVID Medline and Embase, The Cochrane Library and CINAHL, up to August 2012; selected peer-reviewed RCTs comparing physician-led care with nurse-led care on changes in clinical parameters. Study selection and data extraction were performed in duplicate by independent reviewers. We assessed the individual study risk of bias; calculated the study-specific and pooled relative risks (RR) or weighted mean differences (WMD); and performed fixed-effects meta-analyses. RESULTS: 11 RCTs (N = 30,247) were included; most were from Europe, generally small with higher risk of bias. In all studies, nurses provided care for complex conditions including HIV, hypertension, heart failure, cerebrovascular diseases, diabetes, asthma, Parkinson's disease and incontinence. Meta-analyses showed greater reductions in systolic blood pressure (SBP) in favour of nurse-led care (WMD -4.27 mmHg, 95% CI -6.31 to -2.23) but no statistically significant differences between groups in the reduction of diastolic blood pressure (DBP) (WMD -1.48 mmHg, 95%CI -3.05 to -0.09), total cholesterol (TC) (WMD -0.08 mmol/l, 95%CI -0.22 to 0.07) or glycosylated haemoglobin (WMD 0.12%HbAc1, 95%CI -0.13 to 0.37). Of other 32 clinical parameters identified, less than a fifth favoured nurse-led care while 25 showed no significant differences between groups. LIMITATIONS: disease-specific interventions from a small selection of healthcare systems, insufficient quantity and quality of studies,

many different parameters. CONCLUSIONS: trained nurses appeared to be better than physicians at lowering SBP but similar at lowering DBP, TC or HbA1c. There is insufficient evidence that nurse-led care leads to better outcomes of other clinical parameters than physician-led care.

Martinez-Gonzalez, N. A., Tandjung, R., Djalali, S., et al. (2015). "The impact of physician-nurse task shifting in primary care on the course of disease: a systematic review." Hum Resour Health **13**: 55. http://www.ncbi.nlm.nih.gov/pubmed/26149447

BACKGROUND: Physician-nurse task shifting in primary care appeals greatly to health policymakers. It promises to address workforce shortages and demands of high-quality, affordable care in the healthcare systems of many countries. This systematic review was conducted to assess the evidence about physician-nurse task shifting in primary care in relation to the course of disease and nurses' roles. METHODS: We searched MEDLINE, Embase, The Cochrane Library and CINAHL, up to August 2012, and the reference list of included studies and relevant reviews. All searches were updated in February 2014. We selected and critically appraised published randomized controlled trials (RCTs). RESULTS: Twelve RCTs comprising 22,617 randomized patients conducted mainly in Europe met the inclusion criteria. Nurse-led care was delivered mainly by nurse practitioners following structured protocols and validated instruments in most studies. Twenty-five unique disease-specific measures of the course of disease were reported in the 12 RCTs. While most (84 %) study estimates showed no significant differences between nurse-led care and physician-led care, nurses achieved better outcomes in the secondary prevention of heart disease and a greater positive effect in managing dyspepsia and at lowering cardiovascular risk in diabetic patients. The studies were generally small, of varying follow-up episodes and were at risk of biases. Descriptive details about roles, qualifications or interventions were also incomplete or not reported. CONCLUSION: Trained nurses may have the ability to achieve outcome results that are at least similar to physicians' for managing the course of disease, when following structured protocols and validated instruments. The evidence, however, is limited by a small number of studies reporting a broad range of disease-specific outcomes; low reporting standards of interventions, roles and clinicians' characteristics, skills and qualifications; and the quality of studies. More rigorous studies using validated tools could clarify these findings.

McGilton, K. S., Boscart, V., Fox, M., et al. (2009). "A systematic review of the effectiveness of communication interventions for health care providers caring for patients in residential care settings." Worldviews Evid Based Nurs **6**(3): 149-159.

OBJECTIVES: This systematic review will describe the theoretical grounding, components, duration, mode of delivery, and outcomes of communication interventions for health care providers delivering care in residential care settings and will evaluate the effectiveness of these interventions. METHODS: We conducted a comprehensive literature search of multiple databases published from January 1985 to the first week of December 2007, supplemented by a hand search of the references in all relevant articles, to find studies that met the inclusion criteria. Intervention details were extracted, and the studies' validity was evaluated independently by two researchers using a standardized data collection form based on Cooper and Hedges' (1994) approach to quality assessment. RESULTS: Of the six studies that met the inclusion criteria (three randomized controlled trials, three quasi-experimental designs), three used a theoretical framework to guide intervention design. Across the six studies, the most commonly used components were (1) cognitive (to teach staff about communication), (2) behavioral (including practice at the bedside), and (3) psychological (involving individualized feedback). Despite the studies' variability in methodological quality, their results indicated that communication interventions have a positive effect on staffs' knowledge and communication skills and on residents' agitation and challenging behaviors. However, none of the studies provided sufficient information on the duration of the intervention and on determining which interventions were most effective. This made it difficult to draw conclusions about the effectiveness of the interventions' different components. CONCLUSION: Although communication training has been shown to have positive effects on staffs' communication knowledge and skills as well as on resident outcomes, future controlled intervention research is needed to assess the effectiveness of individual intervention components.

Midy, F. (2003). Efficacité et efficience du partage des compétences dans le secteur des soins primaires. Revue de la littérature 1970-2002. Document de travail Credes. Paris Credes**:** 43. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=2ahUKEwiTkfeJpM7nAhXO3oUKHag9Cc0QFjAAegQIARAB&url=https%3A%2F%2Fpdfs.semanticscholar.org%2F210a%2Ff09c6a22e9b2cd5d17dacefb1e3f7906775d.pdf&usg=AOvVaw1Ys5qLq2s_eOtrwLtUO8CB

Midy, F. (2003). "Efficacité et efficience de la délégation d'actes des médecins généralistes aux infirmières : revue de la littérature 1970-2002." Questions D'economie De La Sante (Credes)(65): 4. http://www.irdes.fr/Publications/Qes/Qes65.pdf

Les anglo-saxons utilisent le terme de " skill mix " pour décrire la variété des professionnels qui composent une équipe de soins et la répartition des tâches entre eux. Cette problématique, que l'on traduira par " répartition des compétences ", renvoie en France aux questions posées en termes de partage des tâches et des compétences, et de définition du contenu et des frontières des métiers. Cette analyse de la délégation de tâches du médecin généraliste à l'infirmière repose sur la bibliographie réalisée par le National Primary Care Research and Development Centre, qui comprend 888 articles internationaux de langue anglaise publiés entre 1965 et 1998 (Halliwell et al. [1999] ; Sergison et al. [1997]), et sur une actualisation pour la période 1998-2002.

Midy, F. (2002). Substitution et qualité des soins : revue de la littérature, Paris : Cnamts

Cette communication a été présentée lors du séminaire organisé en octobre 2002 par le Conseil Scientifique de la Caisse Nationale de l'Assurance Maladie des Travailleurs Salariés (CNAMTS), à l'initiative de son Conseil Scientifique et en collaboration avec le Centre de Recherche - d'Etude et de Documentation en Economie de la Santé (CREDES) et la Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques (DREES) du Ministère de la Santé. Cette revue de littérature a pour objectif de présenter des expériences étrangères de substitution.

Mirhoseiny, S., Geelvink, T., Martin, S., et al. (2019). "Does task delegation to non-physician health professionals improve quality of diabetes care? Results of a scoping review." PLoS One **14**(10): e0223159.

OBJECTIVE: As a result of unhealthy lifestyles, reduced numbers of healthcare providers are having to deal with an increasing number of diabetes patients. In light of this shortage of physicians and nursing staff, new concepts of care are needed. The aim of this scoping review is to review the literature and examine the effects of task delegation to non-physician health professionals, with a further emphasis on inter-professional care. RESEARCH DESIGN AND METHODS: Systematic searches were performed using the PubMed, Embase and Google Scholar databases to retrieve papers published between January 1994 and December 2017. Randomised/non-randomised controlled trials and studies with a before/after design that described the delegation of tasks from physicians to non-physicians in diabetes care were included in the search. This review is a subgroup analysis that further assesses all the studies conducted using a team-based approach. RESULTS: A total of 45 studies with 12,092 patients met the inclusion criteria. Most of the interventions were performed in an outpatient setting with type-2 diabetes mellitus patients. The non-physician healthcare professionals involved in the team were nurses, pharmacists, community health workers and dietitians. Most studies showed significant improvements in glycaemic control and high patient satisfaction, while there were no indications that the task delegation affected quality of life scores. CONCLUSIONS: The findings of the review suggest that task delegation can provide equivalent glycaemic control and potentially lead to an improvement in the quality of care. However, this review revealed a lack of clinical endpoints, as well as an inconsistency between the biochemical outcome parameters and the patient-centred outcome parameters. Given the vast differences between the individual healthcare systems used around the world, further high-quality research with an emphasis on long-term outcome effects and the expertise of non-physicians is needed.

Morilla-Herrera, J. C., Garcia-Mayor, S., Martin-Santos, F. J., et al. (2016). "A systematic review of the effectiveness and roles of advanced practice nursing in older people." Int J Nurs Stud **53**: 290-307. https://www.ncbi.nlm.nih.gov/pubmed/26542652

OBJECTIVES: To identify, assess and summarize available scientific evidence about the effect of interventions deployed by advanced practice nurses when providing care to older people in different care settings, and to describe the roles and components of the interventions developed by these professionals. BACKGROUND: In older people, evidence of advanced practice roles remains dispersed along different contexts, approaches and settings; there is little synthesis of evidence, and it is not easy to visualize the different practice models, their components, and their impact. DESIGN: Systematic review. DATA SOURCES: Sixteen electronic databases were consulted (1990-2014). The research also included screening of original studies in reviews and reports from Centers of Health Services Research and Health Technology Agencies. REVIEW METHODS: Studies were assessed by two reviewers with the Cochrane risk of bias tool. They were classified depending on the type of follow-up (long and short-term care) and the scope of the service (advanced practice nurses interventions focused on multimorbid patients, or focused on a specific disease). RESULTS: Fifteen studies were included. In long-term settings, integrative, multi-component and continuous advanced practice nursing care, reduced readmissions, and increased patients' and caregivers' satisfaction. Advanced practice nurses were integrated within multidisciplinary teams and the main interventions deployed were patient education, multidimensional assessments and coordination of multiple providers. CONCLUSION: Positive results have been found in older people in long-term care settings, although it is difficult to discern the specific effect attributable to them because they are inserted in multidisciplinary teams. Further investigations are needed to evaluate the cost-effectiveness of the two modalities detected and to compare internationally the interventions developed by advanced practice nurses.

Niezen, M. G. et Mathijssen, J. J. (2014). "Reframing professional boundaries in healthcare: a systematic review of facilitators and barriers to task reallocation from the domain of medicine to the nursing domain." Health Policy **117**(2): 151-169.

AIM: To explore the main facilitators and barriers to task reallocation. BACKGROUND: One of the innovative approaches to dealing with the anticipated shortage of physicians is to reallocate tasks from the professional domain of medicine to the nursing domain. Various (cost-)effectiveness studies demonstrate that nurse practitioners can deliver as high quality care as physicians and can achieve as good outcomes. However, these studies do not examine what factors may facilitate or hinder such task reallocation. METHOD: A systematic literature review of PubMed and Web of Knowledge supplemented with a snowball research method. The principles of thematic analysis were followed. RESULTS: The 13 identified relevant papers address a broad spectrum of task reallocation (delegation, substitution and complementary care). Thematic analysis revealed four categories of facilitators and barriers: (1) knowledge and capabilities, (2) professional boundaries, (3) organisational environment, and (4) institutional environment. CONCLUSION: Introducing nurse practitioners in healthcare requires organisational redesign and the reframing of professional boundaries. Especially the facilitators and barriers in the analytical themes of 'professional boundaries' and 'organisational environment' should be considered when reallocating tasks. If not, these factors might hamper the cost-effectiveness of task reallocation in practice.

O'Reilly, P., Lee, S. H., O'Sullivan, M., et al. (2017). "Assessing the facilitators and barriers of interdisciplinary team working in primary care using normalisation process theory: An integrative review." PLoS One **12**(5): e0177026.

BACKGROUND: Interdisciplinary team working is of paramount importance in the reform of primary care in order to provide cost-effective and comprehensive care. However, international research shows that it is not routine practice in many healthcare jurisdictions. It is imperative to understand levers and barriers to the implementation process. This review examines interdisciplinary team working in practice, in primary care, from the perspective of service providers and analyses 1 barriers and facilitators to implementation of interdisciplinary teams in primary care and 2 the main research gaps. METHODS AND FINDINGS: An integrative review following the PRISMA guidelines was conducted. Following a search of 10 international databases, 8,827 titles were screened for relevance and 49 met the criteria. Quality of evidence was appraised using predetermined criteria. Data were

analysed following the principles of framework analysis using Normalisation Process Theory (NPT), which has four constructs: sense making, enrolment, enactment, and appraisal. The literature is dominated by a focus on interdisciplinary working between physicians and nurses. There is a dearth of evidence about all NPT constructs apart from enactment. Physicians play a key role in encouraging the enrolment of others in primary care team working and in enabling effective divisions of labour in the team. The experience of interdisciplinary working emerged as a lever for its implementation, particularly where communication and respect were strong between professionals. CONCLUSION: A key lever for interdisciplinary team working in primary care is to get professionals working together and to learn from each other in practice. However, the evidence base is limited as it does not reflect the experiences of all primary care professionals and it is primarily about the enactment of team working. We need to know much more about the experiences of the full network of primary care professionals regarding all aspects of implementation work. SYSTEMATIC REVIEW REGISTRATION: International Prospective Register of Systematic Reviews PROSPERO 2015: CRD42015019362.

Paradis, E., Leslie, M., Puntillo, K., et al. (2014). "Delivering interprofessional care in intensive care: a scoping review of ethnographic studies." Am J Crit Care **23**(3): 230-238.

BACKGROUND: The sustained clinical and policy interest in the United States and worldwide in quality and safety activities initiated by the release of To Err Is Human has resulted in some high-profile successes and much disappointment. Despite the energy and good intentions poured into developing new protocols and redesigning technical systems, successes have been few and far between, leading some to argue that more attention should be given to the context of care. OBJECTIVE: To examine the insights provided by qualitative studies of interprofessional care delivery in intensive care. METHODS: A total of 532 article abstracts were reviewed. Of these, 24 met the inclusion criteria. RESULTS: Articles focused on the nurse-physician relationship, patient safety, patients' families and end-of-life care, and learning and cognition. The findings indicated the complexities and nuances of interprofessional life in intensive care and also that much needs to be learned about team processes. CONCLUSION: The fundamental insight that interprofessional interactions in intensive care do not happen in a historical, social, and technological vacuum must be brought to bear on future research in intensive care if patient safety and quality of care are to be improved.

Parker, S. et Fuller, J. (2016). "Are nurses well placed as care co-ordinators in primary care and what is needed to develop their role: a rapid review?" Health Soc Care Community **24**(2): 113-122.

Care co-ordination is reported to be an effective component of chronic disease (CD) management within primary care. While nurses often perform this role, it has not been reported if they or other disciplines are best placed to take on this role, and whether the discipline of the co-ordinator has any impact on clinical and health service outcomes. We conducted a rapid review of previous systematic reviews from 2006 to 2013 to answer these questions with a view to informing improvements in care co-ordination programmes. Eighteen systematic reviews from countries with developed health systems comparable to Australia were included. All but one included complex interventions and 12 of the 18 involved a range of multidisciplinary co-ordination strategies. This multi-strategy and multidisciplinarity made it difficult to isolate which were the most effective strategies and disciplines. Nurses required specific training for these roles, but performed co-ordination more often than any other discipline. There was, however, no evidence that discipline had a direct impact on clinical or service outcomes, although specific expertise gained through training and workforce organisational support for the co-ordinator was required. Hence, skill mix is an important consideration when employing care co-ordination, and a sustained consistent approach to workforce change is required if nurses are to be enabled to perform effective care co-ordination in CD management in primary care.

Patel, B. K., Davy, C., Volk, H., et al. (2020). "Integrating pharmacists into care teams: a qualitative systematic review protocol." JBI Database System Rev Implement Rep.

OBJECTIVE: The objective of this review is to systematically examine the qualitative literature reporting on strategies that have been used (or could be developed) by healthcare services to integrate pharmacists into a multidisciplinary healthcare team. INTRODUCTION: Delivery models of

pharmaceutical care have been developed, trialed, and refined since this concept was first defined more than 30 years ago. Delivery models that integrate pharmacists within a multidisciplinary team allow pharmacists to play a pivotal role in improving health outcomes for patients and contributing to patient self-management. Systematic reviews clearly demonstrate the effectiveness of these models; however, the attitudes, beliefs, expectations, understandings, perceptions and experiences of these multidisciplinary teams is less clear. INCLUSION CRITERIA: The populations of interest in this review are healthcare providers, including hospital specialists, general practitioners, nurses, health workers, pharmacists, allied health workers, aged care workers, Indigenous health workers and health promotion workers. The phenomena of interest are attitudes, beliefs, expectations, understandings, perceptions and experiences of the populations of interest arising from experiencing, developing or implementing strategies that have or could support the integration of pharmacists into multidisciplinary healthcare teams. METHODS: The databases to be searched include PubMed, Cochrane, EBSCO (CINAHL), EMBASE, MedNar, Trove and Australian Indigenous Health Infonet. Studies published from 2011 onwards and in English will be considered for inclusion. Selected studies will be assessed for methodological quality by two independent reviewers, using standardized critical appraisal instruments. Where possible, qualitative research findings will be pooled. Where textual pooling is not possible, the findings will be presented in narrative form.

Peltonen, J., Leino-Kilpi, H., Heikkila, H., et al. (2019). "Instruments measuring interprofessional collaboration in healthcare - a scoping review." J Interprof Care: 1-15.

Worldwide there is growing understanding of the importance of interprofessional collaboration in providing well-functioning healthcare. However, little is known about how interprofessional collaboration can be measured between different health-care professionals. In this review, we aim to fill this gap, by identifying and analyzing the existing instruments measuring interprofessional collaboration in healthcare. A scoping review design was applied. A systematic literature search of two electronic databases, Medline (PubMed) and CINAHL, was conducted in 03/2018. The search yielded 1020 studies, of which 35 were selected for the review. The data were analyzed by content analysis. In total, 29 instruments measuring interprofessional collaboration were found. Interprofessional collaboration was measured predominantly between nurses and physicians with different instruments in various health-care settings. Psychometric testing was unsystematic, focusing predominantly on construct and content validity and internal consistency, thus further validation studies with comprehensive testing are suggested. The results of this review can be used to select instruments measuring interprofessional collaboration in practice or research. Future research is needed to strengthen the evidence of reliability and validity of these instruments.

Rashid, C. (2010). "Benefits and limitations of nurses taking on aspects of the clinical role of doctors in primary care: integrative literature review." J Adv Nurs **66**(8): 1658-1670.

AIM: This paper presents an integrative literature review of studies exploring the benefits and limitations of the recent expansion of the clinical role of nurses working in general practice in the United Kingdom. BACKGROUND: Similar clinical outcomes and high levels of satisfaction with consultations undertaken by nurse practitioners compared to general practitioners in primary care have been reported in a Cochrane review [Cochrane Database of Systematic Reviews (2004) vol. 5, p. CD001271]. Since then, nurse consultations have increased considerably as general practitioners have delegated part of their clinical workload to other general practice nurses. However, whether all general practice nurses can fulfil this extended role remains open to question. METHOD: An integrative review was performed. Nine electronic databases were searched. UK studies were included if they were published after the previous Cochrane review, i.e. between 2004 and 2009. RESULTS: Eight studies were identified, most using qualitative methodology. The evidence suggested that the changes in nurses' role have been predominantly driven by the perceived increase in workload arising from the new general practitioner contract. Delegating work to nurses provided a means of organizing workload within a practice without necessarily allowing patient choice. Patients generally thought that all general practice nurses would be able to deal with simple conditions, but they would prefer to consult with a general practitioner if they thought it necessary. There were concerns about nurses' knowledge base, particularly in diagnostics and therapeutics, and their levels of training and

competence in roles formerly undertaken by general practitioners. CONCLUSION: There have been few studies in this key area of healthcare policy. There is a need for better training and support for nurses undertaking roles in consultation and for patients' views to be better represented.

Reeves, S., Pelone, F., Harrison, R., et al. (2017). "Interprofessional collaboration to improve professional practice and healthcare outcomes." Cochrane Database Syst Rev **6**: Cd000072.

BACKGROUND: Poor interprofessional collaboration (IPC) can adversely affect the delivery of health services and patient care. Interventions that address IPC problems have the potential to improve professional practice and healthcare outcomes. OBJECTIVES: To assess the impact of practice-based interventions designed to improve interprofessional collaboration (IPC) amongst health and social care professionals, compared to usual care or to an alternative intervention, on at least one of the following primary outcomes: patient health outcomes, clinical process or efficiency outcomes or secondary outcomes (collaborative behaviour). SEARCH METHODS: We searched CENTRAL (2015, issue 11), MEDLINE, CINAHL, ClinicalTrials.gov and WHO International Clinical Trials Registry Platform to November 2015. We handsearched relevant interprofessional journals to November 2015, and reviewed the reference lists of the included studies. SELECTION CRITERIA: We included randomised trials of practice-based IPC interventions involving health and social care professionals compared to usual care or to an alternative intervention. DATA COLLECTION AND ANALYSIS: Two review authors independently assessed the eligibility of each potentially relevant study. We extracted data from the included studies and assessed the risk of bias of each study. We were unable to perform a meta-analysis of study outcomes, given the small number of included studies and their heterogeneity in clinical settings, interventions and outcomes. Consequently, we summarised the study data and presented the results in a narrative format to report study methods, outcomes, impact and certainty of the evidence. MAIN RESULTS: We included nine studies in total (6540 participants); six cluster-randomised trials and three individual randomised trials (1 study randomised clinicians, 1 randomised patients, and 1 randomised clinicians and patients). All studies were conducted in high-income countries (Australia, Belgium, Sweden, UK and USA) across primary, secondary, tertiary and community care settings and had a follow-up of up to 12 months. Eight studies compared an IPC intervention with usual care and evaluated the effects of different practice-based IPC interventions: externally facilitated interprofessional activities (e.g. team action planning; 4 studies), interprofessional rounds (2 studies), interprofessional meetings (1 study), and interprofessional checklists (1 study). One study compared one type of interprofessional meeting with another type of interprofessional meeting. We assessed four studies to be at high risk of attrition bias and an equal number of studies to be at high risk of detection bias. For studies comparing an IPC intervention with usual care, functional status in stroke patients may be slightly improved by externally facilitated interprofessional activities (1 study, 464 participants, low-certainty evidence). We are uncertain whether patient-assessed quality of care (1 study, 1185 participants), continuity of care (1 study, 464 participants) or collaborative working (4 studies, 1936 participants) are improved by externally facilitated interprofessional activities, as we graded the evidence as very low-certainty for these outcomes. Healthcare professionals' adherence to recommended practices may be slightly improved with externally facilitated interprofessional activities or interprofessional meetings (3 studies, 2576 participants, low certainty evidence). The use of healthcare resources may be slightly improved by externally facilitated interprofessional activities, interprofessional checklists and rounds (4 studies, 1679 participants, low-certainty evidence). None of the included studies reported on patient mortality, morbidity or complication rates. Compared to multidisciplinary audio conferencing, multidisciplinary video conferencing may reduce the average length of treatment and may reduce the number of multidisciplinary conferences needed per patient and the patient length of stay. There was little or no difference between these interventions in the number of communications between health professionals (1 study, 100 participants; low-certainty evidence). AUTHORS' CONCLUSIONS: Given that the certainty of evidence from the included studies was judged to be low to very low, there is not sufficient evidence to draw clear conclusions on the effects of IPC interventions. Neverthess, due to the difficulties health professionals encounter when collaborating in clinical practice, it is encouraging that research on the number of interventions to improve IPC has increased since this review was last updated. While this field is developing, further rigorous, mixed-method studies are required. Future studies should focus on longer acclimatisation periods before evaluating newly implemented IPC

interventions, and use longer follow-up to generate a more informed understanding of the effects of IPC on clinical practice.

Riisgaard, H., Nexoe, J., Le, J. V., et al. (2016). "Relations between task delegation and job satisfaction in general practice: a systematic literature review." BMC Fam Pract **17**(1): 168.

BACKGROUND: It has for years been discussed whether practice staff should be involved in patient care in general practice to a higher extent. The research concerning task delegation within general practice is generally increasing, but the literature focusing on its influence on general practitioners' and their staff's job satisfaction appears to be sparse even though job satisfaction is acknowledged as an important factor associated with both patient satisfaction and medical quality of care. Therefore, the overall aim of this study was 1) to review the current research on the relation between task delegation and general practitioners' and their staff's job satisfaction and, additionally, 2) to review the evidence of possible explanations for this relation. METHODS: A systematic literature review. We searched the four databases PubMed, Cinahl, Embase, and Scopus systematically. The immediate relevance of the retrieved articles was evaluated by title and abstract by the first author, and papers that seemed to meet the aim of the review were then fully read by first author and last author independently judging the eligibility of content. RESULTS: We included four studies in the review. They explored views and attitudes of the staff, encompassing nurses as well as practice managers. Only one of the included studies also explored general practitioners' views and attitudes, hence making it impossible to establish any syntheses on this relation. According to the studies, the staff's overall attitude towards task delegation was positive and led to increased job satisfaction, probably because task delegation comprised a high degree of work autonomy. CONCLUSIONS: The few studies included in our review suggest that task delegation within general practice may be seen by the staff as an overall positive issue contributing to their job satisfaction, primarily due to perceived autonomy in the work. However, because of the small sample size comprising only qualitative studies, and due to the heterogeneity of these studies, we cannot draw unambiguous conclusions although we point towards tendencies.

Sabot, K., Wickremasinghe, D., Blanchet, K., et al. (2017). "Use of social network analysis methods to study professional advice and performance among healthcare providers: a systematic review." Syst Rev **6**(1): 208.

BACKGROUND: Social network analysis quantifies and visualizes relationships between and among individuals or organizations. Applications in the health sector remain underutilized. This systematic review seeks to analyze what social network methods have been used to study professional communication and performance among healthcare providers. METHODS: Ten databases were searched from 1990 through April 2016, yielding 5970 articles screened for inclusion by two independent reviewers who extracted data and critically appraised each study. Inclusion criteria were study of health care worker professional communication, network methods used, and patient outcomes measured. The search identified 10 systematic reviews. The final set of articles had their citations prospectively and retrospectively screened. We used narrative synthesis to summarize the findings. RESULTS: The six articles meeting our inclusion criteria described unique health sectors: one at primary healthcare level and five at tertiary level; five conducted in the USA, one in Australia. Four studies looked at multidisciplinary healthcare workers, while two focused on nurses. Two studies used mixed methods, four quantitative methods only, and one involved an experimental design. Four administered network surveys, one coded observations, and one used an existing survey to extract network data. Density and centrality were the most common network metrics although one study did not calculate any network properties and only visualized the network. Four studies involved tests of significance, and two used modeling methods. Social network analysis software preferences were evenly split between ORA and UCINET. All articles meeting our criteria were published in the past 5 years, suggesting that this remains in clinical care a nascent but emergent research area. There was marked diversity across all six studies in terms of research questions, health sector area, patient outcomes, and network analysis methods. CONCLUSION: Network methods are underutilized for the purposes of understanding professional communication and performance among healthcare providers. The paucity of articles meeting our search criteria, lack of studies in middle- and low-income contexts, limited number in non-tertiary settings, and few longitudinal, experimental designs,

or network interventions present clear research gaps. SYSTEMATIC REVIEW REGISTRATION: PROSPERO CRD42015019328.

Saint-Pierre, C., Herskovic, V. et Sepulveda, M. (2018). "Multidisciplinary collaboration in primary care: a systematic review." Fam Pract **35**(2): 132-141.

Background: Several studies have discussed the benefits of multidisciplinary collaboration in primary care. However, what remains unclear is how collaboration is undertaken in a multidisciplinary manner in concrete terms. Objective: To identify how multidisciplinary teams in primary care collaborate, in regards to the professionals involved in the teams and the collaborative activities that take place, and determine whether these characteristics and practices are present across disciplines and whether collaboration affects clinical outcomes. Methods: A systematic literature review of past research, using the MEDLINE, ScienceDirect and Web of Science databases. Results: Four types of team composition were identified: specialized teams, highly multidisciplinary teams, doctor-nurse-pharmacist triad and physician-nurse centred teams. Four types of collaboration within teams were identified: co-located collaboration, non-hierarchical collaboration, collaboration through shared consultations and collaboration via referral and counter-referral. Two combinations were commonly repeated: non-hierarchical collaboration in highly multidisciplinary teams and co-located collaboration in specialist teams. Fifty-two per cent of articles reported positive results when comparing collaboration against the non-collaborative alternative, whereas 16% showed no difference and 32% did not present a comparison. Conclusion: Overall, collaboration was found to be positive or neutral in every study that compared collaboration with a non-collaborative alternative. A collaboration typology based on objective measures was devised, in contrast to typologies that involve interviews, perception-based questionnaires and other subjective instruments.

Sangaleti, C., Schveitzer, M. C., Peduzzi, M., et al. (2017). "Experiences and shared meaning of teamwork and interprofessional collaboration among health care professionals in primary health care settings: a systematic review." JBI Database System Rev Implement Rep **15**(11): 2723-2788.

BACKGROUND: During the last decade, teamwork has been addressed under the rationale of interprofessional practice or collaboration, highlighted by the attributes of this practice such as: interdependence of professional actions, focus on user needs, negotiation between professionals, shared decision making, mutual respect and trust among professionals, and acknowledgment of the role and work of the different professional groups. Teamwork and interprofessional collaboration have been pointed out as astrategy for effective organization of health care services as the complexity of healthcare requires integration of knowledge and practices from differente professional groups. This integration has a qualitative dimension that can be identified through the experiences of health professionals and to the meaning they give to teamwork. OBJECTIVE: The objective of this systematic review was to synthesize the best available evidence on the experiences of health professionals regarding teamwork and interprofessional collaboration in primary health care settings. INCLUSION CRITERIA TYPES OF PARTICIPANTS: The populations included were all officially regulated health professionals that work in primary health settings: dentistry, medicine, midwifery, nursing, nutrition, occupational therapy, pharmacy, physical education, physiotherapy, psychology, social work and speech therapy. In addition to these professionals, community health workers, nursing assistants, licensed practical nurses and other allied health workers were also included. PHENOMENA OF INTEREST: The phenomena of interest were experiences of health professionals regarding teamwork and interprofessional collaboration in primary health care settings. CONTEXT: The context was primary health care settings that included health care centers, health maintenance organizations, integrative medicine practices, integrative health care, family practices, primary care organizations and family medical clinics. National health surgery as a setting was excluded. TYPES OF STUDIES: The qualitative component of the review considered studies that focused on qualitative data including designs such as phenomenology, grounded theory, ethnography, action research and feminist research. SEARCH STRATEGY: A three-step search strategy was utilized. Ten databases were searched for papers published from 1980 to June 2015. Studies published in English, Portuguese and Spanish were considered. METHODOLOGICAL QUALITY: Methodological quality was assessed using the Qualitative Assessment and Review Instrument developed by the Joanna Briggs Institute. All included studies

received a score of at least 70% the questions in the instrument, 11 studies did not address the influence of the researcher on the research or vice-versa, and six studies did not present a statement locating the researcher culturally or theoretically. DATA EXTRACTION: Qualitative findings were extracted using the Joanna Briggs Institute Qualitative Assessment and Review Instrument. DATA SYNTHESIS: Qualitative research findings were pooled using a pragmatic meta-aggregative approach and the Joanna Briggs Institute Qualitative Assessment and Review Instrument software. RESULTS: This review included 21 research studies, representing various countries and healthcare settings. There were 223 findings, which were aggregated into 15 categories, and three synthesized findings: CONCLUSIONS: This review shows that health professionals experience teamwork and interprofessional collaboration as a process in primary health care settings; its conditions, consequences (benefits and barriers), and finally shows its determinants. Health providers face enormous ideological, organizational, structural and relational challenges while promoting teamwork and interprofessional collaboration in primary health care settings. This review has identified possible actions that could improve implementation of teamwork and interprofessional collaboration in primary health care.

Saxon, R. L., Gray, M. A. et Oprescu, F. I. (2014). "Extended roles for allied health professionals: an updated systematic review of the evidence." Journal of multidisciplinary healthcare **7**: 479-488.
https://www.ncbi.nlm.nih.gov/pubmed/25342909
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4206389/

BACKGROUND: Internationally, health care services are under increasing pressure to provide high quality, accessible, timely interventions to an ever increasing aging population, with finite resources. Extended scope roles for allied health professionals is one strategy that could be undertaken by health care services to meet this demand. This review builds upon an earlier paper published in 2006 on the evidence relating to the impact extended scope roles have on health care services. METHODS: A systematic review of the literature focused on extended scope roles in three allied health professional groups, ie, physiotherapy, occupational therapy, and speech pathology, was conducted. The search strategy mirrored an earlier systematic review methodology and was designed to include articles from 2005 onwards. All peer-reviewed published papers with evidence relating to effects on patients, other professionals, or the health service were included. All papers were critically appraised prior to data extraction. RESULTS: A total of 1,000 articles were identified by the search strategy; 254 articles were screened for relevance and 21 progressed to data extraction for inclusion in the systematic review. CONCLUSION: Literature supporting extended scope roles exists; however, despite the earlier review calling for more robust evaluations regarding the impact on patient outcomes, cost-effectiveness, training requirements, niche identification, or sustainability, there appears to be limited research reported on the topic in the last 7 years. The evidence available suggests that extended scope practice allied health practitioners could be a cost-effective and consumer-accepted investment that health services can make to improve patient outcomes.

Senior, H., Grant, M., Rhee, J. J., et al. (2019). "General practice physicians' and nurses' self-reported multidisciplinary end-of-life care: a systematic review." BMJ Support Palliat Care.

BACKGROUND: General practitioners (GPs) and general practice nurses (GPNs) face increasing demands to provide end-of-life care (EoLC) as the population ages. To enhance primary palliative care (PC), the care they provide needs to be understood to inform best practice models of care. OBJECTIVE: To provide a comprehensive description of the self-reported role and performance of GPs and GPNs in (1) specific medical/nursing roles, (2) communication, (3) care co-ordination, (4) access and out-of-hours care, and (5) multidisciplinary care. METHOD: Systematic literature review. Data included papers (2000 to 2017) sought from Medline, Psychinfo, Embase, Joanna Briggs Institute and Cochrane databases. RESULTS: From 6209 journal articles, 29 reviewed papers reported the GPs' and GPNs' role in EoLC or PC practice. GPs report a central role in symptom management, treatment withdrawal, non-malignant disease management and terminal sedation. Information provision included breaking bad news, prognosis and place of death. Psychosocial concerns were often addressed. Quality of communication depended on GP-patient relationships and GP skills. Challenges were unrealistic patient and family expectations, family conflict and lack of advance care planning. GPs often delayed

end-of-life discussions until 3 months before death. Home visits were common, but less so for urban, female and part-time GPs. GPs co-ordinated care with secondary care, but in some cases parallel care occurred. Trust in, and availability of, the GP was critical for shared care. There was minimal reference to GPNs' roles. CONCLUSIONS: GPs play a critical role in palliative care. More work is required on the role of GPNs, case finding and models to promote shared care, home visits and out-of-hours services.

Smith, T., Fowler-Davis, S., Nancarrow, S., et al. (2018). "Leadership in interprofessional health and social care teams: a literature review." Leadersh Health Serv (Bradf Engl) **31**(4): 452-467.

Purpose The purpose of this study is to review evidence on the nature of effective leadership in interprofessional health and social care teams. Design/methodology/approach A critical review and thematic synthesis of research literature conducted using systematic methods to identify and construct a framework to explain the available evidence about leadership in interprofessional health and social care teams. Findings Twenty-eight papers were reviewed and contributed to the framework for interprofessional leadership. Twelve themes emerged from the literature, the themes were: facilitate shared leadership; transformation and change; personal qualities; goal alignment; creativity and innovation; communication; team-building; leadership clarity; direction setting; external liaison; skill mix and diversity; clinical and contextual expertise. The discussion includes some comparative analysis with theories and themes in team management and team leadership. Originality/value This research identifies some of the characteristics of effective leadership of interprofessional health and social care teams. By capturing and synthesising the literature, it is clear that effective interprofessional health and social care team leadership requires a unique blend of knowledge and skills that support innovation and improvement. Further research is required to deepen the understanding of the degree to which team leadership results in better outcomes for both patients and teams.

Supper, I., Catala, O., Lustman, M., et al. (2015). "Interprofessional collaboration in primary health care: a review of facilitators and barriers perceived by involved actors." Journal of Public Health **37**(4): 716-727. http://jpubhealth.oxfordjournals.org/content/37/4/716.abstract

Background The epidemiological transition calls for redefining the roles of the various professionals involved in primary health care towards greater collaboration. We aimed to identify facilitators of, and barriers to, interprofessional collaboration in primary health care as perceived by the actors involved, other than nurses. Methods Systematic review using synthetic thematic analysis of qualitative research. Articles were retrieved from Medline, Web of science, Psychinfo and The Cochrane library up to July 2013. Quality and relevance of the studies were assessed according to the Dixon-Woods criteria. The following stakeholders were targeted: general practitioners, pharmacists, mental health workers, midwives, physiotherapists, social workers and receptionists. Results Forty-four articles were included. The principal facilitator of interprofessional collaboration in primary care was the different actors' common interest in collaboration, perceiving opportunities to improve quality of care and to develop new professional fields. The main barriers were the challenges of definition and awareness of one another's roles and competences, shared information, confidentiality and responsibility, team building and interprofessional training, long-term funding and joint monitoring. Conclusions Interprofessional organization and training based on appropriate models should support collaboration development. The active participation of the patient is required to go beyond professional boundaries and hierarchies. Multidisciplinary research projects are recommended.

Swan, M., Ferguson, S., Chang, A., et al. (2015). "Quality of primary care by advanced practice nurses: a systematic review." Int J Qual Health Care **27**(5): 396-404. https://www.ncbi.nlm.nih.gov/pubmed/26239474

PURPOSE: To conduct a systematic review of randomized controlled trials (RCTs) of the safety and effectiveness of primary care provided by advanced practice nurses (APNs) and evaluate the potential of their deployment to help alleviate primary care shortages. DATA SOURCES: PubMed, Medline and the Cumulative Index to Nursing and Allied Health Literature. STUDY SELECTION: RCTs and their follow-up reports that compared outcomes of care provided to adults by APNs and physicians in

equivalent primary care provider roles were selected for inclusion. DATA EXTRACTION: Ten articles (seven RCTs, plus two economic evaluations and one 2-year follow-up study of included RCTs) met inclusion criteria. Data were extracted regarding study design, setting and outcomes across four common categories. RESULTS OF DATA SYNTHESIS: The seven RCTs include data for 10 911 patients who presented for ongoing primary care (four RCTs) or same-day consultations for acute conditions (three RCTs) in the primary care setting. Study follow-up ranged from 1 day to 2 years. APN groups demonstrated equal or better outcomes than physician groups for physiologic measures, patient satisfaction and cost. APNs generally had longer consultations compared with physicians; however, two studies reported that APN patients required fewer consultations over time. CONCLUSION: There were few differences in primary care provided by APNs and physicians; for some measures APN care was superior. While studies are needed to assess longer term outcomes, these data suggest that the APN workforce is well-positioned to provide safe and effective primary care.

Tang, C. J., Chan, S. W., Zhou, W. T., et al. (2013). "Collaboration between hospital physicians and nurses: an integrated literature review." Int Nurs Rev **60**(3): 291-302.

BACKGROUND: Ineffective physician-nurse collaboration has been shown to cause work dissatisfaction among physicians and nurses and compromised the quality of patient care. AIM: The review sought to explore: (1) attitudes of physicians and nurses toward physician-nurse collaboration; (2) factors affecting physician-nurse collaboration; and (3) strategies to improve physician-nurse collaboration. METHODS: A literature search was conducted in the following databases: CINAHL, PubMed, Wiley Online Library and Scopus from year 2002 to 2012, to include papers that reported studies on physician-nurse collaboration in the hospital setting. FINDINGS: Seventeen papers were included in this review. Three of the reviewed articles were qualitative studies and the other 14 were quantitative studies. Three key themes emerged from this review: (1) attitudes towards physician-nurse collaboration, where physicians viewed physician-nurse collaboration as less important than nurses but rated the quality of collaboration higher than nurses; (2) factors affecting physician-nurse collaboration, including communication, respect and trust, unequal power, understanding professional roles, and task prioritizing; and (3) improvement strategies for physician-nurse collaboration, involving inter-professional education and interdisciplinary ward rounds. CONCLUSION: This review has highlighted important aspects of physician-nurse collaboration that could be addressed by future research studies. These include: developing a comprehensive instrument to assess collaboration in greater depth; conducting rigorous intervention studies to evaluate the effectiveness of improvement strategies for physician-nurse collaboration; and examining the role of senior physicians and nurses in facilitating collaboration among junior physicians and nurses. Other implications include inter-professional education to empower nurses in making clinical decisions and putting in place policies to resolve workplace issues.

ter Maten-Speksnijder, A., Grypdonck, M., Pool, A., et al. (2014). "A literature review of the Dutch debate on the nurse practitioner role: efficiency vs. professional development." Int Nurs Rev **61**(1): 44-54.

AIM: To explore the debate on the development of the nurse practitioner profession in the Netherlands. BACKGROUND: In the Netherlands, the positives and negatives of nurse practitioners working in the medical domain have been debated since the role was introduced in 1997. The outcome of the debate is crucial for nurse practitioners' professional development and society's justification of their tasks. METHOD: Review of 14 policy documents, 35 opinion papers from nurses, 363 opinion articles from physicians and 24 Dutch research papers concerning nurse practitioners from 1995 to 2012. RESULTS: Two discourses were revealed: one related to efficiency and one to the development of the profession. In both, the nurse practitioner role was presented as a solution for healthcare and workforce problems, while arguments differed. The efficiency discourse seemed most influential. Opinions of nurse practitioners were underrepresented; taking up new responsibilities was driven by the wish to improve patient care. While most physicians were willing to delegate tasks to nurse practitioners, they wished to retain final responsibility for medical care. LIMITATIONS: All available publications were extensively studied, which could not include unpublished policy documents from the government or influential parties. This may have led to some selectivity. CONCLUSION: The case of the Netherlands shows that nurses in developing their advanced role are

facing barriers, similar to those in other countries. The dominance of efficiency arguments combined with protection of medical autonomy undermines the development towards nursing care that really benefits patients. IMPLICATIONS FOR NURSING AND HEALTH POLICY: Nurse practitioners should strive to obtain positions in which they are allowed to make their own decisions and wise use of healthcare resources for the good of patients and society. Nurse practitioners should aim to become members of influential healthcare Boards in their countries, in which they can raise their voices and be involved in policy making.

Tsiachristas, A., Wallenburg, I., Bond, C. M., et al. (2015). "Costs and effects of new professional roles: Evidence from a literature review." Health Policy **119**(9): 1176-1187.
http://www.ncbi.nlm.nih.gov/pubmed/25899880

One way in which governments are seeking to improve the efficiency of the health care sector is by redesigning health services to contain labour costs. The aim of this study was to investigate the impact of new professional roles on a wide range of health service outcomes and costs. A systematic literature review was performed by searching in different databases for evaluation papers of new professional roles (published 1985-2013). The PRISMA checklist was used to conduct and report the systematic literature review and the EPHPP-Quality Assessment Tool to assess the quality of the studies. Forty-one studies of specialist nurses (SNs) and advanced nurse practitioners (ANPs) were selected for data extraction and analysis. The 25 SN studies evaluated most often quality of life (10 studies), clinical outcomes (8), and costs (8). Significant advantages were seen most frequently regarding health care utilization (in 3 of 3 studies), patient information (5 of 6), and patient satisfaction (4 of 6). The 16 ANP studies evaluated most often patient satisfaction (8), clinical outcomes (5), and costs (5). Significant advantages were seen most frequently regarding clinical outcomes (5 of 5), patient information (3 of 4), and patient satisfaction (5 of 8). Promoting new professional roles may help improve health care delivery and possibly contain costs. Exploring the optimal skill-mix deserves further attention from health care professionals, researchers and policy makers.

Vaartio-Rajalin, H. et Fagerstrom, L. (2019). "Professional care at home: Patient-centredness, interprofessionality and effectivity? A scoping review." Health Soc Care Community **27**(4): e270-e288.

The aim of this scoping review was to describe the state of knowledge on professional care at home with regard to different perspectives on patient-centredness, content of care, interprofessional collaboration, competence framework and effectivity. A scoping review, n = 35 papers, from four databases (EBSCO, CINAHL, Medline, Swemed) were reviewed between May and August 2018 using the terms: hospital-at-home, hospital-in-the-home, advanced home healthcare, hospital-based home care or patient-centered medical home. Criteria for inclusion in this review included full text papers, published between 2001 and 2018, in English, Swedish or Finnish. A descriptive content analysis was conducted. Patient-centredness appears to be one aim of professional care at home, but clarity is lacking regarding patient recruitment and the planning and evaluation of care. Content depends, to a certain degree, on the type of care at home and how it is organised: the more non-acute care needs, the more nurse-coordinated care and family involvement and the less interprofessionality. The competence framework presupposed for care at home was extensive yet not explicit, varying from maturity, clinical experience, collaboration skills, ongoing clinical assessment education to Master's studies or degree. The effectivity of care at home services was discussed in terms of experiential, clinical and economic aspects. Patients and their family caregivers were satisfied with care at home, but there was no consensus on clinical or economic outcomes compared with inpatient care. In the context of professional care at home, there is still a lot to do regarding patient-centredness, patient recruitment, patient and care staff education, the organisation of interprofessional collaboration and the analysis of effectivity.

van Erp, R. M. A., van Doorn, A. L., van den Brink, G. T., et al. (2021). "Physician Assistants and Nurse Practitioners in Primary Care Plus: A Systematic Review." Int J Integr Care **21**(1): 6.

INTRODUCTION: Shifting specialist care from the hospital to primary care/community care (also called primary care plus) is proposed as one option to reduce the increasing healthcare costs, improve quality of care and accessibility. The aim of this systematic review was to get insight in primary care plus provided by physician assistants or nurse practitioners. METHODS: Scientific databases and reference list were searched. Hits were screened on title/abstract and full text. Studies published between 1990-2018 with any study design were included. Risk of bias assessment was performed using QualSyst tool. RESULTS: Search resulted in 5.848 hits, 15 studies were included. Studies investigated nurse practitioners only. Primary care plus was at least equally effective as hospital care (patient-related outcomes). The number of admission/referral rates was significantly reduced in favor of primary care plus. Barriers to implement primary care plus included obtaining equipment, structural funding, direct access to patient-data. Facilitators included multidisciplinary collaboration, medical specialist support, protocols. CONCLUSIONS AND DISCUSSION: Quality of care within primary care plus delivered by nurse practitioners appears to be guaranteed, at patient-level and professional-level, with better access to healthcare and fewer referrals to hospital. Most studies were of restricted methodological quality. Findings should be interpreted with caution.

van Vliet, R., Ebben, R., Diets, N., et al. (2020). "Nurse practitioners and physician assistants working in ambulance care: A systematic review." F1000Res **9**: 1182.

Background: This review aims to describe the activities of nurse practitioners (NPs) and physician assistants (PAs) working in ambulance care, and the effect of these activities on patient outcomes, process of care, provider outcomes, and costs. Methods: PubMed, MEDLINE (EBSCO), EMBASE (OVID), Web of Science, the Cochrane Library (Cochrane Database of Systematic Review), CINAHL Plus, and the reference lists of the included articles were systematically searched in November 2019. All types of peer-reviewed designs on the three topics were included. Pairs of independent reviewers performed the selection process, the quality assessment, and the data extraction. Results: Four studies of moderate to poor quality were included. Activities in medical, communication and collaboration skills were found. The effects of these activities were found in process of care and resource use outcomes, focusing on non-conveyance rates, referral and consultation, on-scene time, or follow-up contact Conclusions: This review shows that there is limited evidence on activities of NPs and PAs in ambulance care. Results show that NPs and PAs in ambulance care perform activities that can be categorized into the Canadian Medical Education Directives for Specialists (CanMED) roles of Medical Expert, Communicator, and Collaborator. The effects of NPs and PAs are minimally reported in relation to process of care and resource use, focusing on non-conveyance rates, referral and consultation, on-scene time, or follow-up contact. No evidence on patient outcomes of the substitution of NPs and PAs in ambulance care exists. PROSPERO registration: CRD42017067505 (07/07/2017).

Williams, D. M., Medina, J., Wright, D., et al. (2010). "A review of effective methods of delivery of care: skill-mix and service transfer to primary care settings." Prim Dent Care **17**(2): 53-60.

AIMS: Health policy in England is seeking to minimise hospital use and provide access to services in a primary healthcare setting and maximise skill-mix, driven by issues such as cost and access. The aim of this review was to determine the effectiveness of increased use of skill-mix and service transfer within general and oral healthcare. Secondary outcome measures were related to cost, quality, access, health outcomes and satisfaction. METHODS: Data sources were the Cochrane Database of Systematic Reviews, Centre for Reviews and Dissemination DARE, British Nursing Index, CINAHL, EMBASE, MEDLINE, and PsycINFO from 1996 to August 2008. The reference lists of relevant papers were scanned to identify additional studies. DATA SELECTION: A rapid appraisal of systematic reviews, randomised controlled trials, controlled trials and service evaluations in relation to specialist services, practitioners with a special interest, medical and dental, nursing and dental care professionals, together with evidence of service shifts from secondary to primary care was undertaken. RESULTS: A total of 206 papers were reviewed. All titles and abstracts of articles and papers found were extracted and validated according to predefined criteria. They were screened for relevance by two researchers, who assessed trial quality and extracted data. Twenty-six papers met the inclusion criteria. The literature demonstrated limited evidence of the cost-effectiveness and health outcomes associated with changes in setting and skill-mix. However, there was evidence of improved access, patient and professional satisfaction. CONCLUSIONS: There is an overwhelming need for well-designed

interventions with robust evaluation to examine cost-effectiveness and benefits to patients and the health workforce.

Williams, K. (2017). "Advanced practitioners in emergency care: a literature review." Emerg Nurse **25**(4): 36-41.

There has been an expansion of advanced practitioner roles, such as advanced clinical practitioners, in emergency departments (EDs) in recent years, with the assumption that they will positively affect the provision and quality of emergency care. This article presents a literature review which aimed to identify the evidence on the effects of advanced practitioners in emergency care. The search revealed only four papers, but these studies did identify a need for the role, and highlighted positive attitudes towards it and its potential to improve patient care. The studies also raised concerns about the lack of clarity about titles, education, skills and competence, issues that must be addressed before implementation of such roles. There is clearly an urgent need for further research, but with careful consideration and implementation, advanced clinical practitioners, like the established emergency nurse practitioner role, can positively affect emergency care provision and help address the challenges faced by EDs across the UK.

Wynendaele, H., Willems, R. et Trybou, J. (2019). "Systematic review: Association between the patient-nurse ratio and nurse outcomes in acute care hospitals." J Nurs Manag **27**(5): 896-917.

AIMS: To evaluate and summarize current evidence on the relationship between the patient-nurse ratio staffing method and nurse employee outcomes. BACKGROUND: Evidence-based decision-making linking nurse staffing with staff-related outcomes is a much needed research area. Although multiple studies have investigated this phenomenon, the evidence is mixed and fragmented. EVALUATION: A systematic literature search was conducted using PubMed, Embase, Web of Science, Cinahl, Cochrane Library and the ERIC databases. Thirty studies were identified, analysing eight selected key nurse outcomes. KEY ISSUE(S): Future research should focus on unit-level data, incorporate other methodologies and aim for comparability between different types of clinical settings as well as different health care systems. CONCLUSION: A relationship between the patient-nurse ratio and specific staff-related outcomes is confirmed by various studies. However, apart from the patient-nurse ratio other variables have to be taken into consideration to ensure quality of care (e.g., skill mix, the work environment and patient acuity). IMPLICATIONS FOR NURSING MANAGEMENT: Hospital management should pursue the access and use of reliable data so that the validity and generalizability of evidence-based research can be assessed, which in turn can be converted into policy guidelines.

ÉTUDES FRANÇAISES

- Voir aussi sur le site de l'Irdes la bibliographie :

Les professions paramédicales : sociologie et délégations de soins, (2020)

Agamaliyev, E., et al. (2016). "Les déterminants de l'opinion des médecins généralistes sur la délégation de tâches vers les infirmiers de leur cabinet." Revue Francaise Des Affaires Sociales **5**(1): 375-404. http://www.cairn.info/revue-francaise-des-affaires-sociales-2016-1-page-375.htm

Des nouvelles formes de coopération entre les médecins généralistes libéraux et les infirmiers se développent en France, souvent dans le cadre d'expérimentations. La vision des professionnels de santé sur les modalités de cette coopération n'est pas uniforme. À partir des résultats de deux enquêtes réalisées auprès du panel des médecins généralistes, cet article étudie les déterminants de la disposition à déléguer des médecins selon trois scénarios de financement de l'infirmier : la rémunération intégrale par l'assurance maladie, la rémunération mixte (50 % par l'assurance maladie et 50 % par les revenus du cabinet) et la rémunération intégrale par les revenus du cabinet.
Tous scénarios confondus, un tiers des médecins généralistes seraient favorables à la délégation d'une ou plusieurs tâches vers un infirmier de leur cabinet. Néanmoins, ce résultat varie sensiblement selon le mode de financement de l'infirmier : les médecins seraient d'autant plus favorables au transfert

d'activité que celui-ci est rémunéré par l'assurance maladie (60 % d'entre eux), alors que lorsque l'infirmier est intégralement rémunéré par les revenus du cabinet, seuls 17 % des avis seraient favorables.
Nos analyses suggèrent également l'émergence de deux modèles de coopération entre les médecins généralistes libéraux et les infirmiers. Un premier modèle, pour lequel opte la majorité des médecins qui seraient favorables à la délégation, prévoit une délégation d'activités liées à l'accompagnement des patients et au suivi des maladies chroniques (éducation thérapeutique, accompagnement des patients lors de l'arrêt de la consommation de tabac, etc.). Un deuxième modèle beaucoup plus minoritaire semble aussi émerger de médecins favorables à une délégation plus large d'activités y compris des actes techniques (le frottis cervical) ou la prescription d'hémoglobine glyquée (HbA1c).

Anger, E. et Gimbert, V. (2011). "Quelles opportunités pour l'offre de soins de demain ? (volet 1). Les coopérations entre professionnels de santé." Note D'analyse (La)(254): 11 , graph.
http://www.strategie.gouv.fr/content/les-cooperations-entre-professionnels-de-sante-note-danalyse-254-decembre-2011

À quoi ressemblera l'offre de santé en France dans vingt ans ? Les défis sanitaires sont nombreux : hausse des maladies chroniques, vieillissement de la population, évolution de la démographie médicale, etc. Pour y répondre, deux leviers d'action sont disponibles. D'une part, la télésanté, ou production de soins à distance. D'autre part, la coopération entre professionnels de santé, grâce à laquelle personnels médicaux et paramédicaux peuvent développer de nouveaux modes d'exercice collectif et opérer entre eux des transferts d'activité afin d'optimiser la production de soins. En France, ces démarches sont encore marginales, notamment dans le secteur ambulatoire, car elles nécessitent de faire évoluer certains principes d'exercice libéral. Dans d'autres pays, les coopérations sont très développées dans le champ des soins primaires, mobilisant surtout médecins généralistes et infirmiers sur l'accès aux soins courants et sur la qualité de prise en charge des pathologies chroniques. Cette évolution requiert une politique volontariste de soutien aux structures pluridisciplinaires et la reconnaissance juridique des nouvelles compétences acquises. L'essor des coopérations en France, gage d'un renforcement du secteur ambulatoire, permettrait, sous certaines conditions, de mieux adapter l'offre aux besoins des patients et d'améliorer l'efficience du système de santé en réduisant le poids des dépenses hospitalières.

Bauer, D., Burdillat, M. et Bourgueil, Y. (2004). Démographie régionale de 5 professions de santé de premiers recours : rapport 2004. Paris La Documentation française **:** 207, tab., graph.
http://www.sante.gouv.fr/ondps/rapport2004.htm

L'Observatoire National de la Démographie des Professions de Santé livre au public, avec ce premier rapport 2004, une synthèse générale, ainsi que quatre tomes thématiques sur les professions de santé en France. Chaque tome rend compte des résultats du travail de collaboration accompli tout au long de cette année, au sein du conseil d'orientation et des comités régionaux. Le tome 4 décrit, par canton, la démographie de cinq professions de premiers recours : médecins généralistes, pharmaciens d'officine, chirurgiens-dentistes, infirmiers, masseurs-kinésithérapeutes, et en propose des synthèses régionales.

Berland, Y. (2003). Coopération des professions de santé : le transfert de tâches et de compétences. Paris Ministère chargé de la santé **:** 57.
http://lesrapports.ladocumentationfrancaise.fr/BRP/034000619/0000.pdf

Le premier rapport du Pr. Yvon Berland, portant sur la démographie médicale, a été rendu en décembre dernier. Rendu public le 17 octobre, ce deuxième rapport est un rapport d´étape sur " les transferts des tâches et des compétences, notamment en vue d'une coopération accrue entre les professionnels de santé " que le Pr. Berland a présenté au ministre de la santé. Il s'agit, dans la perspective d'un risque de pénurie de médecins généralistes et surtout spécialistes, de mieux définir ce qui relève à proprement parler du rôle du médecin et ce qui, dans ses activités, pourrait être réalisé par un autre professionnel, médical ou paramédical. Le rapport intermédiaire comporte une analyse des nombreux transferts et délégations d'actes et de compétences existant déjà dans plusieurs pays,

notamment anglo-saxons. Il fait également état de plusieurs expériences françaises au cours des dernières années. Il enregistre la volonté de plusieurs acteurs médicaux et paramédicaux d'organiser les conditions dans lesquelles de nouveaux transferts de compétences pourraient se produire à l'avenir. A cette fin, plusieurs équipes soignantes conduiront au cours des prochains mois des expérimentations de transferts de tâches et de compétences. Ces expérimentations feront l'objet d'évaluations rigoureuses, qui constitueront le rapport final de la mission. De la teneur de ces évaluations dépendra ensuite l'importance des transferts, qui pourront être institués en accord avec l'ensemble des partenaires professionnels et des responsables de formation. Ces transferts de compétences, associés à la hausse régulière du numerus clausus des professions de santé et aux différentes mesures visant à une meilleure répartition des professions de santé sur le territoire, complèteront la politique de régulation de l'offre de soins mise en ?uvre par le Gouvernement, indique le ministère de la Santé.

Berland, Y., Burdillat, M., Mino, J.-C., et al. (2010). "Les coopérations entre professionnels : actualité et enjeux." Actualite Et Dossier En Sante Publique(70): 16-35.

[BDSP. Notice produite par EHESP 9DHR0xDr. Diffusion soumise à autorisation]. La situation inédite de la baisse certaine, pour les dix ans, à venir, du nombre de médecins en France a déclenché études et débats, présentés par Martine Burdillat, permettant ainsi de disposer d'informations objectives et détaillées sur la ressource humaine en santé, aussi bien en termes quantitatifs que qualitatifs. Cette approche très générale est complétée par une analyse de l'évolution des pratiques de terrain développée par Jean-Christophe Mino et Magali Robelet, qui s'interrogent sur la possibilité de la reconnaissance des pratiques invisibles et de leurs acteurs. Le processus en cours soulève de nombreux enjeux dépassant la seule question de la baisse du nombre de médecins. Enjeu de cadre juridique tout d'abord, comme l'expose Joël Moret-Bailly. La formation des professions de santé constitue un deuxième enjeu d'importance. Il s'agit tout d'abord, comme l'expose Jacques Domergue, de l'organisation de la formation initiale commune à plusieurs professions qui se met en place. Mais c'est également l'articulation de la formation avec les processus de qualification, et surtout de définition initiale des compétences requises, et l'adaptation au cadre du LMD européen qui font l'objet d'une véritable révolution selon les termes de Marie Ange Coudray. Enfin, l'enjeu économique et plus précisément l'analyse des conditions économiques du développement des coopérations comme leurs effets attendus, en ville comme à l'hôpital, sont présentés par Sandrine Chambaretaud.

Berland, Y. r. et Bourgueil, Y. r. (2006). Rapport "Cinq expérimentations de coopération et de délégation de tâches entre professions de santé". Paris ONDPS **:** 69 , tabl., schann.
http://www.sante.gouv.fr/IMG/pdf/rapport_cinq_experim_juin2006.pdf

Ce document est un rapport d'étape d'une démarche 'expérimentation initiée en décembre 2003 visant à apporter des éléments détaillés de réflexion sur les évolutions possibles des contours des métiers de la santé et sur les modalités de transfert et ou de délégations d'activités et de compétences entre la profession médicale et les autres professions de santé. La mise en oeuvre de ces expérimentations a suscité de nombreux débats et sollicitations de la part de multiples acteurs du champ de la santé désireux de faire valoir leurs expériences et pratiques de terrain. Les réactions des organisations professionnelles et syndicales aux projets inscrits dans le cadre des expérimentations ont mis en lumière, les craintes mais aussi les attentes vis à vis d'une évolution des rôles et des responsabilités. Nous avons pu, à cette occasion, constater l'importance des initiatives et des projets visant à redistribuer les rôles et les tâches entre professionnels pour faire face à une augmentation mais aussi à une évolution de la demande de soins. Paradoxalement, a contrario de ce que nous montre la littérature internationale, il existe très peu de travaux documentés en France sur les motivations, les organisations et les effets de nouvelles formes d'organisation des soins faisant appel à une délégation d'activité des médecins à d'autres professionnels de santé.

Bohic, N., Josselin, A., Sandeau-Bruber, A. C., et al. (2021). Trajectoires pour de nouveaux partages de compétences entre professionnels de santé. 2 tomes. Paris Igas**:** 2 vol. (165 +155).
https://igas.gouv.fr/spip.php?article842

Dans un contexte de revendication croissante d'autonomie des professionnels paramédicaux et d'inquiétude de la population sur l'accès aux soins, le ministre des solidarités et de la santé a confié à l'Igas une mission d'évaluation des dispositions visant à reconnaitre et développer les compétences des professionnels non-médicaux pour les mettre en capacité d'intervenir dans des champs en principe réservés aux médecins. La mission a principalement analysé les « protocoles de coopération », l'exercice des infirmiers en « pratique avancée » et son extension possible aux infirmiers spécialisés, notamment aux infirmiers anesthésistes (IADE). Elle a en outre étudié, en lien avec les ordres des médecins et des infirmiers, l'opportunité de créer une profession de santé « intermédiaire ».

Brocas, A. M., Cuvillier, N. et Deuxdeniers, M. L. (1998). Rapport sur l'exercice libéral des professions paramédicales : infirmiers, masseurs kinésithérapeutes, orthophonistes, orthoptistes. Paris Ministère chargé de la santé **:** 18.

Le présent rapport a été élaboré à l'issue de la concertation menée à la demande de la Ministre de l'Emploi et de la Solidarité et du Secrétaire d'Etat à la santé, avec les représentants des infirmières et infirmiers, des masseurs kinésithérapeutes, des orthophonistes et des orthoptistes libéraux. Il envisage les orientations susceptibles de répondre aux difficultés rencontrées aujourd'hui par les professions paramédicales pour remplir leur mission tout en favorisant une prise en charge sanitaire de qualité. Les propositions qu'il présente à cette fin visent à préciser la place des paramédicaux dans le système de soins ambulatoire, à clarifier leur rôle vis-à-vis des médecins et à leur fournir les outils de régulation de l'exercice professionnel qui font aujourd'hui défaut.

Buscail, S., Chabot, J.-M., Derenne, R., et al. (2010). "Coopération entre professionnels de santé. Enjeux et perspectives." Revue Hospitaliere De France(533): 66-68.

[BDSP. Notice produite par EHESP R0xElmJ8. Diffusion soumise à autorisation]. La Haute Autorité en Santé (HAS) a souligné, dans sa recommandation d'avril 2008, que de nouvelles formes de coopération entre professionnels de santé ne pouvaient se développer que dans le cadre d'une orientation politique forte. Le travail d'expertise et de concertation de la HAS et de l'Observatoire national de la démographie des professions de santé a contribué à préparer le chemin législatif. La loi Hôpital, patients, santé, territoires, dans son article 51, donne à la HAS compétence pour émettre un avis conforme sur les protocoles qui émaneront des acteurs de terrain et seront relayés par les futures agences régionales de santé. Ce travail devra s'accompagner d'une réflexion continue sur l'évolution des métiers de la santé, les conditions de leur formation initiale et leurs missions, dans le contexte d'un exercice de moins en moins marqué par l'individualisme, et de plus en plus tourné vers la complémentarité et la pluridisciplinarité.

Cour des Comptes (2014). Les conventions avec les professions libérales de santé : répondre aux besoins des patients, mieux assurer l'efficience de la dépense. Rapport sur l'application des lois de financement de la sécurité sociale., Paris : Cour des Comptes **:** 241-266., tabl.
http://www.ccomptes.fr/Actualites/A-la-une/La-securite-sociale
http://www.ccomptes.fr/Publications/Publications/La-securite-sociale2

La France a développé un modèle spécifique visant à concilier un exercice libéral des professions de santé avec un accès aux soins de ville généralisé, garanti par une sécurité sociale organisant la solidarité collective. Les conventions nationales passées depuis 1971 entre l'assurance maladie et les différentes catégories de professionnels libéraux en constituent un outil essentiel. L'enjeu financier en est significatif : en 2013, au sein de l'objectif national des dépenses d'assurance maladie (ONDAM), le sous-objectif des soins de ville s'est élevé en exécution à 79,4 Md€, soit 46 % du total. Les conventions élaborées par profession revêtent un caractère obligatoire une fois approuvées par arrêté ministériel, sauf refus d'adhésion par le praticien concerné. Plus de 99 % des professionnels de santé libéraux sont actuellement conventionnés. Le cadre de leur négociation a été profondément réformé par la loi n° 2004-810 du 13 août 2004 relative à l'assurance maladie. La Cour a examiné les politiques conventionnelles développées à la suite de cette réforme. Elle a centré son analyse sur cinq professions, qui représentent l'essentiel des dépenses de soins de ville : médecins, chirurgiens-dentistes, pharmaciens, infirmiers, masseurs-kinésithérapeutes. Elle a constaté que les résultats de ces

politiques sont insuffisants, que ce soit en termes d'accès aux soins ou d'efficience dans leur dispensation. Le système conventionnel doit être réorienté, pour le recentrer sur les besoins des assurés sociaux et pour faciliter une réorganisation des soins de proximité en développant les approches interprofessionnelles.

Deleau, M. E. (2005). Améliorer la prise en charge des pathologies chroniques en médecine générale : installation d'infirmières dédiées à la santé publique dans des cabinets de médecine générale, sur le mode de la délégation de tâches : exemple de la prise en charge du diabète de type 2. Poitiers : Université de Poitiers.

Doan, Levy et Pavot (2008). "The Task Delegation Issue : Scenarios for the French Sector of Ambulatory Care.; La délégation des tâches : scénarios pour le secteur ambulatoire en France." Cahiers De Sociologie Et De Demographie Medicales **48**(2): 307-324.

De toute évidence, une délégation de tâches implique qu'il y ait d'un côté des "donneurs de tâches" et de l'autre, des "receveurs des mêmes tâches". En 2004, une enquête entreprise parmi les infirmières libérales en exercice en France métropolitaine révèle que sur 10 d'entre elles, 3 déclarent que leur charge de travail est "trop lourde". A la même date, les deux tiers des masseurs-kinésithérapeutes libéraux pensent que leur charge de travail est "sûrement suffisante". Au printemps 2005, une autre enquête montre que 9% des omnipraticiens et 29% des médecins spécialistes déclarent qu'ils rencontrent des difficultés à trouver du personnel pour les assister dans leur travail. En partant de l'hypothèse (plausible) que les infirmières ayant une charge de travail trop lourde n'acceptent pas de tâches supplémentaires, un modèle de simulation montre que dans l'état actuel de choses, des mesures visant à promouvoir la délégation des tâches n'obtiendraient que de maigres résultats. Là où le corps médical n'est pas surchargé, son temps de travail hebdomadaire n'accuserait qu'une réduction de 0,7% à 3,1%. Lorsque la pénurie médicale s'aggrave et que les médecins doivent faire face à une activité intense, l'allègement, paradoxalement, serait encore plus faible, entre 0,5% et 2,3%. (Résumé d'auteur).

Drees (2016). Portrait des professionnels de santé, Paris : Drees
http://drees.social-sante.gouv.fr/etudes-et-statistiques/publications/panoramas-de-la-drees/article/portrait-des-professionnels-de-sante-edition-2016

À l'occasion de la Grande Conférence de la santé, organisée le 11 février 2016, la Direction de la recherche, des études, de l'évaluation et des statistiques (Drees) et ses partenaires ont réalisé un état des lieux inédit des connaissances sur les 1,9 million de professionnels de santé qui exercent en France. À travers une vingtaine de fiches à la fois pédagogiques et synthétiques, cet ouvrage fournit les chiffres clés sur les différents aspects des métiers et des parcours des professionnels de santé. Il livre tout d'abord un panorama de la démographie, passant en revue le nombre de professionnels et son évolution passée, les spécificités de l'exercice à l'hôpital et les transformations de l'exercice ambulatoire, ainsi que la répartition géographique des professionnels de premier recours. L'ouvrage se penche ensuite sur les rémunérations de ces professionnels selon le mode d'exercice et le métier ou la spécialité exercés, et place celles des médecins et infirmiers dans une perspective internationale. La formation fait l'objet d'une troisième partie. Celle-ci dresse une synthèse sur les évolutions des quotas et du numerus clausus, la sélection dans le cadre de la première année commune aux études de santé et des épreuves classantes nationales, ainsi que sur les formations des professions non médicales et les dispositifs de formation continue. Un quatrième ensemble de fiches décrit les conditions de travail des professionnels à l'hôpital et se penche sur l'exercice des médecins généralistes libéraux. Enfin, dans une dernière partie, l'ouvrage esquisse, à la lumière des connaissances actuelles, les tendances des futures évolutions démographiques et examine la répartition des professionnels sur le territoire qui pourrait se dessiner.

Dupuis (2014). L'éthique organisationnelle dans le secteur de la santé : Ressources et limites contextuelles des pratiques soignantes, Seli Arslan, Paris

Michel Dupuis contextualise les pratiques et vise à considérer les situations réelles de soins, les "soins en situation". D'autres valeurs apparaissent alors et, avec elles, d'autres exigences, qui s'inscrivent

dans une politique et une économie des soins. L'éthique organisationnelle prend notamment en compte les techniques de management, les styles de leadership, les politiques institutionnelles, le climat éthique des organisations de soins, hospitalières et autres. Comme Ricoeur l'a montré, on ne perd rien de l'éthique en visant le niveau politique et collectif d'organisation. En passant d'une relation "courte" à autrui à une relation "longue" aux autres, on n'abandonne pas le souci de la rencontre singulière, mais on s'organise pour la rendre possible à chaque fois que se présente un nouvel autrui, anonyme, inconnu. Il s'agit donc toujours de prendre soin de personnes singulières, mais en visant le collectif qui a droit à la justice, à la reconnaissance, au partage des ressources. À ce niveau organisationnel, le professionnel trouve une position nouvelle : comme le patient, il a droit, pour lui-même, à une organisation juste, motivante, reconnaissante, légitimement exigeante. L'éthique organisationnelle, c'est le principe de réalité qui rejoint l'idéal soignant et qui le réalise, au moins un peu, dans les conditions concrètes des situations. (4ème de couv.).

Gilles de La Londe, J., Afrite, A. et Mousques, J. (2021). "La coopération entre médecins généralistes et infirmières améliore le suivi des patients diabétiques. L'impact du dispositif Asalée." Questions D'economie De La Sante (Irdes)(264): 1-8.
https://www.irdes.fr/recherche/questions-d-economie-de-la-sante/264-la-cooperation-entre-medecins-generalistes-et-infirmieres-ameliore-le-suivi-des-patients-diabetiques.pdf

Le dispositif expérimental de coopération entre médecins généralistes et infirmier·ère.s Action de santé libérale en équipe (Asalée), a pour objectif principal d'améliorer la qualité des soins et services rendus, notamment aux personnes souffrant de pathologies chroniques. Il s'appuie pour cela sur la substitution de certains actes des médecins vers les infirmières et sur le développement d'une démarche d'éducation thérapeutique. L'analyse des impacts du dispositif, inscrits dans le programme d'évaluation Doctor and Advanced Public Health Nurse Experiment Evaluation (DAPHNEE), est appréhendée ici à travers l'évolution de la qualité des soins et services dont ont pu bénéficier les patients diabétiques de type II, avant et après l'entrée de leur médecin traitant dans l'expérimentation Asalée. Les analyses montrent que l'entrée des médecins dans le dispositif Asalée a un impact positif et significatif sur la qualité du suivi des patients diabétiques et, particulièrement, de ceux bénéficiant d'un suivi spécifique par des infirmières. De plus, l'impact est plus important pour les binômes médecins-infirmières pour lesquels la coopération est plus intense, notamment en termes de nombre de patients concernés, de démarches éducatives entreprises ou encore de nombre et de variétés des actes substitués.

HAS (2008). "Délégation, transferts, nouveaux métiers... Comment favoriser des formes nouvelles de coopération entre professionnels de santé ? Recommandation HAS en collaboration avec l'ONDPS."

Le projet de recommandation est organisé en quatre grands chapitres. Il propose tout d'abord un état des lieux sur les conditions de l'exercice des professions médicales et paramédicales. Il examine ensuite le potentiel de développement de ces nouvelles formes de coopération entre professionnels de santé pouvant être atteint sans modifications majeures de cadre d'exercice. Puis il analyse les évolutions structurelles qui sont nécessaires à un développement des coopérations au-delà du potentiel immédiat. Enfin, il propose les conditions immédiates de mise en oeuvre de coopération.

HAS (2008). Intégrer de nouvelles formes de coopération au sein d'une organisation existante. Guides méthodologiques.**:** 27 , tabl.
http://www.has-sante.fr/portail/upload/docs/application/pdf/guide_methodologique_cooperation_2008_04_16__12_25_31_703.pdf

[BDSP. Notice produite par HAS BR0xn9pA. Diffusion soumise à autorisation]. L'intégration de nouvelles formes de coopération au sein d'une organisation existante se traduit par une transformation des fonctionnements et des pratiques en place. Il est donc important de se donner les moyens d'une gestion de projet de qualité. Ce guide repose entièrement sur le vécu des professionnels qui ont pris part aux expérimentations de nouvelles formes de coopération citées dans l'arrêté de mars 2006.

HAS (2008). Nouvelles formes de coopération entre professionnels de santé. Rapport de synthèse des évaluations quantitatives et recueil de l'avis du malade. Rapport de synthèse. Enquêtes et études. Saint-Denis : HAS**:** 119.
http://www.has-sante.fr/portail/upload/docs/application/pdf/2008-07/rapport_de_synthese_des_evaluations_quantitatives_relatives_aux_nouvelles_formes_de_cooperation_entre_professionnels_de_sant.pdf

[BDSP. Notice produite par HAS H9ER0xr8. Diffusion soumise à autorisation]. Entre décembre 2003 et octobre 2007,15 expérimentations visant à apporter des éléments de réflexion détaillés sur les évolutions possibles des contours des métiers de la santé et sur les modalités de redéfinition de ces contours ont été menées en France. Ces expérimentations (qui se sont déroulées en deux vagues successives) se sont inscrites dans des démarches volontaires devant déboucher sur des résultats évaluables portant notamment sur l'efficacité et la sécurité des soins dispensés.

HAS (2018). "Recommandation vaccinale sur l'extension des compétences des professionnels de santé en matière de vaccination contre la grippe saisonnière."

Suite à une saisine de la Direction générale de la santé, la Haute Autorité de santé (HAS) et sa Commission Technique des vaccinations (CTV) émettent des recommandations établissant l'intérêt et les conditions d'une extension des compétences en matière de vaccination des infirmiers, des sages-femmes et des pharmaciens ainsi que les formations et/ou les pré-requis nécessaires à la pratique de ces vaccinations. Cette recommandation porte uniquement sur la vaccination contre la grippe saisonnière. D'autres travaux à venir traiteront de l'ensemble des vaccinations de l'enfance, de l'adolescence et de l'âge adulte. La HAS a pris en considération les principales données disponibles pour ces vaccins qui sont détaillées dans cette évaluation à savoir : Les données de couverture vaccinale contre la grippe saisonnière qui restent insuffisantes en France au regard de objectifs fixés à 75% par l'Organisation Mondiale de la Santé et par la Commission Européenne ; L'absence d'impact sur la couverture vaccinale globale des incitations financières menées auprès des médecins généralistes ; La difficulté d'apprécier l'impact, y compris économique, des évolutions législatives et réglementaires ayant autorisé les infirmiers et sages-femmes à prescrire et pratiquer la vaccination contre la grippe saisonnière sans prescription préalable d'un médecin et les critères d'éligibilité des publics concernés qui diffèrent entre les deux professions ; Le bilan à un an des expérimentations mises en oeuvre en région Auvergne-Rhône-Alpes et Nouvelle Aquitaine en France autorisant les pharmaciens d'officine à vacciner certaines populations ; Les données de sécurité des vaccins contre la grippe y compris chez des populations particulières (primo-vaccinés, femmes enceintes, immunodéprimés, personnes sous traitement anticoagulant,) et le risque rare de réactions anaphylactiques aux protéines de l'oeuf chez l'adulte ; Le bilan des expériences étrangères portant sur l'impact de la couverture vaccinale de la vaccination contre la grippe saisonnière proposée en pharmacies d'officine.

HCAAM (2014). Avis sur la coopération entre professionnels de santé. Annexe 1 : état des lieux des dispositifs de coopération. Paris HCAAM**:** 58 , tabl., fig.
http://www.securite-sociale.fr/IMG/pdf/annexe_1_etat_des_lieux.pdf

La question de la coopération entre professionnels de santé est au coeur des préoccupations des pouvoirs publics et des acteurs du champ de la santé dans la perspective du renforcement d'une médecine de parcours. A la demande de Mme la Ministre des affaires sociales et de la santé, le Haut Conseil pour l'avenir de l'assurance maladie a conduit au cours du premier semestre de 2014 une réflexion sur les modèles cibles pertinents pour mieux organiser une telle coopération, au-delà des expérimentations ou transformations partielles déjà engagées dans le système de santé. Cet avis rassemble les éléments de la réflexion. Cette annexe 1 à l'avis dresse un état des lieux des dispositifs de coopération en France : médecin traitant, profession d'infirmière, délégation de soins, le regroupement des professionnels de santél, asalée...

HCAAM (2014). Avis sur la coopération entre professionnels de santé. Annexe 2 : Les expressions du HCAAM sur la coordination des interventions des professionnels autour du patient. Paris HCAAM**:** 6 , tabl., fig.

http://www.securite-sociale.fr/IMG/pdf/annexe_2_expression_du_hcaam.pdf

> La question de la coopération entre professionnels de santé est au coeur des préoccupations des pouvoirs publics et des acteurs du champ de la santé dans la perspective du renforcement d'une médecine de parcours. A la demande de Mme la Ministre des affaires sociales et de la santé, le Haut Conseil pour l'avenir de l'assurance maladie a conduit au cours du premier semestre de 2014 une réflexion sur les modèles cibles pertinents pour mieux organiser une telle coopération, au-delà des expérimentations ou transformations partielles déjà engagées dans le système de santé. Cet avis rassemble les éléments de la réflexion. Cette annexe 2 présente les expressions du HCAAM sur la coordination des interventions des professionnels autour du patient

HCAAM (2014). Avis sur la coopération entre professionnels de santé. Annexe 3 : les enseignements des systèmes de santé étrangers. Paris HCAAM**:** 17 , tabl., fig.
http://www.securite-sociale.fr/IMG/pdf/annexe_3_experiences_etrangeres.pdf

> La question de la coopération entre professionnels de santé est au coeur des préoccupations des pouvoirs publics et des acteurs du champ de la santé dans la perspective du renforcement d'une médecine de parcours. A la demande de Mme la Ministre des affaires sociales et de la santé, le Haut Conseil pour l'avenir de l'assurance maladie a conduit au cours du premier semestre de 2014 une réflexion sur les modèles cibles pertinents pour mieux organiser une telle coopération, au-delà des expérimentations ou transformations partielles déjà engagées dans le système de santé. Cet avis rassemble les éléments de la réflexion. Cette annexe 3 présente une étude comparée des organisations pluri-professionnelles mises en place dans les pays de l'Union européenne.

HCAAM (2014). Avis sur la coopération entre professionnels de santé. Annexe 4 : Enseignements des théories économiques et des évaluations sur le sujet des coopérations des professionnels de santé. Paris HCAAM**:** 4 , tabl., fig.
http://www.securite-sociale.fr/IMG/pdf/annexe_4_theories_economiques_et_evaluations.pdf

> La question de la coopération entre professionnels de santé est au coeur des préoccupations des pouvoirs publics et des acteurs du champ de la santé dans la perspective du renforcement d'une médecine de parcours. A la demande de Mme la Ministre des affaires sociales et de la santé, le Haut Conseil pour l'avenir de l'assurance maladie a conduit au cours du premier semestre de 2014 une réflexion sur les modèles cibles pertinents pour mieux organiser une telle coopération, au-delà des expérimentations ou transformations partielles déjà engagées dans le système de santé. Cet avis rassemble les éléments de la réflexion. Cette annexe 4 présente les enseignements des théories économiques et des évaluations sur le sujet des coopérations des professionnels de santé.

HCAAM (2014). Avis sur la coopération entre professionnels de santé. Annexe 5 : Comparaison par la DREES entre les projections d'effectifs de 2008 et les données observées. Paris HCAAM**:** 11 , tabl., fig.
http://www.securite-sociale.fr/IMG/pdf/annexe_5_demographie_des_professionnels_drees.pdf

> La question de la coopération entre professionnels de santé est au coeur des préoccupations des pouvoirs publics et des acteurs du champ de la santé dans la perspective du renforcement d'une médecine de parcours. A la demande de Mme la Ministre des affaires sociales et de la santé, le Haut Conseil pour l'avenir de l'assurance maladie a conduit au cours du premier semestre de 2014 une réflexion sur les modèles cibles pertinents pour mieux organiser une telle coopération, au-delà des expérimentations ou transformations partielles déjà engagées dans le système de santé. Cet avis rassemble les éléments de la réflexion. Cette annexe 5 présente les comparaisons réalisées par la DREES

Henart, L., Berland, Y. et Cadet, D. (2011). Rapport relatif aux métiers en santé de niveau intermédiaire. Professionnels d'aujourd'hui et nouveaux métiers : des pistes pour avancer. Paris Ministère chargé de la santé**:** 2 vol. (57; 39).
http://www.ladocumentationfrancaise.fr/rapports-publics/114000061/

Le monde de la santé fait face à des changements majeurs. Après avoir participé de façon remarquable au cours des trente dernières années à l'amélioration de la santé publique et accompagné les évolutions sociales et économiques de la population, on perçoit que son organisation actuelle pourrait se révéler moins performante face aux défis du futur, qui sont d'un ordre différent. L'émergence des pathologies liées au vieillissement, avec en corollaire celles inhérentes à la dépendance, le développement des maladies chroniques et les enjeux de santé publique actuels, le cancer et la santé mentale entre autres, réclament que se développent de nouvelles prises en charge plus graduées et mieux coordonnées entre la ville et l'hôpital. Les professionnels de santé sont inégalement répartis en termes géographiques et certains ont une démographie qui s'annonce inquiétante. Pourtant les besoins ne vont et n'iront pas en diminuant et la régulation devient un souci prégnant pour les pouvoirs publics. Les membres de la mission ont choisi d'auditionner un très grand nombre de professionnels de toutes catégories, des employeurs, des représentants syndicaux et des associations de patients. En outre des tables rondes ont été organisées sur les thèmes : personnes âgées, maladies chroniques, cancer, maladies mentales, chirurgie et imagerie. Le rapport de la mission met en lumière les professions et les professionnels, leur environnement et propose des actions de mise en œuvre de nouveaux métiers qui prennent pleinement en compte les métiers existants. Pour l'ensemble des membres de la mission, le plus important n'était pas de dresser un inventaire de nouveaux métiers possibles, mais de dessiner un cadre conceptuel et une méthode à même d'assurer à ces nouveaux intervenants une émergence durable et une valeur ajoutée certaine, une intégration. La mission présente neuf propositions reposant sur quatre piliers : une priorité : mettre en place une politique modernisée des ressources humaines en santé ; une nouveauté : créer des professions de santé de niveau intermédiaire ; une méthode : adopter un système rigoureux de validation ; une nécessité : intégrer les formations à l'enseignement supérieur.

Isaac-Sibille, C. (2021). L'organisation des professions de santé : quelle vision dans dix ans et comment y parvenir ? Paris Assemblée Nationale **:** 98.
https://www.assemblee-nationale.fr/dyn/15/rapports/cion-soc/l15b4319_rapport-information.pdf

La présente mission d'information émane d'une profonde volonté, partagée par l'ensemble des acteurs, de faire évoluer l'organisation du système de santé français, avec l'objectif d'améliorer l'accès aux soins et d'enrichir les missions et les carrières des professionnels paramédicaux. Cette volonté est aussi partagée sur de nombreux bancs de l'Assemblée nationale mais peine à se concrétiser. Récemment, les réflexions se sont concentrées sur l'opportunité ou non de créer une profession de santé intermédiaire pour apporter une réponse aux tensions portant sur la démographie médicale et aux besoins croissants en personnels médicaux hospitaliers.

Jourdan, J. R., Viossat, L. C., Zantman, F., et al. (2020). La filière visuelle : modes d'exercice, pratiques professionnelles et formation. Paris Igas**:** 2vol. (109.+149).
http://www.igas.gouv.fr/spip.php?article793

Faisant suite à une série de mesures décidées depuis une vingtaine d'années, le rapport conjoint de l'IGAS et de l'IGéSR, élaboré à la demande des ministres de la santé et de l'enseignement supérieur, énonce 28 nouvelles propositions pragmatiques visant à raccourcir, à l'horizon de deux ou trois ans, les délais d'accès à la prescription de verres correcteurs et à moderniser les formations au niveau de la licence et du master, en cohérence avec l'évolution des métiers.

Kervasdoue, J. d. (2003). La crise des professions de santé, Paris : Dunod

L'insatisfaction grandissante des professions de santé s'accroît à l'évidence depuis trois ans. Pourtant la France ne dispose-t-elle pas, selon l'Organisation Mondiale de la Santé, du meilleur système de santé du monde ? Cette crise constitue-t-elle l'expression habituelle d'un mouvement social ? Le revenu des professionnels a-t-il ou non baissé durant ces dernières années, et si oui, la composante financière suffit-elle, à elle seule, à expliquer le désarroi ? Pourquoi la crise perdure-t-elle alors que le gouvernement vient d'accorder d'importantes révolutions de tarifs ? Autant de problématiques que traitent dans cet ouvrage économistes, juristes, politologues, sociologues soucieux d'analyser en profondeur les modifications des caractéristiques fondamentales du système de santé français. Mais

cet ouvrage ne se limite pas à une mise à plat des symptômes et de leurs causes récentes et anciennes. Il constitue aussi un outil de réflexion dessinant la vision d'un nouveau système de santé.

Lambert et Ordre National des Médecins. Paris (2004). "Transfert de compétences : à la recherche du temps médical." Bulletin De L'ordre Des Medecins(2): 8-12.

Pour compenser la baisse annoncée de la démographie médicale, le transfert de certains actes techniques à des paramédicaux permettrait de dégager un temps dédié à d'autres actes diagnostiques et thérapeutiques. La notion de transfert de compétences regroupe toutefois des situations très variées allant d'une simple coopération entre médecins et paramédicaux, à un réel transfert de tâches, en passant par une optimisation de l'organisation, par exemple à travers le fonctionnement d'un réseau de soins. Quelques expérimentations concernant diverses spécialités (cardiologie, néphrologie, gastro-entérologie, ophtalmologie, médecine générale, transport sanitaire) ont déjà été retenues par les professionnels concernés à l'issue d'une rencontre, en décembre 2003, au ministère de la santé. Ce qui prouve que le transfert de compétences a toutes les chances de s'inscrire rapidement dans les pratiques. Il reste toutefois à démontrer qu'il profitera aux uns autant qu'aux autres.

Legendre, B., Aberki, C., Chaput, H., et al. (2019). "Infirmiers, masseurs-kinésithérapeutes et sages-femmes : l'accessibilité s'améliore malgré des inégalités." Etudes Et Resultats(1100): 6. https://drees.solidarites-sante.gouv.fr/IMG/pdf/er_1100.pdf

L'accessibilité géographique aux infirmiers, masseurs-kinésithérapeutes et sages-femmes s'améliore entre 2016 et 2017 (respectivement +2,3 %, +2,8 % et +5,4 %), soutenue par une croissance des effectifs de ces professionnels, notamment de ceux exerçant à titre libéral. Pour ces trois professions, les inégalités de répartition géographique diminuent, entre les communes les moins dotées et les mieux dotées, en particulier pour les sages-femmes. Toutefois, des inégalités territoriales subsistent. Les infirmiers sont plus inégalement répartis selon les régions et les masseurs-kinésithérapeutes selon le type de commune. La répartition des sages-femmes ne répond à aucune de ces deux logiques. Pour les trois professions, l'accessibilité est globalement meilleure dans les grands pôles urbains et le long du littoral. Si 7 habitants sur 10 bénéficient d'un bon accès à un professionnel de premier recours (que ce soit un médecin généraliste, un infirmier ou un masseur-kinésithérapeute), 4,5 % de la population française rencontre simultanément des difficultés d'accès à ces trois professions. Le cumul des difficultés d'accès aux sages-femmes et aux maternités est moins répandu, puisque cela ne concerne que 1,5 % de la population.

Levy, Pavot et Dang Ha, D. (2009). "Essai de simulation de délégation des tâches : le secteur des soins ambulatoires en France." Cahiers De Sociologie Et De Demographie Medicales **49**(2): 167-203.

En 2004, deux enquêtes entreprises par le Centre de Sociologie et de Démographie Médicales (CSDM) mettent en lumière la surcharge de travail des professions para-médicales : 31% des infirmières libérales interrogées déclarent que "leur charge de travail est trop lourde". Du côté des masseurs kinésithérapeutes libéraux, 65% des enquêtés estiment que "leur charge de travail est certainement suffisante". Un an plus tard, une autre enquête conduite auprès des médecins libéraux, laisse voir que 9% des généralistes et 29% des spécialistes éprouvent de "grandes difficultés à trouver du personnel auxiliaire pour les aider". [...] De cette étude une simulation de délégation de tâches a été élaborée. Il s'agit d'opérer des calculs en partant d'hypothèse sur la durée de travail des médecins, le pourcentage d'infirmières (ou de kinés) qui acceptent les tâches qui leur sont transférées et le nombre d'heures supplémentaires que chaque "infirmière (ou kiné) acceptante" veut bien accomplir chaque semaine en plus de son horaire habituel. [...] Ainsi, pour obtenir des succès significatifs, une action cherchant à promouvoir la délégation des tâches devrait s'accompagner de très généreuses incitations et, avant tout, d'incitations financières. On peut, à ce stade, s'interroger sur la pertinence de toute la démarche compte tenu de l'escalade actuelle des dépenses de santé et du risque qu'elle représente pour la pérennité du système de protection sociale d'aujourd'hui. Par ailleurs, la simulation fait apparaître deux paradoxes de taille. Le premier se rapporte à la charge de travail du corps médical. Lorsque cette charge est lourde ("52" heures), son allègement est faible, en tout cas bien plus faible que quand elle est légère ("39" heures). En d'autres termes, la délégation des tâches n'obtient que des résultats

> homéopathiques quand on en a le plus besoin. L'explication vient de la constance du stock des receveurs (les infirmières ou les kinés) alors que la charge de travail des médecins s'avère plus lourde. L'autre paradoxe vient de la différence entre les régions au nord de la Loire et celles qui sont au sud. Dans les dernières, la densité médicale est généralement plus élevée et la charge de travail par médecin moins importante qu'au nord de la Loire. Mais c'est dans les régions du sud que la simulation enregistre les résultats les moins modestes pour la délégation des tâches. Dans ces régions méridionales, le nombre d'infirmières par médecin est bien plus élevé qu'au nord, et ceci explique cela. Ici encore, la simulation montre que la délégation des tâches risque de conduire à des résultats décevants dans les contrées où elle serait la plus nécessaire. (Extrait Résumé d'auteur).

Levy, D., Pavot, J. et Doan, B. D. (2009). "[Task delegation scenarios at national and regional levels of the French ambulatory care sector]." Cah Sociol Demogr Med **49**(2): 167-203.

> The French sector of ambulatory care is characterized by two features: (i) health care providers are mostly independent practitioners paid on a fee-for-service basis; (ii) a large consensus is observed as concerns the shortage of health workers, particularly physicians and nurses. In such a context, if a task delegation programme is envisaged, attention should be paid, not only to the competencies of task receivers, but equally to the reluctance of health workforce. Given the current doctor shortage, it is probable that the reluctance of physicians is not vigorous. But on the side of task receivers (nurses, physiotherapists, other auxiliary workers...) reluctance should be taken into account. Shortage of nurses and physiotherapists (and consequently their growing workload) lowers their acceptance level (i.e., the proportion accepting task delegation) and reduces the time each accepting worker can devote to the activities delegated by physicians. The model shows that, in the current situation, French physicians can only expect a small reduction of their workload i they undertake to transfer to nurses some parts of their activities. When physician working time is not excessively lengthy, the overall reduction would be between 0.7% and 3.1%. When doctors have to work harder (when their shortage is acute), paradoxically, the reduction is lower, between 0.5% and 2.3%. The fact is easily understood as the stock of task receivers (the nurses) remains unchanged, but the volume of worked hours becomes larger. Other things being equal, the model shows that French southern physicians may take more profit from a task delegation programme than their counterparts practising in the northern areas of the country. As in the southern areas, the nurse/physician ratio is higher, the potential task receivers are in higher numbers and the volume of the tasks transferred may be much broader than in the northern areas. The paradox is that the workload of northern physicians is heavier, their ratio to population being lower. In 2013, if the acceptance level of nurses and the time each o them devotes to transferred tasks remain unchanged, the physician workload would not be reduced more significantly, even in case of strong growth of the nursing profession. In other words, to obtain a clear-cut success, any task delegation process should be accompanied by a large range of generous inancial rewards aimed at strongly motivating the task receivers to work harder, during a longer time and with enlarged responsibilities. In France, as in most industrialized countries, health expenditures are predominantly financed by public money (taxes and contributions from employees and employers) and their share in the Gross Domestic Product is growing steadily for decades. The weight of the health sector upon the national economy is already extremely heavy. Does wisdom lie in launching action programmes aimed at uncertain returns? No doubt that the issue of task delegation is a painful dilemma to health workforce strategists.

Mainguy, P., Viossat, L. C., Baba, J., et al. (2021). Evaluation de la filière auditive. 2 vol. Paris Igas**:** 2 vol. (99 +288). https://www.igas.gouv.fr/spip.php?article843

> Cette filière de soins prend en charge les déficiences auditives, handicap sensoriel invisible frappant 10% des Français, notamment les plus âgés. Pour le traitement et l'appareillage de ces patients atteints de presbyacousie, elle fait intervenir 2.800 oto-rhino-laryngologistes (ORL) ainsi que les médecins généralistes, et les 4.400 audioprothésistes (professionnels paramédicaux). Elle représente des soins d'une valeur supérieure à 1 milliard d'euros chaque année. Or cette filière est confrontée à de rapides changements, dûs principalement à la réforme des conditions de remboursement, dite du « 100 % Santé », mais aussi aux évolutions technologiques, à la concurrence entre distributeurs d'aides auditives et à la démographie (préoccupante) des ORL. C'est dans ce contexte que les ministres des solidarités et de la

santé et de l'enseignement supérieur, de la recherche et de l'innovation ont sollicité l'Igas et l'IGéSR pour évaluer la mise en œuvre du « 100 % Santé » ainsi que les évolutions, en cours ou souhaitables, des modes d'exercice, des pratiques professionnelles et des formations au sein de la filière. Au terme de plus d'une centaine d'entretiens et de cinq mois d'investigations de terrain dans trois régions, la mission met en évidence des effets quantitatifs importants, mais des effets qualitatifs encore incertains du « 100 % Santé » dans ce domaine. Cette réforme visant à améliorer l'accessibilité financière des soins a agi finalement comme un révélateur des enjeux propres à la filière auditive : faiblesse de la prévention et du dépistage, formalisation limitée des parcours de soins, règles professionnelles éparses…La mission formule 30 recommandations concrètes : pour l'adaptation du « 100 % Santé » en audiologie, pour l'organisation et le fonctionnement de la filière et des parcours de soins, pour la formation des ORL et des audioprothésistes.

Micallef, P. (2021). "Les praticiens hospitaliers : quelles évolutions depuis 2010 ?" Questions Politiques Sociales : Les Breves(5): 4.
https://retraitesolidarite.caissedesdepots.fr/content/questions-politiques-sociales-les-br-ves-5

Le numéro 5 de Questions Politiques Sociales – Les brèves est consacré aux praticiens hospitaliers. Il présente les principales caractéristiques (effectifs par statut, part des femmes, âge moyen, cotisations…) de cette population regroupant 97 400 agents publics en 2019, et les évolutions intervenues depuis 2010.

Michaud, S., Cadet, D., Anquetil, B., et al. (2011). "Coopération entre professionnels : expérimentations et enjeux." Revue Hospitaliere De France(541): 16-32.

[BDSP. Notice produite par EHESP F7kR0xFC. Diffusion soumise à autorisation]. A travers quatre articles, ce dossier revient sur l'historique de la coopération entre professionnels, de la loi d'août 2004 relative à la politique de santé publique à la loi HPST du 21 juillet 2009, explore la notion de nouveaux métiers et de métiers intermédiaires, expose le rôle des agences régionales de santé dans la mise en oeuvre des protocoles de coopération et présente la démarche d'un projet de coopération initié par la communauté hospitalière de territoire CHU de Nancy/CHR Metz-Thionville.

Midy, F., Condinguy, S., Delamaire, M. L., et al. (2004). Analyse de trois professions : sages-femmes, infirmières, manipulateurs d'électroradiologie médicale : rapport 2004. Paris La Documentation française**:** 122 , tab., graph.
http://www.sante.gouv.fr/ondps/rapport2004.htm

L'Observatoire National de la Démographie des Professions de Santé livre au public, avec ce premier rapport 2004, une synthèse générale, ainsi que quatre tomes thématiques sur les professions de santé en France. Chaque tome rend compte des résultats du travail de collaboration accompli tout au long de cette année, au sein du conseil d'orientation et des comités régionaux. Le tome 3 présente une analyse de trois professions : sages-femmes, infirmières et manipulateurs d'électroradiologie médicale. Il fournit un état des lieux qui prend en compte les effectifs et les conditions de travail et d'exercice.

Paul, C. (2006). La délégation de taches en médecine générale : enquête auprès des médecins généralistes installés en groupe en Normandie et Picardie. Rouen Faculté mixte de médecine et de pharmacie de Rouen, Faculté mixte de médecine et de pharmacie de Rouen. Rouen. FRA. **Thèse pour le Doctorat en médecine:** 99.

Motivé par la crise démographique médicale et une réalité comptable, la France s'ouvre peu à peu à la délégation de certaines activités vers d'autres professionnels. Aujourd'hui, les infirmires paraissent les plus à même d'assurer ces nouvelles fonctions, au sein des soins primaires. Les systèmes anglo-saxons nous prouvent qu'elles peuvent s'y investir efficacement dans la promotion de la santé, la surveillance de pathologies chroniques ou les consultations de première ligne. Ce travail permet de connaître l'avis des médecins généralistes français concernant le développement d'un tel système dans leur pratique courante. La délégation s'exerçant à l'étranger au sein de structures pluri-professionnelles, nous avons interrogés les médecins normands et picards exerçant en groupe ou associés à des infirmières. Ceux-ci semblent prêts à déléguer des actions d'éducation à la santé, la gestion des vaccinations, le dépistage de masse des cancers du sein et du côlon, le suivi de pathologies chroniques stabilisées ainsi que la

réception et l'analyse d'appels téléphoniques. Néanmoins, ils semblent plus réticents que leurs homologues anglo-saxons, quant au nombre de consulations qu'ils délègueraient en pratique. Nous ne pouvons répondre à la question de savoir si la qualité des soins et la qualité de vie des patients seront meilleures pour un coût identique voire moindre. Nous pouvons par ailleurs mesurer les évolutions nécessaires au développement d'un tel système, tant au niveau de la formation et du cadre législatif qu'au niveau du financement (résumé d'auteur).

Vallencien (2007). "La concurrence entre les métiers." Seve : Les Tribunes De La Sante(15): 95-96.

La nouvelle médecine impose un réexamen des métiers et sans doute l'émergence de nouvelles professions. Le système de santé tarde à s'y préparer. Cet article aborde des expériences de délégation de soins tentées dans les pays anglo-saxons sans pour autant baisser la qualité des soins.

ÉTUDES INTERNATIONALES

Abrams, R., Wong, G., Mahtani, K. R., et al. (2020). "Delegating home visits in general practice: a realist review on the impact on GP workload and patient care." Br J Gen Pract **70**(695): e412-e420.

BACKGROUND: UK general practice is being shaped by new ways of working. Traditional GP tasks are being delegated to other staff with the intention of reducing GPs' workload and hospital admissions, and improving patients' access to care. One such task is patient-requested home visits. However, it is unclear what impact delegated home visits may have, who might benefit, and under what circumstances. AIM: To explore how the process of delegating home visits works, for whom, and in what contexts. DESIGN AND SETTING: A review of secondary data on home visit delegation processes in UK primary care settings. METHOD: A realist approach was taken to reviewing data, which aims to provide causal explanations through the generation and articulation of contexts, mechanisms, and outcomes. A range of data has been used including news items, grey literature, and academic articles. RESULTS: Data were synthesised from 70 documents. GPs may believe that delegating home visits is a risky option unless they have trust and experience with the wider multidisciplinary team. Internal systems such as technological infrastructure might help or hinder the delegation process. Healthcare professionals carrying out delegated home visits might benefit from being integrated into general practice but may feel that their clinical autonomy is limited by the delegation process. Patients report short-term satisfaction when visited by a healthcare professional other than a GP. The impact this has on long-term health outcomes and cost is less clear. CONCLUSION: The delegation of home visits may require a shift in patient expectation about who undertakes care. Professional expectations may also require a shift, having implications for the balance of staffing between primary and secondary care, and the training of healthcare professionals.

Altschuler, J., Margolius, D., Bodenheimer, T., et al. (2012). "Estimating a reasonable patient panel size for primary care physicians with team-based task delegation." Ann Fam Med **10**(5): 396-400.

PURPOSE Primary care faces the dilemma of excessive patient panel sizes in an environment of a primary care physician shortage. We aimed to estimate primary care panel sizes under different models of task delegation to nonphysician members of the primary care team. METHODS We used published estimates of the time it takes for a primary care physician to provide preventive, chronic, and acute care for a panel of 2,500 patients, and modeled how panel sizes would change if portions of preventive and chronic care services were delegated to nonphysician team members. RESULTS Using 3 assumptions about the degree of task delegation that could be achieved (77%, 60%, and 50% of preventive care, and 47%, 30%, and 25% of chronic care), we estimated that a primary care team could reasonably care for a panel of 1,947, 1,523, or 1,387 patients. CONCLUSIONS If portions of preventive and chronic care services are delegated to nonphysician team members, primary care practices can provide recommended preventive and chronic care with panel sizes that are achievable with the available primary care workforce.

Ania, Marti, Rigal, et al. (2009). "La délégation des tâches en soins primaires : les nouveaux rôles des infirmières en Catalogne." Cahiers De Sociologie Et De Demographie Medicales **49**(2): 227-244.

Un modèle de dispense de soins de premier recours est expérimenté dans un centre de santé catalan. Il implique des rôles plus nombreux et une autonomie plus large pour les infirmières. Celles-ci accueillent les patients venus pour une consultation au centre. Elles ont à leur disposition un Guide des interventions pour les cas urgents. Ces cas sont classés en 3 groupes : ceux qui peuvent être traités et finalisés par l'infirmière selon un protocole préalablement défini ; ceux qui exigent des soins immédiats impliquant une intervention postérieure du médecin et une finalisation en commun ; ceux qui demandent l'intervention immédiate du médecin et si celui-ci n'est pas disponible, une évaluation de la gravité en attendant l'intervention. Sur les 202 patients ayant sollicité une consultation le jour même, on observe les données suivantes : 70% des cas ont été résolus par l'infirmière avec l'aide du Guide ; 14% des cas ont fait l'objet d'une consultation téléphonique avec un médecin du centre ont été résolus ; 16% des cas ont été orientés vers un autre service. Par ailleurs, l'avis du médecin de garde a été sollicité dans 6% des cas ci-dessus. L'usage du Guide se révèle ainsi extrêmement intéressant. Toutefois, dans la durée, l'expérience fait apparaître de besoins de formation supplémentaire en certains domaines spécifiques ainsi que des séances d'échange régulières entre médecins et infirmières. (Résumé d'auteur).

Barker, R. O., Stocker, R., Russell, S., et al. (2021). "Future-proofing the primary care workforce: A qualitative study of home visits by emergency care practitioners in the UK." Eur J Gen Pract **27**(1): 68-76.

BACKGROUND: Broadening the skill-mix in general practice is advocated to build resilience into the primary care workforce. However, there is little understanding of how extended-scope practitioners from different disciplines, such as paramedicine and nursing, embed into roles traditionally ascribed to general practitioners (GPs). OBJECTIVES: This study sought to explore patients' and professionals' experiences of a primary care home visiting service delivered by emergency care practitioners (ECPs), in place of GPs; to determine positive impacts/unintended consequences and establish whether interdisciplinary working was achieved. METHODS: Three practices in England piloted an ECP (extended-scope practitioners with a paramedic or nursing background) home visiting service (November 2018-March 2019). Following the pilot, focus groups were conducted with each of the three primary healthcare teams (14 participants, including eight GPs), and one with ECPs (five participants) and nine individual patient interviews. Data were analysed using a modified framework approach. RESULTS: The impact of ECP home visiting on GP workload and patient care was perceived as positive by patients, GPs and ECPs. Initial preconceptions of GPs and patients about the ECP role and expertise, and reservations about the appropriacy of ECPs for home visiting, were perceived to have been overcome by the expertise and interpersonal skills of ECPs. Fostering a culture of collaboration between ECPs and GPs was instrumental to remodelling professional boundaries at the practice level. CONCLUSION: Broadening the skill-mix to incorporate extended-scope practitioners such as ECPs, to deliver primary care home visiting, presents an opportunity to increase resilience in the general practice workforce.

Bartlett, S., Bullock, A. et Spittle, K. (2021). "'I thought it would be a very clearly defined role and actually it wasn't': a qualitative study of transition training for pharmacists moving into general practice settings in Wales." BMJ Open **11**(10): e051684.

OBJECTIVE: Pharmacists are increasingly contributing to the skill mix of general practice surgeries to help alleviate pressures faced by UK doctors working in primary care. However, they need support in overcoming barriers to their integration. The purpose of this work was to evaluate a programme designed to support pharmacists' transition to working in general practice settings. We explored the learning needs of pharmacists', the barriers and enablers to their integration and provide recommendations based on our results. INTERVENTION: A qualitative evaluation of a 1-year transition programme in Wales starting in September 2018 to support pharmacists' transition to working in general practice settings. DESIGN AND SETTING: We employed an interpretative phenomenological approach involving 10 pharmacists across Wales enrolled on the transition to general practice training programme, and their tutors. Data were collected across two sequential phases: in phase 1 telephone

interviews were held with pharmacists midway through their training; in phase 2, focus groups were conducted with both pharmacists and tutors towards the end of the programme. RESULTS: Pharmacists enter general practice settings with a variety of prior experience. The programme provided a framework that pharmacists found helpful to map their experience to but the programme needed to be flexible to individual learning needs. The tutor role was typically regarded as the most valuable component, but interaction with the wider general practice team was critical to ease the transition. Pharmacists encountered a lack of clarity about their role which impeded their integration into the workplace team. CONCLUSIONS: A formal programme with a designated tutor can support pharmacists' transition into general practice settings. The programme's competency framework facilitated reciprocal understanding of the pharmacist's role in the team, helped to manage expectations and enhanced collaborative practice. Recommendations to facilitate pharmacist integration into general practice settings are provided.

Beyer, A., Rehner, L., Hoffmann, W., et al. (2020). "Task-Sharing Between Pediatricians and Non-Physician Healthcare Professionals in Outpatient Child Health Care in Germany: Assessment of Need and Acceptance for Concept Development." Inquiry **57**: 46958020969299.

Although pediatricians in Germany work as general practitioners for children, they are planned and trained as medical specialists. In consequence, distances between practices and residences of patients can be very large. The implementation of task-sharing models is a promising option to sustain pediatric outpatient care in rural regions. In this study we assessed the need for and acceptance of delegation of tasks in outpatient pediatric healthcare to non-physician healthcare professionals and developed a task-sharing concept. A standardized questionnaire was developed and addressed a wide range of healthcare professionals. On the basis of the results of the questionnaire and a subsequent workshop involving representatives of the various fields of pediatric care a delegation-concept was developed. A total of 206 questionnaires were answered (response rate: 17%). About 70% of the respondents (n = 145) agreed with the delegation of counseling on prevention, 66% (n = 135) with the delegation of tasks in the transition process into adult medicine. All proposed tasks were conceivable for at least a third of the respondents. Mostly, pediatricians could envision delegation more than the non-physician health care professionals. A three-dimension-delegation-concept was developed: which tasks can be delegated to whom in which setting. Basically, if nurses or medical practice assistants are adequately qualified, all tasks can be delegated to both. The delegation was approved by most of the respondents. Implementation of task-sharing provides a new option to support pediatricians and create better access to outpatient pediatric health care in rural regions. The next step should be the implementation of the delegation concept in pilot projects.

Bortz, M., Schübel, J., Pochert, M., et al. (2021). "[Delegation of Home Visits and Qualification of Health Care Assistants in Family Practices in Saxony, Germany - Results of the Cross-Sectional Study SESAM-5]." Gesundheitswesen **83**(2): 95-102.

BACKGROUND: In the context of demographic changes and the shortage of family physicians in the primary care sector in Germany, the delegability of home visits to health care assistants is discussed. There is little information on the extent of home visits delegated. The aim of this article is to examine differences in the socio-demographic and organizational profile of delegating vs. non-delegating family doctors in Saxony and to describe the level of qualification of health care assistants. METHODOLOGY: This cross-sectional study is part of a series of epidemiological studies in the federal state of Saxony, Germany. All family doctors in Saxony were contacted in 2014 (n=2677), of whom 11,2% participated. In a period of 12 months, family practices documented home visits within a randomly assigned week. Socio-demographic characteristics of the family practice and the level of qualification of health care assistants were surveyed. RESULTS: A total of 274 family practices participated; 52,9% of all participating family doctors declared their willingness to delegate home visits, but only 8,5% of home visits were made by health care assistants. There were non-significant trends between the willingness to delegate and self-employment vs. being employed (92,4 vs. 84,6%, p=0,06), establishment in a single vs. shared practice (35,2 vs. 31,4%, p=0,09) and higher patient numbers per 3 months (x̄+= 1183,08 vs. 1092,16, p=0,07). The 224 health care assistants that participated in the study were mostly trained in nursing (39,7%) or as medical assistants (50,8%). The vast majority of the health care

assistants (82,5%) had no further training or additional qualification; 19,6% completed further training that qualified them to have home visits formally delegated to them. CONCLUSION: Among family doctors in Saxony there is a reported high willingness to delegate, which is not implemented sufficiently in practice. Delegation is based on personal confidence in health care assistants without formal qualification. Qualified delegation ensures high standards in patient care and this potential is not used in Saxony, particularly in rural areas with imminent shortages of medical care. More education about the opportunities of qualified delegation seems necessary.

Bourgeault, Y. L. (2007). Who minds the gate? Comparing the role of non physician providers in the primary care division of labour in Canada & the U.S. SEDAP Research Paper ; n°205. Hamilton SEDAP**:** 33 , tabl. http://socserv2.socsci.mcmaster.ca/~sedap/p/sedap205.pdf

Le rôle de premier plan des soins de santé primaires a été la compétence la plus férocement défendue des systèmes de santé, cependant, plus récemment, cette pratique médicale a graduellement perdu en popularité. Ceci a permis d'ouvrir le marché à une variété de fournisseurs de « remplacement ». Dans cette étude, nous présentons de données comparatives documentaires et d'entretiens provenant du Canada et des États-Unis sur les changements et la composition de la division du travail dans le secteur des soins de santé primaires. Notre analyse démontre: 1) que le recours à des fournisseurs de soins de santé de remplacement est plus répandu aux Etats-Unis comme le démontre l'existence d'un plus grand nombre et d'une plus grande variété de fournisseurs de soins de santé primaires 2) il existe également aux Etats-Unis une plus forte propension vers la spécialisation des fournisseurs de soins de santé y compris parmi les fournisseurs de remplacement de soins de santé primaires; et 3) dans les deux pays, les fournisseurs de remplacement résistent à cette étiquette se concentrant plutôt sur leur propre modèle d'opération ou leur positionnement dans le secteur des soins de santé primaires.(résumé d'auteur).

Bridges, J., Lucas, G., Wiseman, T., et al. (2017). "Workforce characteristics and interventions associated with high-quality care and support to older people with cancer: a systematic review." BMJ Open **7**(7): e016127.

OBJECTIVES: To provide an overview of the evidence base on the effectiveness of workforce interventions for improving the outcomes for older people with cancer, as well as analysing key features of the workforce associated with those improvements. DESIGN: Systematic review. METHODS: Relevant databases were searched for primary research, published in English, reporting on older people and cancer and the outcomes of interventions to improve workforce knowledge, attitudes or skills; involving a change in workforce composition and/or skill mix; and/or requiring significant workforce reconfiguration or new roles. Studies were also sought on associations between the composition and characteristics of the cancer care workforce and older people's outcomes. A narrative synthesis was conducted and supported by tabulation of key study data. RESULTS: Studies (n=24) included 4555 patients aged 60+ from targeted cancer screening to end of life care. Interventions were diverse and two-thirds of the studies were assessed as low quality. Only two studies directly targeted workforce knowledge and skills and only two studies addressed the nature of workforce features related to improved outcomes. Interventions focused on discrete groups of older people with specific needs offering guidance or psychological support were more effective than those broadly targeting survival outcomes. Advanced Practice Nursing roles, voluntary support roles and the involvement of geriatric teams provided some evidence of effectiveness. CONCLUSIONS: An array of workforce interventions focus on improving outcomes for older people with cancer but these are diverse and thinly spread across the cancer journey. Higher quality and larger scale research that focuses on workforce features is now needed to guide developments in this field, and review findings indicate that interventions targeted at specific subgroups of older people with complex needs, and that involve input from advanced practice nurses, geriatric teams and trained volunteers appear most promising.

Brown, J. B., Lewis, L., Ellis, K., et al. (2009). "Mechanisms for communicating within primary health care teams." Can Fam Physician **55**(12): 1216-1222.

OBJECTIVE: To explore the types of communication used within primary health care teams (PHCTs), with a particular focus on the mechanisms teams use to promote optimal clinical and administrative information sharing. DESIGN: A descriptive qualitative study. SETTING: Primary health care teams in Ontario between August 2004 and October 2005. PARTICIPANTS: Purposive sampling was used to recruit 121 members from 16 PHCTs reflecting a range of health care professionals, including family physicians, nurse practitioners, nurses, pharmacists, dietitians, social workers, office managers, health promoters, and receptionists. METHODS: Individual in-depth interviews were conducted. An iterative analysis process was used to examine the verbatim transcripts created from the interviews. Techniques of immersion and crystallization were used in the analysis. MAIN FINDINGS: Analysis of the data revealed that communication occurs through formal and informal means. Formal communication included regular team meetings with agendas and meeting minutes, memorandums, computer-assisted communication, and communication logs. Informal communication methods were open and opportunistic, reflecting the traditional hallway consultation. For patient care issues, face-to-face communication was preferred. Team member attributes facilitating communication included approachability, availability, and proximity. Finally, funding issues could be an impediment to optimal communication. CONCLUSION: Primary health care is experiencing demands for enhanced and efficient communication that optimizes team functioning and patient care. This study describes formal and informal mechanisms of communication currently used by PHCTs. Attributes that facilitate team communication, such as approachability, availability, and proximity of team members, were highlighted. New funding arrangements might alleviate concerns about remuneration for attendance at meetings.

Buchan, J. et Calman, L. (2004). Skill-mix and policy change in the health workforce : nurses in advanced roles. OECD Health Working Papers ; 17. Paris OCDE**:** 58 , tab.
http://www.oecd.org/dataoecd/30/28/33857785.pdf

Ce rapport a été établi à la demande de l'OCDE afin d'examiner les données disponibles sur l'évolution des rôles et la délégation d'actes par les médecins aux infirmières en pratique avancée - infirmières praticiennes et autres infirmières exerçant à un niveau avancé en milieu hospitalier et dans les centres de santé primaires. Le rapport se divise en trois parties : une analyse des travaux antérieures, une évaluation des réponses des pays à l'enquête de l'OCDE et deux études de cas plus détaillées concernant l'Angleterre et les Etats-Unis/

Buchan, J. et Dal Poz, M. R. (2002). "Skill mix in the health care workforce: reviewing the evidence." Bull World Health Organ **80**(7): 575-580.

This paper discusses the reasons for skill mix among health workers being important for health systems. It examines the evidence base (identifying its limitations), summarizes the main findings from a literature review, and highlights the evidence on skill mix that is available to inform health system managers, health professionals, health policy-makers and other stakeholders. Many published studies are merely descriptive accounts or have methodological weaknesses. With few exceptions, the published analytical studies were undertaken in the USA, and the findings may not be relevant to other health systems. The results from even the most rigorous of studies cannot necessarily be applied to a different setting. This reflects the basis on which skill mix should be examined--identifying the care needs of a specific patient population and using these to determine the required skills of staff. It is therefore not possible to prescribe in detail a "universal" ideal mix of health personnel. With these limitations in mind, the paper examines two main areas in which investigating current evidence can make a significant contribution to a better understanding of skill mix. For the mix of nursing staff, the evidence suggests that increased use of less qualified staff will not be effective in all situations, although in some cases increased use of care assistants has led to greater organizational effectiveness. Evidence on the doctor-nurse overlap indicates that there is unrealized scope in many systems for extending the use of nursing staff. The effectiveness of different skill mixes across other groups of health workers and professions, and the associated issue of developing new roles remain relatively unexplored.

Buff, A. et Paccaud, m. (2006). Transferts de compétences entre professionnels de santé : état des connaissances théoriques et exemples d'expérimentations. Lausanne : Faculté des Hautes Etudes Commerciales. Institut d'Economie et de Management de la Santé.

Ce mémoire s'intéresse au transfert ou la délégation de certaines tâches d'une catégorie de professionnel de santé vers une autre catégorie. Il s'agit d'une part d'élaborer un état des lieux des connaissances théoriques existantes concernant la délégation/substitution de tâches entre professions de la santé, et de ses enjeux. D'autre part, il sera examiné, de manière non exhaustive, des exemples d'expérimentations de transferts de compétences réalisées sur le terrain.

Chong, W. W., Aslani, P. et Chen, T. F. (2013). "Shared decision-making and interprofessional collaboration in mental healthcare: a qualitative study exploring perceptions of barriers and facilitators." J Interprof Care **27**(5): 373-379.

Shared decision-making and interprofessional collaboration are important approaches to achieving consumer-centered care. The concept of shared decision-making has been expanded recently to include the interprofessional healthcare team. This study explored healthcare providers' perceptions of barriers and facilitators to both shared decision-making and interprofessional collaboration in mental healthcare. Semi-structured interviews were conducted with 31 healthcare providers, including medical practitioners (psychiatrists, general practitioners), pharmacists, nurses, occupational therapists, psychologists and social workers. Healthcare providers identified several factors as barriers to, and facilitators of shared decision-making that could be categorized into three major themes: factors associated with mental health consumers, factors associated with healthcare providers and factors associated with healthcare service delivery. Consumers' lack of competence to participate was frequently perceived by mental health specialty providers to be a primary barrier to shared decision-making, while information provision on illness and treatment to consumers was cited by healthcare providers from all professions to be an important facilitator of shared decision-making. Whilst healthcare providers perceived interprofessional collaboration to be influenced by healthcare provider, environmental and systemic factors, emphasis of the factors differed among healthcare providers. To facilitate interprofessional collaboration, mental health specialty providers emphasized the importance of improving mental health expertise among general practitioners and community pharmacists, whereas general health providers were of the opinion that information sharing between providers and healthcare settings was the key. The findings of this study suggest that changes may be necessary at several levels (i.e. consumer, provider and environment) to implement effective shared decision-making and interprofessional collaboration in mental healthcare.

Cnamts (2001). Rapport sur quatre professions paramédicales : infirmières, kinésithérapeutes, orthophonistes, orthoptistes dans les pays de l'Union Européenne et aux Etats-Unis. Paris Cnamts**:** 162 , ann.

Le présent rapport résulte d'une demande de la direction générale de la Cnamts, en date de février 2000. Elle concernait, à l'origine, l'ensemble des professions médicales en Europe. En raison de contrainte de temps, la Mission Recherche Internationale a limité l'étude à quatre principales professions paramédicales : infirmières, masseurs-kinésithérapeutes, orthophonistes, orthoptistes. Après une première partie terminologique, l'analyse porte sur l'organisation des soins et la pratique médicale par types de professions, et par pays. Certains pays n'ont pas pu être étudiés et certaines questions traitées pour l'instant. Les informations manquantes seront fournies ultérieurement.

Costa, D. K., Barg, F. K., Asch, D. A., et al. (2014). "Facilitators of an interprofessional approach to care in medical and mixed medical/surgical ICUs: a multicenter qualitative study." Res Nurs Health **37**(4): 326-335.

The purpose of this study was to describe clinicians' perceptions of interprofessional collaboration in the intensive care unit and identify factors associated with interprofessional collaboration. We performed 64 semi-structured interviews in seven hospitals with ICU nurses, physicians, respiratory therapists, nurse managers, clinical pharmacists, and dieticians. ICU clinicians perceived two distinct types of facilitators to interprofessional collaboration in critical care: cultural and structural. In the critical care setting, cultural and structural facilitators worked independently as well as in concert to

create effective interprofessional collaboration. Initiatives aimed at creating and facilitating interprofessional collaboration should focus attention on cultural and structural facilitators to improve patient care and team effectiveness.

de Bont, A., van Exel, J., Coretti, S., et al. (2016). "Reconfiguring health workforce: a case-based comparative study explaining the increasingly diverse professional roles in Europe." BMC Health Serv Res **16**(1): 637.

BACKGROUND: Over the past decade the healthcare workforce has diversified in several directions with formalised roles for health care assistants, specialised roles for nurses and technicians, advanced roles for physician associates and nurse practitioners and new professions for new services, such as case managers. Hence the composition of health care teams has become increasingly diverse. The exact extent of this diversity is unknown across the different countries of Europe, as are the drivers of this change. The research questions guiding this study were: What extended professional roles are emerging on health care teams? How are extended professional roles created? What main drivers explain the observed differences, if any, in extended roles in and between countries? METHODS: We performed a case-based comparison of the extended roles in care pathways for breast cancer, heart disease and type 2 diabetes. We conducted 16 case studies in eight European countries, including in total 160 interviews with physicians, nurses and other health care professionals in new roles and 600+ hours of observation in health care clinics. RESULTS: The results show a relatively diverse composition of roles in the three care pathways. We identified specialised roles for physicians, extended roles for nurses and technicians, and independent roles for advanced nurse practitioners and physician associates. The development of extended roles depends upon the willingness of physicians to delegate tasks, developments in medical technology and service (re)design. Academic training and setting a formal scope of practice for new roles have less impact upon the development of new roles. While specialised roles focus particularly on a well-specified technical or clinical domain, the generic roles concentrate on organising and integrating care and cure. CONCLUSION: There are considerable differences in the number and kind of extended roles between both countries and care pathways. The main drivers for new roles reside in the technological development of medical treatment and the need for more generic competencies. Extended roles develop in two directions: 1) specialised roles and 2) generic roles.

Denton, M., Brookman, C., Zeytinoglu, I., et al. (2015). "Task shifting in the provision of home and social care in Ontario, Canada: implications for quality of care." Health Soc Care Community **23**(5): 485-492.

Growing healthcare costs have caused home-care providers to look for more efficient use of healthcare resources. Task shifting is suggested as a strategy to reduce the costs of delivering home-care services. Task shifting refers to the delegation or transfer of tasks from regulated healthcare professionals to home-care workers (HCWs). The purpose of this paper is to explore the impacts of task shifting on the quality of care provided to older adults from the perspectives of home healthcare workers. This qualitative study was completed in collaboration with a large home and community care organisation in Ontario, Canada, in 2010-2011. Using a purposive sampling strategy, semi-structured telephone interviews were conducted with 46 home healthcare workers including HCWs, home-care worker supervisors, nurses and therapists. Study participants reported that the most common skills transferred or delegated to HCWs were transfers, simple wound care, exercises, catheterisation, colostomies, compression stockings, G-tube feeding and continence care. A thematic analysis of the data revealed mixed opinions on the impacts of task shifting on the quality of care. HCWs and their supervisors, more often than nurses and therapists, felt that task shifting improved the quality of care through the provision of more consistent care; the development of trust-based relationships with clients; and because task shifting reduced the number of care providers entering the client's home. Nurses followed by therapists, as well as some supervisors and HCWs, expressed concerns that task shifting might compromise the quality of care because HCWs lacked the knowledge, training and education necessary for more complex tasks, and that scheduling problems might leave clients with inconsistent care once tasks are delegated or transferred. Policy implications for regulating bodies, employers, unions and educators are discussed.

Dierick-van Daele, A. T., Steuten, L. M., Romeijn, A., et al. (2011). "Is it economically viable to employ the nurse practitioner in general practice?" J Clin Nurs **20**(3-4): 518-529.

AIMS: This article provides insight into the potential economic viability of nurse practitioner employment in Dutch general practices. BACKGROUND: General practitioners face the challenging task of finding the most efficient and effective mix of professionals in general practice to accommodate future care demands within scarce health care budgets. To enable informed decision-making about skill mix issues, economic information is needed. DESIGN: Discursive paper. METHOD: A descriptive and explorative design was chosen to study the economic viability of nurse practitioner employment in general practice. The conditions under which the nurse practitioner is able to earn back his/her own cost of employment were identified. Preferences and expectations of general practitioners and health insurers about nurse practitioner reimbursement were made transparent. RESULTS: Although general practitioners and health insurers acknowledge the importance of the nurse practitioner in accommodating primary care demands, they have polarised views about reimbursement. The employment of nurse practitioners is seldom economically viable in current practices. It requires a reallocation of (80% of) the general practitioner's freed up time towards practice growth (12% number of patients). CONCLUSION: The economic viability of the nurse practitioner has proven difficult to achieve in every day health care practice. This study provided insight into the complex interaction of the (cost) parameters that result in economic viability and feeds a further discussion about the content of the nurse practitioner role in general practice based on optimal quality of care vs. efficiency. RELEVANCE TO CLINICAL PRACTICE: Effective and efficient health care can only be provided if the actual care needs of a population provide the basis for deciding which mix of professionals is best equipped to deal with the changing and increasing demand of care. A macro-level intervention is needed to help a broad-scale introduction of the nurse practitioner in general practice.

Dini, L., Koppelow, M., Reuß, F., et al. (2021). "[The Delegation Agreement and its Implementation Inside and Outside the GP Office from the Perspective of Practice Owners]." Gesundheitswesen **83**(7): 523-530.

BACKGROUND: In many regions in Germany, demographic changes are affecting general practitioners (GPs). The 2017 "Delegation Agreement" (D-A) rolled out the 2015 reform and was introduced initially only for regions with GP shortages, allowing delegation to non-medical practice personnel for all regions in Germany. OBJECTIVES: This article explores GPs' knowledge regarding current regulations and the task-based delegation inside and outside their office. MATERIALS AND METHODS: We conducted a quantitative anonymous postal questionnaire survey of a randomized sample of 30% of GPs working in Nord Rhine-Westphalia. The response rate was 32%. Outcomes included attitude towards delegation, self-perceived level of information about the D-A and task-based attitude towards delegation (is being delegated/is not delegable) for 34 medical tasks. RESULTS: Over two-thirds of GPs had a positive attitude towards delegation, but only 24% reported having a good/very good level of Information regarding the D-A. "Diagnostic tasks" were most frequently delegated. Agreement on what can be delegated in the areas of "general tasks" and "counselling/education" showed significant differences based on level of information. Both well-informed and poorly informed GPs delegated in equal measure "therapeutic tasks". Two distinct groups of "diagnostic tasks" were distinguished based on GPs' information level. CONCLUSIONS: The list of tasks being currently delegated to PAs in the fields of "diagnostics", "organization/administration" and "general tasks" shows further potential for expansion. This could be supported by improved information communicated to GPs about the health policy reform introduced by the D-A.

Doan (2002). "Les ressources humaines du système de santé : situation et évolution dans les pays industrialisés." Cahiers De Sociologie Et De Demographie Medicales **42**(2-3): 283-323, tabl., stat., fig.

L'objectif de cette étude est de présenter un clair panorama de la situation et des tendances évolutives du potentiel humain du système de santé dans le monde industriel. Il n'échappe à personne qu'aujourd'hui, les professions de santé offrent le spectacle d'une extrême diversité, même si l'on se cantonne aux seuls pays industrialisés. Le panorama que présente ce rapport va donc à l'essentiel, met en relief ce qui est important et ne s'encombre pas de détails importants. L'objectif ultime est d'aider à comprendre le phénomènes et à élaborer des mesures d'action qui soient pertinentes, c'est à dire

bénéfique pour l'efficacité de toute l'organisation des soins. L'axe principal est la comparaison de la situation de l'Espagne à celle des autres pays industrialisés. Les données proviennent des publications de l'OCDE, complétées par d'autres sources. (extrait du texte).

Freidson et Herzlich (1984). La profession médicale, Payot, Paris

La maladie, la médecine font l'objet d'investigation sociologique, l'auteur pose toutes les questions du fonctionnement social de la médecine. L'intérêt de ce livre est d'amener à une nouvelle compréhension de la maladie. La maladie et la santé sont des catégories sociales construites par le savoir et la pratique du médecin. L'ouvrage éclaire aussi la notion de "profession", c'est à dire une nouvelle façon de penser division du travail et l'organisation de la société. Chez l'auteur, la notion de profession s'applique au champ de la santé.

Freund, T., Everett, C., Griffiths, P., et al. (2015). "Skill mix, roles and remuneration in the primary care workforce: who are the healthcare professionals in the primary care teams across the world?" Int J Nurs Stud **52**(3): 727-743.

World-wide, shortages of primary care physicians and an increased demand for services have provided the impetus for delivering team-based primary care. The diversity of the primary care workforce is increasing to include a wider range of health professionals such as nurse practitioners, registered nurses and other clinical staff members. Although this development is observed internationally, skill mix in the primary care team and the speed of progress to deliver team-based care differs across countries. This work aims to provide an overview of education, tasks and remuneration of nurses and other primary care team members in six OECD countries. Based on a framework of team organization across the care continuum, six national experts compare skill-mix, education and training, tasks and remuneration of health professionals within primary care teams in the United States, Canada, Australia, England, Germany and the Netherlands. Nurses are the main non-physician health professional working along with doctors in most countries although types and roles in primary care vary considerably between countries. However, the number of allied health professionals and support workers, such as medical assistants, working in primary care is increasing. Shifting from 'task delegation' to 'team care' is a global trend but limited by traditional role concepts, legal frameworks and reimbursement schemes. In general, remuneration follows the complexity of medical tasks taken over by each profession. Clear definitions of each team-member's role may facilitate optimally shared responsibility for patient care within primary care teams. Skill mix changes in primary care may help to maintain access to primary care and quality of care delivery. Learning from experiences in other countries may inspire policy makers and researchers to work on efficient and effective teams care models worldwide.

Fulton, B. D., Scheffler, R. M., Sparkes, S. P., et al. (2011). "Health workforce skill mix and task shifting in low income countries: a review of recent evidence." Hum Resour Health **9**: 1.

BACKGROUND: Health workforce needs-based shortages and skill mix imbalances are significant health workforce challenges. Task shifting, defined as delegating tasks to existing or new cadres with either less training or narrowly tailored training, is a potential strategy to address these challenges. This study uses an economics perspective to review the skill mix literature to determine its strength of the evidence, identify gaps in the evidence, and to propose a research agenda. METHODS: Studies primarily from low-income countries published between 2006 and September 2010 were found using Google Scholar and PubMed. Keywords included terms such as skill mix, task shifting, assistant medical officer, assistant clinical officer, assistant nurse, assistant pharmacist, and community health worker. Thirty-one studies were selected to analyze, based on the strength of evidence. RESULTS: First, the studies provide substantial evidence that task shifting is an important policy option to help alleviate workforce shortages and skill mix imbalances. For example, in Mozambique, surgically trained assistant medical officers, who were the key providers in district hospitals, produced similar patient outcomes at a significantly lower cost as compared to physician obstetricians and gynaecologists. Second, although task shifting is promising, it can present its own challenges. For example, a study analyzing task shifting in HIV/AIDS in sub-Saharan Africa noted quality and safety concerns,

professional and institutional resistance, and the need to sustain motivation and performance. Third, most task shifting studies compare the results of the new cadre with the traditional cadre. Studies also need to compare the new cadre's results to the results from the care that would have been provided--if any care at all--had task shifting not occurred. CONCLUSIONS: Task shifting is a promising policy option to increase the productive efficiency of the delivery of health care services, increasing the number of services provided at a given quality and cost. Future studies should examine the development of new professional cadres that evolve with technology and country-specific labour markets. To strengthen the evidence, skill mix changes need to be evaluated with a rigorous research design to estimate the effect on patient health outcomes, quality of care, and costs.

Gafni, A., Birch, S. et Buckley, G. (2011). Economic Analysis of Physician Assistants in Ontario: Literature Review and Feasibility Study. Chepa working paper series ; 11-03. Hamilton McMaster University**:** 20+ , xxii tabl., fig. http://www.chepa.org/Libraries/PDFs/CHEPA_WP_11-03.sflb.ashx

This paper consists in a literature review of studies on Physician Assistants working in a variety of settings and found few evaluation studies on the costs and/or effectiveness of Physician Assistants in primary care practices, Emergency Departments and in hospital settings other than Emergency Departments. The existing literature is limited because of the non-Canadian settings in which most studies have been performed and because of the non-experimental study designs, which are subject to potential bias. In addition, the research questions that have been addressed have tended to ignore what would appear to be the most important comparison: that between Physician Assistants and other non-physician providers such as Nurse Practitioners. The evidence we found on the cost-effectiveness of PAs is anecdotal and difficult to translate in the Ontario context. We conclude that it is difficult to make use of the existing literature. We recommend that MOHLTC consider options for funding a randomized control trial that might involve several trial arms in the particular sectors of relevance to the PA program, for example: physician only; physician and PA; physician and NP; and physician, NP and PA. The purpose of this would be to explore the difference in costs and effects on the different service modalities. This would also provide sufficient information to support modelling the short-run effects that could be expected from allocating the same amount of resources to the different service modalities as well as the implications for physician resources planning.

GAO (2019). Health care workforce: Views on Expanding Medicare Graduate Medical Education Funding to Nurse Practitioners and Physician Assistants. Washington GAO**:** 32.
https://www.gao.gov/products/GAO-20-162

Studies point to a physician shortage in the U.S., making it harder for people to get needed health care. Training more nurse practitioners and physician assistants could help people get care. Most federal funding to educate health care providers funds physician residencies through Medicare's graduate medical education program. Could that program be expanded to include nurse practitioners and physician assistants? According to stakeholders, there could be benefits and challenges. For example, the program would provide reliable funding from year to year. But stakeholders were also concerned about diverting resources from physician residencies.

Glazier, R. H., Hutchinson, B. et Kopp, A. (2015). Comparison of Family Health Teams to Other Ontario Primary Care Models, 2004/05 to 2011/12. Toronto ICES**:** vii-37 , tabl.
http://www.ices.on.ca/~/media/Files/Atlases-Reports/2015/Comparison-of-Family-Health-Teams/ICES-083-Ontario-Primary-Care-Model-Report_mk06B_CC.ashx

This report compares outcomes of Family Health Team patients in relation to other major models of primary care in Ontario over time. Very few longitudinal analyses are available that compare Ontario's primary care models with each other, so this report serves to fill that knowledge gap.

Goldman, J., Meuser, J., Rogers, J., et al. (2010). "Interprofessional collaboration in family health teams: An Ontario-based study." Can Fam Physician **56**(10): e368-374.

OBJECTIVE: To examine family health team (FHT) members' perspectives and experiences of interprofessional collaboration and perceived benefits. DESIGN: Qualitative case study using semistructured interviews. SETTING: Fourteen FHTs in urban and rural Ontario. PARTICIPANTS: Purposeful sample of the members of 14 FHTs, including family physicians, nurse practitioners, nurses, dietitians, social workers, pharmacists, and managers. METHODS: A multiple case-study approach involving 14 FHTs was employed. Thirty-two semistructured interviews were conducted and data were analyzed by employing an inductive thematic approach. A member-checking technique was also undertaken to enhance the validity of the findings. MAIN FINDINGS: Five main themes are reported: rethinking traditional roles and scopes of practice, management and leadership, time and space, interprofessional initiatives, and early perceptions of collaborative care. CONCLUSION: This study shows the importance of issues such as roles and scopes of practice, leadership, and space to effective team-based primary care, and provides a framework for understanding different types of interprofessional interventions used to support interprofessional collaboration.

Gibson, J., Spooner, S. et Sutton, M. (2020). "Determinants of primary care workforce variation in England." Br J Gen Pract **70**(suppl 1).

BACKGROUND: The General Practice Forward View (GPFV) outlined how the government plans to attain a strengthened model of general practice. A key component of this proposal is an expansion of the workforce by employing a varied range of practitioners, in other words 'skill mix'. A significant proportion of this investment focuses on increasing the number of 'new' roles such as clinical pharmacists, physiotherapists, physician associates, and paramedics. AIM: The aim of this study is to examine what practice characteristics are associated with the current employment of these 'new' roles. METHOD: The study uses practice level workforce data (2015-2019), publicly available from NHS Digital. The authors model FTE of specific workforce groups (for example, advanced nurse) as a function of deprivation, practice rurality, patient demographics (total list size and percentage of patients aged >65 years) and FTEs from other staff groups. RESULTS: Although analysis is ongoing, initial estimation suggests that the employment of 'new' roles has occurred in larger practices (in terms of list size), in practices with a higher proportion of patients living in deprived areas and practices with a larger proportion of patients aged >65 years. FTE for advanced nurses is negatively associated with GP FTE. CONCLUSION: A negative correlation between advanced nurse FTE and GP FTE is potentially suggestive of substitution between roles, deliberate or otherwise. For example, practices may employ 'new' roles if they are unable to recruit GPs or they may recruit staff to free up GP time. Further work is needed to confirm these findings and to explore the reasons behind practice employment decisions.

Gibson, J., Spooner, S., Sutton, M., et al. (2020). "Motivating factors behind skill mix change: results from a practice managers' survey in England." Br J Gen Pract **70**(suppl 1).

BACKGROUND: The expansion of the primary care workforce by employing a varied range of practitioners ('skill mix') is a key component of the General Practice Forward View (GPFV). The extent of skill mix change and where that has occurred has been examined using publicly available practice level workforce data. However, such data does not provide information regarding specific motivating factors behind employment decisions for individual practices nor future workforce plans. AIM: To identify key motivating factors behind practice workforce decisions and their future workforce plans. METHOD: An online questionnaire was sent to practice managers in England. Data collection is ongoing; however, 1000 practices have responded to the survey so far. The questionnaire was composed of questions related to current workforce, motivating factors behind employment decisions, planned future workforce changes, financial assistance with employing staff (for example, HEE or CCG funding) and ideal workforce. RESULTS: Early results indicate that practices that have employed physician associates have done so to increase appointment availability (78% of practices) and release GP time (68%). Sixty-six per cent of practices who have employed pharmacists have received some form of financial assistance with 21% of practices still receiving assistance. When asked to construct an ideal workforce, 'new' roles accounted for 20% of that workforce on average, which is a significantly larger proportion than those roles currently account for. CONCLUSION: Although data collection and analysis are ongoing, the results of the survey provide novel insights into the underlying

motivating factors behind employment decisions, specifically for new roles such as pharmacists, PAs and paramedics.

Gisbert Miralles, J., Heintze, C. et Dini, L. (2020). "[Delegation modalities for general practitioners in North Rhine-Westphalia: Results of a survey among general practitioners on the assignment of defined tasks to EVA, VERAH and VERAH Plus]." Z Evid Fortbild Qual Gesundhwes **156-157**: 50-58.

BACKGROUND: The delegation of traditional GP tasks to qualified medical assistants (MFA) includes several modalities based on extended qualification curricula known as "Nicht-ärztliche Praxisassistentin" (NäPa) [non-physician practice assistant], also known as the "Entlastende Versorgungsassistentin" (EVA) and the "Versorgungsassistentin in der Hausarztpraxis" (VERAH and VERAH Plus) [professional healthcare assistants in the family practice]. Delegation to MFA has gained importance in recent years due to an increasing workload of general practitioners in Germany. OBJECTIVES: This article examines the characteristics of general practitioners (GPs) currently delegating activities to MFAs with and without extended qualification based on the three mentioned modalities (EVA, VERAH and VERAH Plus). In addition, we explore whether the delegated activities are delivered in the office, at the patient's home or in the nursing home and how GPs perceived the potential of future delegation. MATERIALS AND METHODS: Between April and August 2016, we conducted an anonymous postal survey of a representative randomized sample of general practitioners in North Rhine-Westphalia (n = 2,404). The questionnaire contained questions about practice staff, setting for delivery of the delegated activity as well as the perceived added values of and barriers to delegation. We compare characteristics of GPs delegating to MFA with extended qualification to those delegating to standard qualified MFA. RESULTS: The response rate was 32 % (n = 762). Almost one third of the respondents (n = 239) delegated tasks to MFAs with extended qualification. These GPs are more likely to be younger and male and less likely to be working alone in individual practice. They delegate more activities to be delivered in all settings than GPs employing MFAs without extended qualification. DISCUSSION AND CONCLUSIONS: GPs benefit from delegating to MFA with extended qualification as shown by the associated added values and setting of deployment for delivery of tasks. Delegation to non-medical staff should be considered by more GPs as a means of supporting healthcare delivery. In addition to legal changes, further procedures are needed to encourage GPs to get more actively involved with the issue of delegation and consider to further develop the competence of their staff and deploy them accordingly.

Groenewegen, P. P., Boerma, W. G. W., Spreeuwenberg, P., et al. (2021). "Task shifting from general practitioners to practice assistants and nurses in primary care: a cross-sectional survey in 34 countries." Prim Health Care Res Dev **22**: e66.

AIM: To describe variation in task shifting from general practitioners (GPs) to practice assistants/nurses in 34 countries, and to explain differences by analysing associations with characteristics of the GPs, their practices and features of the health care systems. BACKGROUND: Redistribution of tasks and responsibilities in primary care are driven by changes in demand for care, such as the growing number of patients with chronic conditions, and workforce developments, including staff shortage. The need to manage an expanding range of services has led to adaptations in the skill mix of primary care teams. However, these developments are hampered by barriers between professional domains, which can be rigid as a result of strict regulation, traditional attitudes and lack of trust. METHODS: Data were collected between 2011 and 2013 through a cross-sectional survey among approximately 7200 GPs in 34 countries. The dependent variable 'task shifting' is measured through a composite score of GPs' self-reported shifting of tasks. Independent variables at GP and practice level are: innovativeness; part-time working; availability of staff; location and population of the practice. Country-level independent variables are: institutional development of primary care; demand for and supply of care; nurse prescribing as an indicator for professional boundaries; professionalisation of practice assistants/nurses (indicated by professional training, professional associations and journals). Multilevel analysis is used to account for the clustering of GPs in countries. FINDINGS: Countries vary in the degree of task shifting by GPs. Regarding GP and practice characteristics, use of electronic health record applications (as an indicator for innovativeness) and age of the GPs are significantly related to task shifting. These variables explain only little variance at

the level of GPs. Two country variables are positively related to task shifting: nurse prescribing and professionalisation of primary care nursing. Professionalisation has the strongest relationship, explaining 21% of the country variation.

Jaccard Ruedin, H., Seematter-Bagnoud, L., Roth, M., et al. (2009). "[Family practitioners in Switzerland by 2030: which roles for medical task delegation?]." Cah Sociol Demogr Med **49**(2): 205-225.

Due to population aging, by 2030 Switzerland may face a demand of 24 million family practitioner visits, a growth of 13 percent from the 2005 level. This result is based on the assumption that the per capita demand for doctor visits remains what was observed in 2005 by age groups and sex. During the same period, the total number of practitioners may decrease by 14 percent whereas the female proportion of such practitioners may double. These changes may cause a 33 percent decrease in the supply of physician visits to reach only 14 millions. The comparison of the demand and supply of family doctor visits reveals that by 2030, 10 million visits may be unmet which represents 40 percent of the demand. On the supply side, a full scale implementation of task delegation may partially reduce that gap (minus 2 millions). On the demand side, improved health status may bring in a larger decrease in the needs for visits (minus 4 million).

Jenkins-Clarke, S., Carr-Hill, R., Dixon, P., et al. (1997). "Skill mix in primary care : a study of the interface between the general practitioner and other members of the primary health care team : executive summary." Occasional Paper(28): 15 , 11 graph.

Ce document résume un projet du Départment de la Santé britannique réalisé en 1994-1996 qui étudiait les relations entre médecins généralistes et les autres acteurs qui prodiguent des soins primaires. Il fait suite au rapport de décembre 1992 du « Medical Manpower Standing Advisory Committee » : « Planning the medical workforce ». Les objectifs étaient d'étudier les activités et les relations ente les acteurs fournissant des soins primaires, d'évaluer les tâches effectuées par le médecin et qui seraient réalisables par d'autres personnes, d'étudier les attitudes de chacun vis-à-vis des autres membres, d'évaluer l'intérêt de ces organisations pour le patient, puis leur coût-efficacité. Le rapport final a été publié en septembre 1997.

Josi, R. et De Pietro, C. (2019). "Skill mix in Swiss primary care group practices - a nationwide online survey." BMC Fam Pract **20**(1): 39.

BACKGROUND: Increasing chronic conditions and multimorbidity is placing growing service pressures on health care, especially primary care services. This comes at a time when GP workforce shortages are starting to be felt across Switzerland, placing a threat on the sustainability of good access to primary care. By establishing multiprofessional teams in primary care, service capacity is increased and the pressures on the GP workforce can be alleviated. The roles of non-medical health professions in primary care are not established so far in Switzerland and the personnel composition of primary care group practices is not known. Therefore this study aims to provide insights into the current composition, educational background and autonomy of the these new professional roles in primary care. METHODS: For this descriptive exploratory study a web-based online survey methodology was used. Group practices were defined as being a medical practice with any specialisation where at least three physicians work together in a team. Based on this restriction 240 eligible group practices were identified in Switzerland. The following four tertiary-level health professions were included in the study: nurses, physiotherapists, occupational therapists and dietitians. Additionally medical practice assistants with couselling competencies were included. RESULTS: A total of 102 practices answered the questionnaire which is equivalent to an answer rate of 43%. The sample included data from 17 cantons. 46.1% of the practices employed non-physician health professionals. Among the tertiary-level health professions, physiotherapists were the most frequent profession with a total of 78 physiotherapists over all group practices, followed by nurses (43), dietitians (34) and occupational therapists (3). In practices which employ those professionals their average number per practice was 3.4. 25.5% of the practices had health professionals employed with advanced roles and competencies. CONCLUSION: The results from this study demonstrate that while nearly 50% of groups practices have established non-physician professionals, only 25% of practices integrate these professionals with

advanced roles. Compared with other countries, there would appear to be significant scope to extent and broaden the uptake of non-physician professionals in primary care in Switzerland. Clear policy direction along with supporting regulation and financing arrangements are required.

Karam, M., Brault, I., Van Durme, T., et al. (2018). "Comparing interprofessional and interorganizational collaboration in healthcare: A systematic review of the qualitative research." Int J Nurs Stud **79**: 70-83.

BACKGROUND: Interprofessional and interorganizational collaboration have become important components of a well-functioning healthcare system, all the more so given limited financial resources, aging populations, and comorbid chronic diseases. The nursing role in working alongside other healthcare professionals is critical. By their leadership, nurses can create a culture that encourages values and role models that favour collaborative work within a team context. OBJECTIVES: To clarify the specific features of conceptual frameworks of interprofessional and interorganizational collaboration in the healthcare field. This review, accordingly, offers insights into the key challenges facing policymakers, managers, healthcare professionals, and nurse leaders in planning, implementing, or evaluating interprofessional collaboration. DESIGN: This systematic review of qualitative research is based on the Joanna Briggs Institute's methodology for conducting synthesis. DATA SOURCES: Cochrane, JBI, CINAHL, Embase, Medline, Scopus, Academic Search Premier, Sociological Abstract, PsycInfo, and ProQuest were searched, using terms such as professionals, organizations, collaboration, and frameworks. METHODS: Qualitative studies of all research design types describing a conceptual framework of interprofessional or interorganizational collaboration in the healthcare field were included. They had to be written in French or English and published in the ten years between 2004 and 2014. RESULTS: Sixteen qualitative articles were included in the synthesis. Several concepts were found to be common to interprofessional and interorganizational collaboration, such as communication, trust, respect, mutual acquaintanceship, power, patient-centredness, task characteristics, and environment. Other concepts are of particular importance either to interorganizational collaboration, such as the need for formalization and the need for professional role clarification, or to interprofessional collaboration, such as the role of individuals and team identity. Promoting interorganizational collaboration was found to face greater challenges, such as achieving a sense of belonging among professionals when differences exist between corporate cultures, geographical distance, the multitude of processes, and formal paths of communication. CONCLUSIONS: This review sets a direction to follow for implementing changes that meet the challenge of a changing healthcare system and the transition towards non-institutional care. It also shows that collaboration between nurses and healthcare professionals from different healthcare organizations is still poorly explored. This is a major limitation in the existing scientific literature, especially given the potential role that could be played by nurses in enhancing interorganizational collaboration.

Kilpatrick, K., DiCenso, A., Bryant-Lukosius, D., et al. (2013). "Practice patterns and perceived impact of clinical nurse specialist roles in Canada: Results of a national survey." Int J Nurs Stud **50**(11): 1524-1536. https://www.sciencedirect.com/science/article/pii/S002074891300093X

Background Clinical nurse specialists are recognized internationally for providing an advanced level of practice. They positively impact the delivery of healthcare services by using specialty-specific expert knowledge and skills, and integrating competencies as clinicians, educators, researchers, consultants and leaders. Graduate-level education is recommended for the role but many countries do not have formal credentialing mechanisms for clinical nurse specialists. Previous studies have found that clinical nurse specialist roles are poorly understood by stakeholders. Few national studies have examined the utilization of clinical nurse specialists. Objective To identify the practice patterns of clinical nurse specialists in Canada. Design A descriptive cross-sectional survey. Participants Self-identified clinical nurse specialists in Canada. Methods A 50-item self-report questionnaire was developed, pilot-tested in English and French, and administered to self-identified clinical nurse specialists from April 2011 to August 2011. Data were analyzed using descriptive and inferential statistics and content analysis. Results The actual number of clinical nurse specialists in Canada remains unknown. The response rate using the number of registry-identified clinical nurse specialists was 33% (804/2431). Of this number, 608 reported working as a clinical nurse specialist. The response rate for graduate-prepared clinical

nurse specialists was 60% (471/782). The practice patterns of clinical nurse specialists varied across clinical specialties. Graduate-level education influenced their practice patterns. Few administrative structures and resources were in place to support clinical nurse specialist role development. The lack of title protection resulted in confusion around who identifies themselves as a clinical nurse specialist and consequently made it difficult to determine the number of clinical nurse specialists in Canada. Conclusions This is the first national survey of clinical nurse specialists in Canada. A clearer understanding of these roles provides stakeholders with much needed information about clinical nurse specialist practice patterns. Such information can inform decisions about policies, education and organizational supports to effectively utilize this role in healthcare systems. This study emphasizes the need to develop standardized educational requirements, consistent role titles and credentialing mechanisms to facilitate the identification and comparison of clinical nurse specialist roles and role outcomes internationally.

Koopmans, L., Damen, N. et Wagner, C. (2018). "Does diverse staff and skill mix of teams impact quality of care in long-term elderly health care? An exploratory case study." BMC Health Serv Res **18**(1): 988.

OBJECTIVES: Many European countries face challenges in long-term care for older people, such as the growing number of older people requiring care, the increasing complexity of their health care problems, and a decreasing workforce that is inadequately prepared. Optimizing the staff and skill mix of health care teams may offer part of the solution for these challenges. The aim of this study was to obtain insight into the development of teams in terms of staff and skill mix, and the influence of staff and skill mix on quality of care, quality of life, and job satisfaction. METHODS: Seven teams in elderly care in the Netherlands participated in this exploratory case study. From April 2013 to January 2015, a researcher followed the development of the teams, performed observations at the workplace and held interviews with team members, team captains, and (representatives of) clients. Data-analyses were carried out in MAXQDA 11, by coding interviews and analyzing themes. RESULTS: During the project, almost all teams became more diverse in terms of staff and skill mix. In general, there was a trend towards adding (more) higher-qualified health care workers (e.g. nurse) to the team, increasing communication with other disciplines, and enhancing skills of lower-qualified team members. A more diverse staff and skill mix had a positive effect on quality of care and quality of life of clients, and on job satisfaction, but only under certain contextual conditions. Important contextual conditions for successful functioning of a diverse team were a shared view of care by all team members, good communication, autonomy for professionals, and a safe team culture. CONCLUSION: A more diverse staff and skill mix, in combination with positive contextual conditions, can result in improved quality of care, quality of life, and job satisfaction. However, a "one size fits all" blueprint for the optimal staff and skill mix, that suits each team and organization, does not exist. This depends on the context, and should be based on the needs of the clients and possible future changes in these needs.

Kopasker, D., Islam, M. K., Gibson, J., et al. (2020). "Skill Mix and Patient Outcomes: A Multi-country Analysis of Heart Disease and Breast Cancer Patients." Health Policy.
https://doi.org/10.1016/j.healthpol.2020.07.009

Policymakers are becoming aware that increasing the size of the healthcare workforce is no longer the most viable way to address the increasing demand for healthcare. Consequently, a focus of recent healthcare workforce reform has been extending existing roles and creating new roles for health professionals. However, little is known of the influence on outcomes from this variation in labour inputs within hospital production functions. Using a unique combination of primary and administrative data, this paper provides evidence of associations between the composition of care delivery teams and patient outcomes. The primary data enabled the construction of a task component-based measure of skill mix. This novel measure of skill mix has the advantage of capturing how workforce planning can restructure the relative input of nurses or physicians into task components while keeping the overall level of staff fixed. The analysis focuses on specific care pathways and individual hospitals, thus controlling for an under-investigated source of heterogeneity. Additionally, stratifying by country (England, Scotland, and Norway) enabled analysis of skill mix within different health systems. We provide evidence that variations in labour inputs within the breast cancer and heart disease care

pathways are associated with both positive and adverse outcomes. The results illustrate the scope for substitution of task components within care pathways as a potential method of healthcare reform.

Kowalska-Bobko, I., Gałązka-Sobotka, M., Frączkiewicz-Wronka, A., et al. (2020). "[Skill mix in medical and about medical professions]." Med Pr **71**(3): 337-352.

An important problem faced by many healthcare systems is the shortage of medical staff, and in particular doctors and nurses. Their number, competences and qualifications determine the level of availability and quality of medical services. Unfortunately, the demand for medical services is increasing, along with the progressive aging of the population, as well as the increase in the incidence of chronic diseases and frequent reforms of health systems. Employee costs related to healthcare are the most burdensome for the system; therefore, based on the available resources, it is necessary to create effective teams of sector employees. This results in rationalizing employment, or providing new medical and about medical competencies to new groups of professionals, which gives rise to the skill mix phenomenon. A well-prepared and implemented skill mix contributes to improving the quality of patient care, increased patient satisfaction and better clinical outcomes. In the process of mixing of competences, the roles that have been exercised so far are being changed. While some professionals are expanding their existing roles, other employees are required to accept some aspects of the previous roles. In Poland, in order to counteract such negative trends (the shortage of doctors), changes have been introduced to increase access to medical services (e.g., nurses and midwives being vested with the right to issue prescriptions and medical ordinances, paramedics - with the right to perform medical emergency services and provide healthcare services, and physiotherapists - with the right to conduct independent physiotherapeutic visits). A new profession of a medical coordinator has also been introduced. Med Pr. 2020;71(3):337-52.

Laude, A. d. et Tabuteau, D. d. (2018). Les professions de santé. Tome 1 : la notion de professions de santé, Paris : IDS
https://www.calameo.com/read/00531799035fbd0ce4a02

Cette étude rassemble des éléments comparés sur les professions de santé dans les pays de l'Union européenne. Afin de parvenir à cerner cette notion de "professions de santé", il convient dans un premier temps de s'intéresser à la manière dont la définition est abordée - ou n'est pas abordée - par le droit des différents États en Europe, le droit de l'Union européenne - le droit international ne définissant pas précisément cette notion. À partir de ce constat selon lequel une telle définition n'existe pas, les professions de santé doivent être étudiées sous l'angle de trois éléments dont il faut tenir compte pour délimiter la profession : la qualification, les compétences, puis les missions du système de santé.

Mergenthal, K., Beyer, M., Gerlach, F. M., et al. (2016). "Sharing Responsibilities within the General Practice Team - A Cross-Sectional Study of Task Delegation in Germany." PLoS One **11**(6): e0157248.

BACKGROUND: Expected growth in the demand for health services has generated interest in the more effective deployment of health care assistants. Programs encouraging German general practitioners (GPs) to share responsibility for care with specially qualified health care assistants in the family practice (VERAHs) have existed for several years. But no studies have been conducted on the tasks German GPs are willing to rely on specially qualified personnel to perform, what they are prepared to delegate to all non-physician practice staff and what they prefer to do themselves. METHODS: As part of an evaluation study on the deployment of VERAHs in GP-centered health care, we used a questionnaire to ask about task delegation within the practice team. From a list of tasks that VERAHs are specifically trained to carry out, GPs were asked to indicate which they actually delegate. We also asked GPs why they had employed a VERAH in their practice and for their opinions on the benefits and limitations of assigning tasks to VERAHs. The aim of the study was to find out which tasks GPs delegate to their specially qualified personnel, which they permit all HCAs to carry out, and which tasks they do not delegate at all. RESULTS: The survey was filled in and returned by 245 GPs (83%). Some tasks were exclusively delegated to VERAHs (e.g. home visits), while others were delegated to all HCAs (e.g. vaccinations). About half the GPs rated the assessment of mental health, as part of the comprehensive

assessment of a patient's condition, as the sole responsibility of a GP. The possibility to delegate more complex tasks was the main reason given for employing a VERAH. Doctors said the delegation of home visits provided them with the greatest relief. CONCLUSIONS: In Germany, where GPs are solely accountable for the health care provided in their practices, experience with the transfer of responsibility to other non-physician health care personnel is still very limited. When HCAs have undergone special training, GPs seem to be prepared to delegate tasks that demand a substantial degree of know-how, such as home visits and case management. This "new" role allocation within the practice may signal a shift in the provision of health care by family practice teams in Germany.

Meyer-Treschan, T., Busch, D., Farhan, N., et al. (2021). "[What is the contribution of physician assistants to health care in Germany? A differentiation between physician assistants and physicians in training]." Z Evid Fortbild Qual Gesundhwes **164**: 15-22.

BACKGROUND: Physicians in training are major contributors to the German health care system. After graduation from medical school, physicians in training qualify for a certain specialty. The workload of physicians in training in Germany is so high that they have expressed their need for support. One opportunity to support physicians in training is by delegating tasks to physician assistants (medical assistants qualified by a specific course of study, graduated from universities of applied sciences). However, there is a lack of knowledge about the qualification of physician assistants and the conditions which allow support of physicians in training by physician assistants in Germany. METHODS: Based on a focused internet search, this paper describes the development of the profession physician assistance in Germany and the currently offered graduation courses including their duration and qualification requirements. Furthermore, we present available recommendations for the content of physician assistants' education and characterize conditions for the support of physicians in training by physician assistants. RESULTS: In Germany, physician assistance has been an academic discipline since 2005, the profession is, however, still quite seldom. Qualification requirements and the duration of education are determined by the universities. The aim is to qualify students for several competencies, which enable physician assistants to perform tasks of physicians under delegation. The conditions for delegation to physicians in training and to physician assistants are quite similar, resulting in partly comparable practice. Major differences relate to the so called "physician reservation" or physicians' core area, both of which define tasks that may only be carried out by physicians. DISCUSSION: Integrating physician assistants into a medical team means supporting the specialists by delegating tasks, thus reducing the workload of all physicians in the team, including physicians in training. Currently, there are no data on and no outcomes of the performance of physician assistants in Germany. CONCLUSION: In everyday practice, health care delivered by physician assistants and by physicians in training is similar, at least as regards activities and tasks that do not need physician supervision.

Mirhoseiny, S., Geelvink, T., Martin, S., et al. (2019). "Does task delegation to non-physician health professionals improve quality of diabetes care? Results of a scoping review." PLoS One **14**(10): e0223159.

OBJECTIVE: As a result of unhealthy lifestyles, reduced numbers of healthcare providers are having to deal with an increasing number of diabetes patients. In light of this shortage of physicians and nursing staff, new concepts of care are needed. The aim of this scoping review is to review the literature and examine the effects of task delegation to non-physician health professionals, with a further emphasis on inter-professional care. RESEARCH DESIGN AND METHODS: Systematic searches were performed using the PubMed, Embase and Google Scholar databases to retrieve papers published between January 1994 and December 2017. Randomised/non-randomised controlled trials and studies with a before/after design that described the delegation of tasks from physicians to non-physicians in diabetes care were included in the search. This review is a subgroup analysis that further assesses all the studies conducted using a team-based approach. RESULTS: A total of 45 studies with 12,092 patients met the inclusion criteria. Most of the interventions were performed in an outpatient setting with type-2 diabetes mellitus patients. The non-physician healthcare professionals involved in the team were nurses, pharmacists, community health workers and dietitians. Most studies showed significant improvements in glycaemic control and high patient satisfaction, while there were no indications that the task delegation affected quality of life scores. CONCLUSIONS: The findings of the

review suggest that task delegation can provide equivalent glycaemic control and potentially lead to an improvement in the quality of care. However, this review revealed a lack of clinical endpoints, as well as an inconsistency between the biochemical outcome parameters and the patient-centred outcome parameters. Given the vast differences between the individual healthcare systems used around the world, further high-quality research with an emphasis on long-term outcome effects and the expertise of non-physicians is needed.

Mughal, Z. et Maharjan, R. (2021). "Cross-sectional analysis of hospital tasks handed over to general practitioners: workload delegation or dumping?" Postgrad Med J.

PURPOSE OF THE STUDY: New requirements for hospital clinicians to follow up and act on hospital-initiated investigations were introduced in 2016 in the National Health Service standard contract. We aimed to evaluate the tasks handed over from hospital clinicians to general practitioners (GPs). STUDY DESIGN: A retrospective observation of all tasks in a random sample of electronic discharge summaries at a university teaching hospital over a 1 month period was conducted. A single-best-answer questionnaire was circulated among hospital clinicians over 3 months to gain an understanding of their follow-up and referral practices. RESULTS: The total number of tasks found on discharge summaries (n=178) were 227, of which 39% were directed at GPs and 61% at the hospital team. Of 89 tasks delegated to GPs, 33% were inappropriate. Some tasks on discharge summaries were delegated more frequently to GPs such as blood tests (73%) and endoscopy requests (67%). While others were undertaken more often by hospitals clinicians including imaging requests (88%), follow-up appointments (87%) and onward referrals (71%). Surveyed doctors (n=72) admitted to asking GPs to follow up blood tests (52%), imaging and endoscopy (16%) and make onward referrals for related conditions (14%) and unrelated conditions (70%). CONCLUSION: The majority of outstanding tasks in the hospital setting were followed up by hospital clinicians. A considerable volume of tasks were delegated to GPs, of which a significant proportion were inappropriate. An increase in awareness and understanding among hospital clinicians of their responsibility to follow up hospital-initiated investigations is needed.

Nelson, P. A., Bradley, F., Martindale, A. M., et al. (2019). "Skill-mix change in general practice: a qualitative comparison of three 'new' non-medical roles in English primary care." Br J Gen Pract **69**(684): e489-e498.

BACKGROUND: General practice is currently facing a significant workforce challenge. Changing the general practice skill mix by introducing new non-medical roles is recommended as one solution; the literature highlights that organisational and/or operational difficulties are associated with skill-mix changes. AIM: To compare how three non-medical roles were being established in general practice, understand common implementation barriers, and identify measurable impacts or unintended consequences. DESIGN AND SETTING: In-depth qualitative comparison of three role initiatives in general practices in one area of Greater Manchester, England; that is, advanced practitioner and physician associate training schemes, and a locally commissioned practice pharmacist service. METHOD: Semi-structured interviews and focus groups with a purposive sample of stakeholders involved in the implementation of each role initiative were conducted. Template analysis enabled the production of pre-determined and researcher-generated codes, categories, and themes. RESULTS: The final sample contained 38 stakeholders comprising training/service leads, role holders, and host practice staff. Three key themes captured participants' perspectives: purpose and place of new roles in general practice, involving unclear role definition and tension at professional boundaries; transition of new roles into general practice, involving risk management, closing training-practice gaps and managing expectations; and future of new roles in general practice, involving demonstrating impact and questions about sustainability. CONCLUSION: This in-depth, in-context comparative study highlights that introducing new roles to general practice is not a simple process. Recognition of factors affecting the assimilation of roles may help to better align them with the goals of general practice and harness the commitment of individual practices to enable role sustainability.

OCDE (2008). Les personnels de santé dans les pays de l'OCDE. Comment répondre à la crise imminente ?, Paris : OCDE
http://www.oecdbookshop.org/oecd/display.asp?k=5KZHFQ8SWBZQ&lang=fr

Au cours des vingt prochaines années, les pays de l'OCDE seront confrontés à une demande croissante en médecins et infirmiers. Cette situation doit être appréhendée dans un environnement international qui est d'ores et déjà caractérisé par des flux migratoires importants que ce soit entre les pays de l'OCDE ou des pays en voie de développement vers la zone OCDE. Quelles ont été les politiques adoptées par les pays de l'OCDE en matière de ressources humaines et d'immigration ? Dans quelle mesure ces politiques sont-elles liées ? Comment les pays de l'OCDE peuvent-ils se doter d'effectifs viables de personnels de santé ? Quelles sont les conséquences de l'émigration des médecins et des infirmiers pour les pays d'origine ? Cet ouvrage présente des faits nouveaux sur chacune de ces questions et trace quelques pistes pour la marche à suivre dans l'avenir. Il résulte d'un projet conjointement mené par l'OCDE et l'OMS sur la gestion des ressources humaines dans le secteur de la santé et des migrations internationales (4 ème de couv.)

OCDE (2016). Health Workforce Policies in OECD Countries : Right Jobs, Right Skills, Right Places, Paris : OCDE http://www.oecd.org/fr/publications/health-workforce-policies-in-oecd-countries-9789264239517-en.htm

Health workers are the cornerstone of health systems, playing a central role in providing health services to the population and improving health outcomes. The demand and supply of health workers have increased over time in all OECD countries, with jobs in the health and social sector accounting for more than 10% of total employment now in several OECD countries. This publication reviews key trends and policy priorities on health workforce across OECD countries, with a particular focus on doctors and nurses given the preeminent role that they have traditionally played in health service delivery.

O'Reilly, P., Lee, S. H., O'Sullivan, M., et al. (2017). "Assessing the facilitators and barriers of interdisciplinary team working in primary care using normalisation process theory: An integrative review." PLoS One **12**(5): e0177026.

BACKGROUND: Interdisciplinary team working is of paramount importance in the reform of primary care in order to provide cost-effective and comprehensive care. However, international research shows that it is not routine practice in many healthcare jurisdictions. It is imperative to understand levers and barriers to the implementation process. This review examines interdisciplinary team working in practice, in primary care, from the perspective of service providers and analyses 1 barriers and facilitators to implementation of interdisciplinary teams in primary care and 2 the main research gaps. METHODS AND FINDINGS: An integrative review following the PRISMA guidelines was conducted. Following a search of 10 international databases, 8,827 titles were screened for relevance and 49 met the criteria. Quality of evidence was appraised using predetermined criteria. Data were analysed following the principles of framework analysis using Normalisation Process Theory (NPT), which has four constructs: sense making, enrolment, enactment, and appraisal. The literature is dominated by a focus on interdisciplinary working between physicians and nurses. There is a dearth of evidence about all NPT constructs apart from enactment. Physicians play a key role in encouraging the enrolment of others in primary care team working and in enabling effective divisions of labour in the team. The experience of interdisciplinary working emerged as a lever for its implementation, particularly where communication and respect were strong between professionals. CONCLUSION: A key lever for interdisciplinary team working in primary care is to get professionals working together and to learn from each other in practice. However, the evidence base is limited as it does not reflect the experiences of all primary care professionals and it is primarily about the enactment of team working. We need to know much more about the experiences of the full network of primary care professionals regarding all aspects of implementation work. SYSTEMATIC REVIEW REGISTRATION: International Prospective Register of Systematic Reviews PROSPERO 2015: CRD42015019362.

Peltonen, J., Leino-Kilpi, H., Heikkila, H., et al. (2019). "Instruments measuring interprofessional collaboration in healthcare - a scoping review." J Interprof Care: 1-15.

Worldwide there is growing understanding of the importance of interprofessional collaboration in providing well-functioning healthcare. However, little is known about how interprofessional

collaboration can be measured between different health-care professionals. In this review, we aim to fill this gap, by identifying and analyzing the existing instruments measuring interprofessional collaboration in healthcare. A scoping review design was applied. A systematic literature search of two electronic databases, Medline (PubMed) and CINAHL, was conducted in 03/2018. The search yielded 1020 studies, of which 35 were selected for the review. The data were analyzed by content analysis. In total, 29 instruments measuring interprofessional collaboration were found. Interprofessional collaboration was measured predominantly between nurses and physicians with different instruments in various health-care settings. Psychometric testing was unsystematic, focusing predominantly on construct and content validity and internal consistency, thus further validation studies with comprehensive testing are suggested. The results of this review can be used to select instruments measuring interprofessional collaboration in practice or research. Future research is needed to strengthen the evidence of reliability and validity of these instruments.

Reeves, S., McMillan, S. E., Kachan, N., et al. (2015). "Interprofessional collaboration and family member involvement in intensive care units: emerging themes from a multi-sited ethnography." J Interprof Care **29**(3): 230-237.

This article presents emerging findings from the first year of a two-year study, which employed ethnographic methods to explore the culture of interprofessional collaboration (IPC) and family member involvement in eight North American intensive care units (ICUs). The study utilized a comparative ethnographic approach - gathering observation, interview and documentary data relating to the behaviors and attitudes of healthcare providers and family members across several sites. In total, 504 hours of ICU-based observational data were gathered over a 12-month period in four ICUs based in two US cities. In addition, 56 semi-structured interviews were undertaken with a range of ICU staff (e.g. nurses, doctors and pharmacists) and family members. Documentary data (e.g. clinical guidelines and unit policies) were also collected to help develop an insight into how the different sites engaged organizationally with IPC and family member involvement. Directed content analysis enabled the identification and categorization of major themes within the data. An interprofessional conceptual framework was utilized to help frame the coding for the analysis. The preliminary findings presented in this paper illuminate a number of issues related to the nature of IPC and family member involvement within an ICU context. These findings are discussed in relation to the wider interprofessional and health services literature.

Reeves, S., Pelone, F., Harrison, R., et al. (2017). "Interprofessional collaboration to improve professional practice and healthcare outcomes." Cochrane Database Syst Rev **6**: Cd000072.

BACKGROUND: Poor interprofessional collaboration (IPC) can adversely affect the delivery of health services and patient care. Interventions that address IPC problems have the potential to improve professional practice and healthcare outcomes. OBJECTIVES: To assess the impact of practice-based interventions designed to improve interprofessional collaboration (IPC) amongst health and social care professionals, compared to usual care or to an alternative intervention, on at least one of the following primary outcomes: patient health outcomes, clinical process or efficiency outcomes or secondary outcomes (collaborative behaviour). SEARCH METHODS: We searched CENTRAL (2015, issue 11), MEDLINE, CINAHL, ClinicalTrials.gov and WHO International Clinical Trials Registry Platform to November 2015. We handsearched relevant interprofessional journals to November 2015, and reviewed the reference lists of the included studies. SELECTION CRITERIA: We included randomised trials of practice-based IPC interventions involving health and social care professionals compared to usual care or to an alternative intervention. DATA COLLECTION AND ANALYSIS: Two review authors independently assessed the eligibility of each potentially relevant study. We extracted data from the included studies and assessed the risk of bias of each study. We were unable to perform a meta-analysis of study outcomes, given the small number of included studies and their heterogeneity in clinical settings, interventions and outcomes. Consequently, we summarised the study data and presented the results in a narrative format to report study methods, outcomes, impact and certainty of the evidence. MAIN RESULTS: We included nine studies in total (6540 participants); six cluster-randomised trials and three individual randomised trials (1 study randomised clinicians, 1 randomised patients, and 1 randomised clinicians and patients). All studies were conducted in high-income

countries (Australia, Belgium, Sweden, UK and USA) across primary, secondary, tertiary and community care settings and had a follow-up of up to 12 months. Eight studies compared an IPC intervention with usual care and evaluated the effects of different practice-based IPC interventions: externally facilitated interprofessional activities (e.g. team action planning; 4 studies), interprofessional rounds (2 studies), interprofessional meetings (1 study), and interprofessional checklists (1 study). One study compared one type of interprofessional meeting with another type of interprofessional meeting. We assessed four studies to be at high risk of attrition bias and an equal number of studies to be at high risk of detection bias.For studies comparing an IPC intervention with usual care, functional status in stroke patients may be slightly improved by externally facilitated interprofessional activities (1 study, 464 participants, low-certainty evidence). We are uncertain whether patient-assessed quality of care (1 study, 1185 participants), continuity of care (1 study, 464 participants) or collaborative working (4 studies, 1936 participants) are improved by externally facilitated interprofessional activities, as we graded the evidence as very low-certainty for these outcomes. Healthcare professionals' adherence to recommended practices may be slightly improved with externally facilitated interprofessional activities or interprofessional meetings (3 studies, 2576 participants, low certainty evidence). The use of healthcare resources may be slightly improved by externally facilitated interprofessional activities, interprofessional checklists and rounds (4 studies, 1679 participants, low-certainty evidence). None of the included studies reported on patient mortality, morbidity or complication rates.Compared to multidisciplinary audio conferencing, multidisciplinary video conferencing may reduce the average length of treatment and may reduce the number of multidisciplinary conferences needed per patient and the patient length of stay. There was little or no difference between these interventions in the number of communications between health professionals (1 study, 100 participants; low-certainty evidence). AUTHORS' CONCLUSIONS: Given that the certainty of evidence from the included studies was judged to be low to very low, there is not sufficient evidence to draw clear conclusions on the effects of IPC interventions. Neverthess, due to the difficulties health professionals encounter when collaborating in clinical practice, it is encouraging that research on the number of interventions to improve IPC has increased since this review was last updated. While this field is developing, further rigorous, mixed-method studies are required. Future studies should focus on longer acclimatisation periods before evaluating newly implemented IPC interventions, and use longer follow-up to generate a more informed understanding of the effects of IPC on clinical practice.

Riisgaard, H., Nexoe, J., Le, J. V., et al. (2016). "Relations between task delegation and job satisfaction in general practice: a systematic literature review." BMC Fam Pract **17**(1): 168.

BACKGROUND: It has for years been discussed whether practice staff should be involved in patient care in general practice to a higher extent. The research concerning task delegation within general practice is generally increasing, but the literature focusing on its influence on general practitioners' and their staff's job satisfaction appears to be sparse even though job satisfaction is acknowledged as an important factor associated with both patient satisfaction and medical quality of care. Therefore, the overall aim of this study was 1) to review the current research on the relation between task delegation and general practitioners' and their staff's job satisfaction and, additionally, 2) to review the evidence of possible explanations for this relation. METHODS: A systematic literature review. We searched the four databases PubMed, Cinahl, Embase, and Scopus systematically. The immediate relevance of the retrieved articles was evaluated by title and abstract by the first author, and papers that seemed to meet the aim of the review were then fully read by first author and last author independently judging the eligibility of content. RESULTS: We included four studies in the review. They explored views and attitudes of the staff, encompassing nurses as well as practice managers. Only one of the included studies also explored general practitioners' views and attitudes, hence making it impossible to establish any syntheses on this relation. According to the studies, the staff's overall attitude towards task delegation was positive and led to increased job satisfaction, probably because task delegation comprised a high degree of work autonomy. CONCLUSIONS: The few studies included in our review suggest that task delegation within general practice may be seen by the staff as an overall positive issue contributing to their job satisfaction, primarily due to perceived autonomy in the work. However, because of the small sample size comprising only qualitative studies, and due to the

heterogeneity of these studies, we cannot draw unambiguous conclusions although we point towards tendencies.

Riisgaard, H., Sondergaard, J., Munch, M., et al. (2017). "Associations between degrees of task delegation and job satisfaction of general practitioners and their staff: a cross-sectional study." BMC Health Serv Res **17**(1): 44.

BACKGROUND: In recent years, the healthcare system in the western world has undergone a structural development caused by changes in demography and pattern of disease. In order to maintain the healthcare system cost-effective, new tasks are placed in general practice urging the general practitioners to rethink the working structure without compromising the quality of care. However, there is a substantial variation in the degree to which general practitioners delegate tasks to their staff, and it is not known how these various degrees of task delegation influence the job satisfaction of general practitioners and their staff. METHODS: We performed a cross-sectional study based on two electronic questionnaires, one for general practitioners and one for their staff. Both questionnaires were divided into two parts, a part exploring the degree of task delegation regarding management of patients with chronic obstructive pulmonary disease in general practice and a part concerning the general job satisfaction and motivation to work. RESULTS: We found a significant association between perceived "maximal degree" of task delegation in management of patients with chronic obstructive pulmonary disease and the staff's overall job satisfaction. The odds ratio of the staff's satisfaction with the working environment displayed a tendency that there is also an association with "maximal degree" of task delegation. In the analysis of the general practitioners, the odds ratios of the results indicate that there is a tendency that "maximal degree" of task delegation is associated with overall job satisfaction, satisfaction with the challenges in work, and satisfaction with the working environment. CONCLUSIONS: We conclude that a high degree of task delegation is significantly associated with overall job satisfaction of the staff, and that there is a tendency that a high degree of task delegation is associated with the general practitioners' and the staff's satisfaction with the working environment as well as with general practitioners' overall job satisfaction and satisfaction with challenges in work. To qualify future delegation processes within general practice, further research could explore the reasons for our findings.

Riisgaard, H., Sondergaard, J., Munch, M., et al. (2017). "Work motivation, task delegation and job satisfaction of general practice staff: a cross-sectional study." Fam Pract **34**(2): 188-193.

Background: Recent research has shown that a high degree of task delegation is associated with the practise staff's overall job satisfaction, and this association is important to explore since job satisfaction is related to medical as well as patient-perceived quality of care. Objectives: This study aimed: (1) to investigate associations between degrees of task delegation in the management of chronic disease in general practice, with chronic obstructive pulmonary disease (COPD) as a case and the staff's work motivation, (2) to investigate associations between the work motivation of the staff and their job satisfaction. Methods: The study was based on a questionnaire to which 621 members of the practice staff responded. The questionnaire consisted of a part concerning degree of task delegation in the management of COPD in their respective practice and another part being about their job satisfaction and motivation to work. Results: In the first analysis, we found that 'maximal degree' of task delegation was significantly associated with the staff perceiving themselves to have a large degree of variation in tasks, odds ratio (OR) = 4.26, confidence interval (CI) = 1.09, 16.62. In the second analysis, we found that this perceived large degree of variation in tasks was significantly associated with their overall job satisfaction, OR = 2.81, confidence interval = 1.71, 4.61. Conclusion: The results suggest that general practitioners could delegate highly complex tasks in the management of COPD to their staff without influencing the staff's work motivation, and thereby their job satisfaction, negatively, as long as they ensure sufficient variation in the tasks.

Sabot, K., Wickremasinghe, D., Blanchet, K., et al. (2017). "Use of social network analysis methods to study professional advice and performance among healthcare providers: a systematic review." Syst Rev **6**(1): 208.

BACKGROUND: Social network analysis quantifies and visualizes relationships between and among individuals or organizations. Applications in the health sector remain underutilized. This systematic

review seeks to analyze what social network methods have been used to study professional communication and performance among healthcare providers. METHODS: Ten databases were searched from 1990 through April 2016, yielding 5970 articles screened for inclusion by two independent reviewers who extracted data and critically appraised each study. Inclusion criteria were study of health care worker professional communication, network methods used, and patient outcomes measured. The search identified 10 systematic reviews. The final set of articles had their citations prospectively and retrospectively screened. We used narrative synthesis to summarize the findings. RESULTS: The six articles meeting our inclusion criteria described unique health sectors: one at primary healthcare level and five at tertiary level; five conducted in the USA, one in Australia. Four studies looked at multidisciplinary healthcare workers, while two focused on nurses. Two studies used mixed methods, four quantitative methods only, and one involved an experimental design. Four administered network surveys, one coded observations, and one used an existing survey to extract network data. Density and centrality were the most common network metrics although one study did not calculate any network properties and only visualized the network. Four studies involved tests of significance, and two used modeling methods. Social network analysis software preferences were evenly split between ORA and UCINET. All articles meeting our criteria were published in the past 5 years, suggesting that this remains in clinical care a nascent but emergent research area. There was marked diversity across all six studies in terms of research questions, health sector area, patient outcomes, and network analysis methods. CONCLUSION: Network methods are underutilized for the purposes of understanding professional communication and performance among healthcare providers. The paucity of articles meeting our search criteria, lack of studies in middle- and low-income contexts, limited number in non-tertiary settings, and few longitudinal, experimental designs, or network interventions present clear research gaps. SYSTEMATIC REVIEW REGISTRATION: PROSPERO CRD42015019328.

Schonfelder, W. et Nilsen, E. A. (2016). "An ideal-typical model for comparing interprofessional relations and skill mix in health care." BMC Health Serv Res **16**(1): 633.

BACKGROUND: Comparisons of health system performance, including the regulations of interprofessional relations and the skill mix between health professions are challenging. National strategies for regulating interprofessional relations vary widely across European health care systems. Unambiguously defined and generally accepted performance indicators have to remain generic, with limited power for recognizing the organizational structures regulating interprofessional relations in different health systems. A coherent framework for in-depth comparisons of different models for organizing interprofessional relations and the skill mix between professional groups is currently not available. This study aims to develop an ideal-typical framework for categorizing skill mix and interprofessional relations in health care, and to assess the potential impact for different ideal types on care coordination and integrated service delivery. METHODS: A document analysis of the Health Systems in Transition (HiT) reports published by the European Observatory on Health Systems and Policies was conducted. The HiT reports to 31 European health systems were analyzed using a qualitative content analysis and a process of meaning condensation. RESULTS: The educational tracks available to nurses have an impact on the professional autonomy for nurses, the hierarchy between professional groups, the emphasis given to negotiating skill mix, interdisciplinary teamwork and the extent of cooperation across the health and social service interface. Based on the results of the document analysis, three ideal types for regulating interprofessional relations and skill mix in health care are delimited. For each ideal type, outcomes on service coordination and holistic service delivery are described. CONCLUSIONS: Comparisons of interprofessional relations are necessary for proactive health human resource policies. The proposed ideal-typical framework provides the means for in-depth comparisons of interprofessional relations in the health care workforce beyond of what is possible with directly comparable, but generic performance indicators.

Sibbald, B. (2010). "Transferts de tâches entre professionnels de santé dans les soins primaires au Royaume-Uni et enseignements de la littérature internationales." Revue Francaise Des Affaires Sociales(3): 35-47, graph.

Directrice du Centre de développement et de recherche en soins primaires (National Primary Care Research and Development Centre ? NPCRDC) de l?université de Manchester, Bonnie Sibbald mène

depuis 1995 des recherches sur l'amélioration de la qualité des soins primaires à travers le développement des ressources humaines et le transfert de compétences (skill mix) entre professionnels de santé. Ses travaux portent principalement sur la façon dont le skill mix peut contribuer à améliorer l?efficacité et la performance dans les systèmes de santé. Elle a notamment développé le cadre conceptuel devenu une référence à l'échelle internationale visant à décrire et évaluer les changements en matière de transfert de compétences des professionnels de santé. Cet article présente ici le contexte d'introduction du skill mix dans le secteur des soins primaires au Royaume-Uni et fournit quelques éléments d?évaluation de ces pratiques.

Sibbald, B., Shen, J. et McBride, A. (2004). "Changing the skill-mix of the health care workforce." J Health Serv Res Policy **9 Suppl 1**: 28-38.

OBJECTIVE: Changing workforce skill-mix is one strategy for improving the effectiveness and efficiency of health care. Our aim was to summarise available research into the success or failure of skill-mix change in achieving planned outcomes. METHODS: A systematic search for existing reviews of research into skill-mix was conducted. Databases searched included: MEDLINE, CINAHL, PsychINFO, Cochrane Library, HMIC, Centre for Reviews and Dissemination, and Department of Health Research Findings Register. Search terms included keywords defining the type of publication, clinical area, type of health personnel and the focus of the article (role change, skill-mix, etc.). English language publications from 1990 onwards were included. Two reviewers independently identified relevant publications, graded the quality of reviews and extracted findings. In addition, the wider literature was scanned to identify which factors were associated with the success or failure of skill-mix change. RESULTS: A total of 9064 publications were identified, of which 24 met our inclusion criteria. There was a dearth of research, particularly for role changes involving workers other than doctors or nurses. Cost-effectiveness was generally not evaluated, nor was the wider impact of change on health care systems. The wider literature suggested that factors promoting success include: introducing 'treatments' of proven efficacy; appropriate staff education and training; removal of unhelpful boundary demarcations between staff or service sectors; appropriate pay and reward systems; and good strategic planning and human resource management. Unintended consequences sometimes occurred in respect of: staff morale and workload; coordination of care; continuity of care; and cost. CONCLUSIONS: In order to make informed choices, health care planners need good research evidence about the likely consequences of skill-mix change. The findings from existing research need to be made more accessible while the dearth of evidence makes new research necessary.

Smits, M., Peters, Y., Ranke, S., et al. (2020). "Substitution of general practitioners by nurse practitioners in out-of-hours primary care home visits: A quasi-experimental study." Int J Nurs Stud **104**: 103445.

BACKGROUND: General practitioners experience a high workload during out-of-hours care. A possible solution is the shifting of care to nurse practitioners. OBJECTIVES: To provide insight into patient- and care characteristics, safety, efficiency, and patient satisfaction of substituting general practitioners with nurse practitioners for home visits by out-of-hours primary care services. DESIGN: Quasi-experimental non-randomised study comparing home visits by nurse practitioners (intervention group; one out-of-hours care service) with home visits by general practitioners (control group; two out-of-hours care services) for 24 protocolised health problems. SETTING: Three out-of-hours primary care services in the East of the Netherlands. PARTICIPANTS: 1601 patients who received a home visit by a nurse practitioner (N = 386) or a general practitioner (N = 1215). Of these patients, 639 gave informed consent to be included in the protocol adherence assessment and follow-up record review (nurse practitioner: N = 358; general practitioner: N = 281). METHODS: Five nurse practitioners with experience in ambulance care were recruited and trained. From September 2016 to March 2017 the nurse practitioners took over home visits under supervision of a general practitioners. This was evaluated using: (1) data-extraction from the patient registration system, (2) follow-up record review in the patients' general practices, and (3) patient satisfaction survey. Two general practitioners independently assessed protocol adherence based on the extracted registration data. RESULTS: Nurse practitioners prescribed medication significantly less often than general practitioners (19.9% versus 30.6%), and referred patients significantly more often to the hospital (24.1% versus 15.9%). The mean length of the home visit was significantly longer for nurse practitioners (34.1 versus 21.1 min). Nurse

practitioners adhered to the protocol significantly more often than general practitioners (84.9% versus 76.2%) and their medication prescribing was significantly more often appropriate (93.7% versus 79.5%). There were no differences in the number of missed diagnoses and complications. The number of follow-up contacts was also similar in both groups. Patient satisfaction was generally high and significantly higher for nurse practitioners on several items. CONCLUSIONS: Nurse practitioners with experience in ambulance care can safely, efficiently, and satisfactorily perform low complex out-of-hours primary care home visits. It is recommended to study the safety and efficiency of nurse practitioners' home visits in other regions and with nurse practitioners with different educational levels and different specialisations. In addition, we recommend to evaluate the cost-effectiveness and if it leads increased quality of care.

Supper, I., Bourgueil, Y., Ecochard, R., et al. (2017). "Impact of multimorbidity on healthcare professional task shifting potential in patients with type 2 diabetes in primary care: a French cross-sectional study." BMJ Open(7): 11 , tab., graph., fig.
http://bmjopen.bmj.com/content/7/11/e016545.info

This study estimate the transferability of processes of care from general practitioners (GPs) to allied healthcare professionals and the determinants of such transferability. From 8572 processes of care that concerned 1088 encounters of patients with diabetes, 21.9% (95% CI 21.1% to 22.8%) were considered eligible for transfer from GPs to allied healthcare professionals (78.1% to nurses, 36.7% to pharmacists). Processes were transferable with condition(s) for 70.6% (ie, a protocol, shared record or supervision). The most transferable processes concerned health maintenance (32.1%) and cardiovascular risk factors (hypertension (28.7%), dyslipidaemia (25.3%) and diabetes (24.3%)). Multivariate analysis showed that educational processes or a long-term condition status were associated with increased transferability (OR 3.26?and 1.47, respectively), whereas patients with higher intellectual occupations or those with two or more associated health problems were associated with lower transferability (OR 0.33?and 0.81, respectively).

Supper, I., Catala, O., Lustman, M., et al. (2015). "Interprofessional collaboration in primary health care: a review of facilitators and barriers perceived by involved actors." Journal of Public Health **37**(4): 716-727.
http://jpubhealth.oxfordjournals.org/content/37/4/716.abstract

Background The epidemiological transition calls for redefining the roles of the various professionals involved in primary health care towards greater collaboration. We aimed to identify facilitators of, and barriers to, interprofessional collaboration in primary health care as perceived by the actors involved, other than nurses. Methods Systematic review using synthetic thematic analysis of qualitative research. Articles were retrieved from Medline, Web of science, Psychinfo and The Cochrane library up to July 2013. Quality and relevance of the studies were assessed according to the Dixon-Woods criteria. The following stakeholders were targeted: general practitioners, pharmacists, mental health workers, midwives, physiotherapists, social workers and receptionists. Results Forty-four articles were included. The principal facilitator of interprofessional collaboration in primary care was the different actors' common interest in collaboration, perceiving opportunities to improve quality of care and to develop new professional fields. The main barriers were the challenges of definition and awareness of one another's roles and competences, shared information, confidentiality and responsibility, team building and interprofessional training, long-term funding and joint monitoring. Conclusions Interprofessional organization and training based on appropriate models should support collaboration development. The active participation of the patient is required to go beyond professional boundaries and hierarchies. Multidisciplinary research projects are recommended.

Tacchi, P. (2017). "Development of a skill mix and study planning tool for research teams." Nurs Manag (Harrow) **23**(9): 19-28.

There are various tools available in acute and primary care settings to support decision making about safe-staffing levels. Calculating safe staffing levels is about more than just the number of people on duty. It must reflect skill mix and tasks, and this is more complex outside traditional nursing roles. It is essential that research nurses, who work in multidisciplinary teams collecting the evidence that

underpins safe and effective healthcare, are equipped to practise safely, but staffing level tools do not take their unique roles into account. This article describes University Hospitals Bristol Research Work Plan Tool (BRIS-TOOL), developed to enable research managers to identify skill mix in their teams and support effective study planning. It also discusses how the tool accurately reflects research teams' productivity. Finally, the article suggests that the tool can be used to profile research posts, illustrate the breadth of work undertaken in these posts, inform study design and help clinical colleagues to understand research roles better.

True, G., Stewart, G. L., Lampman, M., et al. (2014). "Teamwork and delegation in medical homes: primary care staff perspectives in the Veterans Health Administration." J Gen Intern Med **29 Suppl 2**: S632-639.

BACKGROUND: The patient-centered medical home (PCMH) relies on a team approach to patient care. For organizations engaged in transitioning to a PCMH model, identifying and providing the resources needed to promote team functioning is essential. OBJECTIVE: To describe team-level resources required to support PCMH team functioning within the Veterans Health Administration (VHA), and provide insight into how the presence or absence of these resources facilitates or impedes within-team delegation. DESIGN: Semi-structured interviews with members of pilot teams engaged in PCMH implementation in 77 primary care clinics serving over 300,000 patients across two VHA regions covering the Mid-Atlantic and Midwest United States. PARTICIPANTS: A purposive sample of 101 core members of pilot teams, including 32 primary care providers, 42 registered nurse care managers, 15 clinical associates, and 12 clerical associates. APPROACH: Investigators from two evaluation sites interviewed frontline primary care staff separately, and then collaborated on joint analysis of parallel data to develop a broad, comprehensive understanding of global themes impacting team functioning and within-team delegation. KEY RESULTS: We describe four themes key to understanding how resources at the team level supported ability of primary care staff to work as effective, engaged teams. Team-based task delegation was facilitated by demarcated boundaries and collective identity; shared goals and sense of purpose; mature and open communication characterized by psychological safety; and ongoing, intentional role negotiation. CONCLUSIONS: Our findings provide a framework for organizations to identify assets already in place to support team functioning, as well as areas in need of improvement. For teams struggling to make practice changes, our results indicate key areas where they may benefit from future support. In addition, this research sheds light on how variation in medical home implementation and outcomes may be associated with variation in team-based task delegation.

Trusch, B., Heintze, C., Petelos, E., et al. (2021). "Collaboration amongst general practitioners and gynaecologists working in primary health care in Germany: a cross-sectional study." Prim Health Care Res Dev **22**: e42.

AIM: This cross-sectional study is the first one to explore the collaboration of the influencing factors thereof amongst general practitioners (GPs) and gynaecologists (Gyns) working in primary care in urban and rural settings in Germany. BACKGROUND: The number of women aged ≥ 50 years is predicted to increase in the next years in Germany. This coincides with the ageing of primary care specialists providing outpatient care. Whereas delegation of tasks to nurses as a form of interprofessional collaboration has been the target of recent studies, there is no data regarding collaboration amongst physicians in different specialisations working in primary care. We explored collaboration amongst GPs and Gyn regarding the healthcare provision to women aged ≥ 50 years. METHODS: A quantitative postal survey was administered to GPs and Gyns in three federal states in Germany, focusing on care provision to women aged ≥ 50 years. A total of 4545 physicians, comprising 3514 GPs (67% of the total GP population) randomly selected, and all 1031 Gyns practicing in these states received the postal survey in March 2018. A single reminder was sent in April 2018 with data collection ending in June 2018. Multiple logistic regressions were performed for collaboration, adjusted by age and sex, alongside descriptive methods. FINDINGS: The overall response rate was 31% (1389 respondents): 861 GPs (25%) and 528 Gyns (51%), with the mean respondent age being 54.4 years. Seventy-two per cent were female. Key competencies of collaboration are associated with working in rural federal states and with network participation. Physicians from rural states [odds ratio (OR) = 1.5, 95% confidence interval (CI) = 1.2, 1.9] and physicians in networks (OR = 3.0, CI = 2.3, 3.9)

were more satisfied with collaboration. Collaboration to deliver services for women aged ≥ 50 years is more systematic amongst GPs and Gyns who are members of a network; increased networking could improve collaboration, and ultimately, outcomes too.

Ubink-Veltmaat, L. J., Bilo, H. J., Groenier, K. H., et al. (2005). "Shared care with task delegation to nurses for type 2 diabetes: prospective observational study." Neth J Med **63**(3): 103-110.

BACKGROUND: To study the effects of two different structured shared care interventions, tailored to local needs and resources, in an unselected patient population with type 2 diabetes mellitus. METHODS: A three-year prospective observational study of two interventions and standard care. The interventions involved extensive (A) or limited (B) task delegation from general practitioners to hospital-liaised nurses specialised in diabetes and included a diabetes register, structured recall, facilitated generalist-specialist communication, audit and feedback, patient-specific reminders, and emphasised patient education. The target population consisted of 2660 patients with type 2 diabetes treated in the primary care setting. Patients who were terminally ill or who had been diagnosed with dementia were excluded from the study. RESULTS: The participation rates were high (90%) for patients, and none of the 64 GPs discontinued their participation in the study. Longitudinal analyses showed significant improvements in quality indicators for both intervention groups (process parameters and achieved target values on the individual patient level); in standard care, performance remained stable or deteriorated. Both patients and caregivers appeared satisfied with the project. CONCLUSION: This study shows that structured shared care with task delegation to nurses, targeted at a large unselected general practice population, is feasible and can positively affect the quality of care for patients with type 2 diabetes.

Vaartio-Rajalin, H. et Fagerstrom, L. (2019). "Professional care at home: Patient-centredness, interprofessionality and effectivity? A scoping review." Health Soc Care Community **27**(4): e270-e288.

The aim of this scoping review was to describe the state of knowledge on professional care at home with regard to different perspectives on patient-centredness, content of care, interprofessional collaboration, competence framework and effectivity. A scoping review, n = 35 papers, from four databases (EBSCO, CINAHL, Medline, Swemed) were reviewed between May and August 2018 using the terms: hospital-at-home, hospital-in-the-home, advanced home healthcare, hospital-based home care or patient-centered medical home. Criteria for inclusion in this review included full text papers, published between 2001 and 2018, in English, Swedish or Finnish. A descriptive content analysis was conducted. Patient-centredness appears to be one aim of professional care at home, but clarity is lacking regarding patient recruitment and the planning and evaluation of care. Content depends, to a certain degree, on the type of care at home and how it is organised: the more non-acute care needs, the more nurse-coordinated care and family involvement and the less interprofessionality. The competence framework presupposed for care at home was extensive yet not explicit, varying from maturity, clinical experience, collaboration skills, ongoing clinical assessment education to Master's studies or degree. The effectivity of care at home services was discussed in terms of experiential, clinical and economic aspects. Patients and their family caregivers were satisfied with care at home, but there was no consensus on clinical or economic outcomes compared with inpatient care. In the context of professional care at home, there is still a lot to do regarding patient-centredness, patient recruitment, patient and care staff education, the organisation of interprofessional collaboration and the analysis of effectivity.

Van Den Berg, N., et al. (2012). "Effect of the delegation of GP-home visits on the development of the number of patients in an ambulatory healthcare centre in Germany." BMC Health Serv Res **12**: 14, fig. http://www.biomedcentral.com/1472-6963/12/355/abstract

The AGnES-concept (AGnES: GP-supporting, community-based, e-health-assisted- , systemic intervention) was developed to support general practitioners (GPs) in undersupplied regions. The project aims to delegate GP-home visits to qualified AGnES-practice assistants, to increase the number of patients for whom medical care can be provided. This paper focuses on the effect of delegating GP-home visits on the total number of patients treated. First, the theoretical number of additional

patients treated by delegating home visits to AGnES-practice assistants was calculated. Second, actual changes in the number of patients in participating GP-practi- ces were analyzed

van den Bogaart, E. H. A., Kroese, M., Spreeuwenberg, M. D., et al. (2020). "Reorganising dermatology care: predictors of the substitution of secondary care with primary care." BMC Health Serv Res **20**(1): 510.

BACKGROUND: The substitution of healthcare is a way to control rising healthcare costs. The Primary Care Plus (PC+) intervention of the Dutch 'Blue Care' pioneer site aims to achieve this feat by facilitating consultations with medical specialists in the primary care setting. One of the specialties involved is dermatology. This study explores referral decisions following dermatology care in PC+ and the influence of predictive patient and consultation characteristics on this decision. METHODS: This retrospective study used clinical data of patients who received dermatology care in PC+ between January 2015 and March 2017. The referral decision following PC+, (i.e., referral back to the general practitioner (GP) or referral to outpatient hospital care) was the primary outcome. Stepwise logistic regression modelling was used to describe variations in the referral decisions following PC+, with patient age and gender, number of PC+ consultations, patient diagnosis and treatment specialist as the predicting factors. RESULTS: A total of 2952 patients visited PC+ for dermatology care. Of those patients with a registered referral, 80.2% (N = 2254) were referred back to the GP, and 19.8% (N = 558) were referred to outpatient hospital care. In the multivariable model, only the treating specialist and patient's diagnosis independently influenced the referral decisions following PC+. CONCLUSION: The aim of PC+ is to reduce the number of referrals to outpatient hospital care. According to the results, the treating specialist and patient diagnosis influence referral decisions. Therefore, the results of this study can be used to discuss and improve specialist and patient profiles for PC+ to further optimise the effectiveness of the initiative.

Williams, D. M., Medina, J., Wright, D., et al. (2010). "A review of effective methods of delivery of care: skill-mix and service transfer to primary care settings." Prim Dent Care **17**(2): 53-60.

AIMS: Health policy in England is seeking to minimise hospital use and provide access to services in a primary healthcare setting and maximise skill-mix, driven by issues such as cost and access. The aim of this review was to determine the effectiveness of increased use of skill-mix and service transfer within general and oral healthcare. Secondary outcome measures were related to cost, quality, access, health outcomes and satisfaction. METHODS: Data sources were the Cochrane Database of Systematic Reviews, Centre for Reviews and Dissemination DARE, British Nursing Index, CINAHL, EMBASE, MEDLINE, and PsycINFO from 1996 to August 2008. The reference lists of relevant papers were scanned to identify additional studies. DATA SELECTION: A rapid appraisal of systematic reviews, randomised controlled trials, controlled trials and service evaluations in relation to specialist services, practitioners with a special interest, medical and dental, nursing and dental care professionals, together with evidence of service shifts from secondary to primary care was undertaken. RESULTS: A total of 206 papers were reviewed. All titles and abstracts of articles and papers found were extracted and validated according to predefined criteria. They were screened for relevance by two researchers, who assessed trial quality and extracted data. Twenty-six papers met the inclusion criteria. The literature demonstrated limited evidence of the cost-effectiveness and health outcomes associated with changes in setting and skill-mix. However, there was evidence of improved access, patient and professional satisfaction. CONCLUSIONS: There is an overwhelming need for well-designed interventions with robust evaluation to examine cost-effectiveness and benefits to patients and the health workforce.

Les modes d’exercice pluridisciplinaire : des avancées notoires

Depuis 2008, en France, les pouvoirs publics accompagnent financièrement les maisons de santé pluriprofessionnelles (MSP) en espérant qu’elles attirent et maintiennent des médecins dans les espaces sous-médicalisés. Loin d’être un remède

miracle, l'exercice regroupé relève le défi de la prise en charge des maladies chroniques et répond en grande partie aux aspirations des jeunes médecins[2627]. Selon les chiffres de la Drees, les deux tiers des généralistes de moins de 40 ans exercent en groupe, contre moins de la moitié de leurs confrères de 60 ans et plus. Les maisons de santé sont un exemple de cet engouement pour l'exercice en groupe. Entre 2008 et 2020, 1 300 maisons de santé pluriprofessionnelles ont été créés[28]. Cependant malgré une réelle dynamique d'implantation, il semblerait que celle-ci ne s'accompagne pas des évolutions organisationnelles attendues[29]. Néanmoins la situation de crise sanitaire liée à la pandémie de covid-19 a conduit les professionnels des MSP à travailler autrement au sein de collectifs élargis[30]. D'autres formes d'exercice regroupé existent par, ailleurs et répondent aussi positivement aux besoins d'accès aux soins : permanence de soins des communes sans présence médicale, exercices multisites, etc. Et la loi de financement de la sécurité sociale 2018 a lancé l'expérimentation « centres et maisons de santé participatifs) dans les territoires défavorisés[31].

L'IRDES DANS CETTE PROBLEMATIQUE

Afrite, A., et al. (2013). "L'impact du regroupement pluriprofessionnel sur l'offre de soins. Objectifs et méthode d'une évaluation des maisons, pôles et centres de santé dans le cadre de l'expérimentation des nouveaux modes de rémunération." Questions D'economie De La Sante (Irdes)(189): 1-6.
http://www.irdes.fr/recherche/questions-d-economie-de-la-sante/189-l-impact-du-regroupement-pluriprofessionnel-sur-l-offre-de-soins.pdf

La pratique en groupe monodisciplinaire des médecins généralistes, attractive pour les jeunes, est désormais majoritaire. Depuis une dizaine d'années, les pouvoirs publics encouragent le regroupement pluriprofessionnel en soins de premiers recours, principalement en direction des maisons, pôles et centres de santé. Dans ce cadre, les expérimentations de nouveaux modes de rémunération (ENMR) à destination de ces structures ont été mises en œuvre en 2010. Il s'agit de financer l'amélioration de l'organisation et de la coordination des soins, de proposer de nouveaux services aux patients et de développer la coopération interprofessionnelle. À partir de l'observation des sites recensés dans l'Observatoire des recompositions de l'offre de soins ou participant aux ENMR, cet article présente les objectifs et la méthode générale d'une évaluation de ces formes de regroupement, dont la connaissance reste encore parcellaire. Deux questions principales sont posées : l'exercice collectif interprofessionnel permet-il de maintenir une offre de soins dans les zones moins bien dotées ? Est-il plus performant en termes d'activité et de productivité, de consommation et de qualité des soins ? Premier volet de cadrage méthodologique, ce Questions d'économie de la santé inaugure une série de publications de résultats.

Afrite, A. et Mousques, J. (2014). Formes du regroupement pluriprofessionnel en soins de premiers recours. Une typologie des maisons, pôles et centres de santé participant aux Expérimentations des nouveaux modes de rémunération (ENMR). Document de travail (Irdes) ; 62. Paris Irdes **:** 83.
http://www.irdes.fr/recherche/questions-d-economie-de-la-sante/201-les-formes-du-regroupement-pluriprofessionnel-en-soins-de-premiers-recours.pdf.

Ce travail s'appuie sur une enquête spécifique réalisée auprès de 147 sites participant aux ENMR sur la période 2008-2012. Cette enquête a été réalisée en deux vagues, à partir de questionnaires standardisés et administrés par Internet en 2011-2012 et en 2013. Elle décrit l'organisation de la délivrance des soins, le fonctionnement des sites et leur équipement ainsi que les processus de travail.

[26] Chevillard, G. (2015). Dynamiques territoriales et offre de soins : l'implantation des maisons de santé en France métropolitaine
[27] Fournier, C. (2015). Les maisons de santé pluriprofessionnelles, une opportunité pour transformer les pratiques de soins de premier recours : place et rôle des pratiques préventives et éducatives dans des organisations innovantes
[28] Cassou, M., Mousques, J. et Franc, C. (2021). "Exercer en maison de santé pluriprofessionnelle a un effet positif sur les revenus des médecins généralistes." Questions D'economie De La Sante (Irdes)(258).
[29] Sebai et al. (2017)
[30] Fournier, C. (2020). "Travailler en équipe en maison de santé : un questionnement éthique renouvelé." La Sante En Action(453): 35-38.
[31] Loi n° 2017-1836 du 30 décembre 2017 de financement de la sécurité sociale pour 2018 (article 51) et appel à projet du 9 août 2021.

Elle explore aussi la collaboration entre les professionnels, l'existence de pratiques innovantes ainsi que les caractéristiques et usages des systèmes d'information. Dans un premier temps, des analyses descriptives caractérisent les sites selon leurs principales dimensions structurelles, organisationnelles et fonctionnelles. Dans un second temps, afin de s'affranchir de la dimension statutaire des sites (maisons, pôles et centres de santé) et de tenir compte des dimensions considérées comme déterminantes de la performance, des méthodes factorielles d'analyses de données sont mobilisées sur un sous-échantillon de 128 sites afin d'en réaliser une typologie.

Afrite, A. et Mousques, J. (2014). "Les formes du regroupement pluriprofessionnel en soins de premiers recours. Une typologie des maisons, pôles et centres de santé participant aux Expérimentations de nouveaux modes de rémunération (ENMR)." Questions D'economie De La Sante (Irdes)(201): 1-8.
http://www.irdes.fr/recherche/questions-d-economie-de-la-sante/201-les-formes-du-regroupement-pluriprofessionnel-en-soins-de-premiers-recours.pdf

Quelles sont les caractéristiques de taille, de ressources humaines, d'équipement et d'informatisation des maisons, pôles et centres de santé participant aux Expérimentations des nouveaux modes de rémunération (ENMR) ? Leurs modalités d'organisation et de fonctionnement en matière d'offre de soins, de coordination et de coopération pluriprofessionnelles ? Ce quatrième volet de l'évaluation des sites regroupés pluriprofessionnels participant aux ENMR propose une analyse de leurs caractéristiques structurelles, organisationnelles et fonctionnelles, à partir d'une enquête réalisée auprès de 147 sites sur la période 2008-2012. Les sites ont été regroupés à partir d'analyses factorielles et de classifications aboutissant à cinq classes : deux pour les centres de santé, regroupant des professionnels salariés, et trois pour les maisons ou pôles de santé, regroupant des professionnels libéraux.

Afrite, A., et al. (2014). Une estimation de la précarité des patients recourant à la médecine générale en centres de santé. Le cas des centres de santé du projet Epidaure-CDS. Document de travail (Irdes) ; 63. Paris IRDES**:** 39.
http://www.irdes.fr/recherche/documents-de-travail/063-une-estimation-de-la-precarite-des-patients-recourant-a-la-medecine-generale-en-centres-de-sante.pdf

Le projet exploratoire Epidaure-CDS a pour objectif principal d'analyser la spécificité des centres de santé (CDS) dans l'offre de soins et de déterminer s'ils jouent un rôle particulier dans la réduction des inégalités sociales de santé, notamment en facilitant l'accès aux soins primaires pour les personnes en situation de précarité ou de vulnérabilité sociale, ce qui n'a été que peu exploré jusqu'à présent. Il s'agit ici d'estimer en quoi la population recourant à la médecine générale dans un échantillon de CDS volontaires se distingue de la population recourant généralement à la médecine générale, en termes socio-économiques, démographiques, d'état de santé et de précarité sociale. La précarité sociale est mesurée au moyen du score Epices. Mais il s'agit également de mesurer la propension des CDS à accueillir des populations précaires et vulnérables et d'évaluer le lien entre précarité et niveau de couverture en termes d'assurance maladie complémentaire (AMC).

Baudier, F., et al. (2010). "La dynamique de regroupement des médecins généralistes libéraux de 1998 à 2009." Questions D'economie De La Sante (Irdes)(157): 6.
http://www.irdes.fr/Publications/2010/Qes157.pdf

À partir des enquêtes Baromètre santé médecins généralistes de 1998, 2003 et 2009, l'Inpes et l'Irdes analysent ici, sur la base d'échantillons représentatifs au plan national, l'exercice en groupe des généralistes libéraux, ses caractéristiques et son évolution. L'exercice en groupe est aujourd'hui majoritaire. La part des médecins généralistes libéraux déclarant travailler en groupe est passée de 43 % en 1998 à 54 % en 2009. Cette augmentation est particulièrement marquée chez les médecins de moins de 40 ans qui sont près de huit sur dix à travailler en groupe. Les médecins généralistes exerçant en groupe travaillent pour les trois quarts d'entre eux dans des cabinets exclusivement composés de médecins généralistes et/ou spécialistes. Ces cabinets rassemblent en majorité deux ou trois praticiens. Le regroupement semble par ailleurs transformer le rythme de travail hebdomadaire des généralistes sans pour autant modifier leur volume d'activité sur la semaine : les généralistes exerçant en groupe déclarent en effet travailler plus souvent moins de cinq jours mais réaliser plus

d'actes par jour que les médecins exerçant seuls. La pratique de groupe est également associée à un mode d'exercice qui laisse une plus grande place à la formation, l'encadrement des étudiants et s'appuie également plus fréquemment sur l'outil informatique (résumé d'auteur).

Beaute, J., et al. (2007). Baromètre des pratiques en médecine libérale : Résultats de l'enquête 2006 "L'organisation du travail et la pratique de groupe des médecins généralistes bretons". Document de travail Irdes ; 5. Paris Irdes**:** 28 , 13 tabl.
http://www.irdes.fr/EspaceRecherche/DocumentsDeTravail/DT5BarometrePratiquesMedLib.pdf

Face aux nouveaux enjeux épidémiologiques (maladies chroniques), à l'exigence croissante en termes de qualité et d'efficience des soins ou encore les tensions de la démographie médicale, de nombreux auteurs plébiscitent un renforcement de la médecine de première ligne et des soins primaires. Le regroupement de médecins en cabinet de groupe s'inscrit dans cette logique. Il permettrait en effet, par la mutualisation des moyens, d'améliorer la production de soins et services. Toutefois, on ne dispose que de peu de données concernant la pratique de groupe en France. Davantage d'informations sont nécessaires pour envisager l'éventuelle mise en place de politiques incitatives. L'objectif de cette étude est donc de décrire la pratique de groupe, de la comparer avec la pratique individuelle et d'identifier les éventuels leviers utilisables par les décideurs publiques à travers l'identification des motivations des médecins évoluant en groupe ou non.

Bourgueil, Y. (2010). "Les apports des expériences internationales : entre substitution et diversification." Actualite Et Dossier En Sante Publique(70): 30-32.

Ce texte reprend en grande partie les éléments développés dans le rapport établi en septembre 2007 sur les enjeux économiques des nouvelles formes de coopération entre professionnels de santé, réalisé à la demande de la Haute autorité de santé.

Bourgueil, Y. (2010). "Systèmes de soins primaires : contenus et enjeux." Revue Francaise Des Affaires Sociales(3): 13-20.

L'auteur de cet article présente le contenu et les objectifs de ce numéro en clarifiant tout d'abord le concept de « soins primaires » et en pointant les enjeux de la mise en œuvre de ce type d'organisation dans le cadre de la réforme de la gouvernance des soins de santé dont sont chargées les agences régionales de santé (ARS).

Bourgueil, Y. (2013). "La mutation des modes de paiement des professionnels en soins primaires au Canada et en France." Seve : Les Tribunes De La Sante(40): 63-68.

Cet article fait état des évolutions en cours dans les modes de rémunération dans le domaine des soins primaires en comparant le Canada et la France, deux pays qui présentent des systèmes de santé proches et qui s'influencent depuis de nombreuses années. La description des modes innovants de paiement des médecins, leurs processus d'implantation, les résistances auxquelles ils font face et les résultats obtenus permettent de mettre en évidence les orientations communes des politiques menées dans les deux pays et de souligner la nécessaire continuité et globalité de ces politiques pour impacter durablement l'organisation des soins (résumé de l'éditeur).

Bourgueil, Y. (2016). Avis sur les innovations et système de santé. Document 6 : Ressources humaines et organisation du travail en santé. Paris HCAAM**:** 14.
http://www.securite-sociale.fr/IMG/pdf/document_1_-_retrospective_des_depenses_des_progres_en_matiere_de_sante_et_du_progres_medical.pdf

Ce texte vise à souligner l'importance de la ressource humaine dans l'organisation du travail et le fonctionnement des services de santé et donc de sa régulation comme outil et levier de toute politique de santé. Il propose dans une première partie des éléments de compréhension sur les déterminants de l'organisation du travail en santé et illustre dans un deuxième temps les spécificités de l'innovation organisationnelle en santé telles qu'elles se sont déployées en France ces 20 dernières

années et propose en conclusion quelques éléments d'appui pour la transformation de l'organisation des soins notamment ambulatoires.

Bourgueil, Y., et al. (2009). "Une évaluation exploratoire des maisons de santé pluridisciplinaires de Franche-Comté et de Bourgogne." Questions D'economie De La Sante (Irdes)(147): 8. http://www.irdes.fr/Publications/Qes/Qes147.pdf

Les maisons de santé pluridisciplinaires, qui regroupent dans un cadre d'exercice libéral des professionnels médicaux et paramédicaux, se développent un peu partout en France. Dans un contexte de crise de la démographie médicale et d'inégalité de répartition géographique de l'offre de soins, cette forme d'organisation est perçue comme un moyen de maintenir une offre de santé suffisante sur le territoire, moderne et de qualité, tout en améliorant les conditions d'exercice des professionnels. Une évaluation exploratoire de neuf maisons de santé pluridisciplinaires menée dans les régions de Franche-Comté et de Bourgogne confirme que ces structures, comparées à la pratique moyenne en médecine générale, permettent un meilleur équilibre entre vie personnelle et cadre d'exercice des professionnels. Les maisons de santé pluridisciplinaires présentent d'autres avantages : une plus grande accessibilité horaire, une coopération effective entre les professionnels notamment entre généralistes et infirmières, une gamme étendue de l'offre de soins. La qualité du suivi des patients diabétiques de type 2 semble également meilleure dans les maisons de santé pluridisciplinaires malgré la forte hétérogénéité des résultats. À ce stade, on ne peut conclure à l'augmentation ou à la réduction des dépenses de soins de ville des patients suivis en maisons de santé pluridisciplinaires.

Bourgueil, Y. et Elbaum, M. (2007). Les enseignements de la politique des réseaux et des maisons pluridisciplinaires de santé. Enjeux économiques des coopérations entre professionnels de santé : Rapport du groupe de travail présidé par Mireille Elbaum., St Denis : HAS**:** 261-291.

L'objet de cette note est d'analyser dans un laps de temps court, les enseignements en termes de coopération des professions de santé, des multiples expériences de réseaux qui se sont succédées au fur et à mesure des évolutions de la définition et de la politique des réseaux. (Réseaux villes-hôpital, puis des réseaux « Soubie » puis des réseaux de santé financés dans le cadre de la Dotation Nationale des Réseaux). La note présente trois parties distinctes. La première partie propose un cadre conceptuel global de la coopération permettant d'interroger la contribution des réseaux à la coopération mais permettant également de préciser et distinguer les leviers disponibles entre réorganisation des rôles professionnels et réorganisation des services de soins. La deuxième partie est plus spécifiquement consacrée à la description des travaux d'évaluation des réseaux de santé et des maisons de santé pluridisciplinaires. Enfin la troisième partie discute les principaux enseignements que nous retenons de l'analyse des réseaux et des maisons de santé pluridisciplinaires et propose quelques pistes de réflexion et d'action pour renforcer les différents aspects de la coopération telle que définit initialement.

Bourgueil, Y., et al. (2007). "Médecine de groupe en soins primaires dans six pays européens, en Ontario et au Québec : quels enseignements pour la France ?" Questions D'economie De La Sante (Irdes)(127): 1-8. http://www.irdes.fr/Publications/Qes/Qes127.pdf

En France, la médecine de groupe en soins ambulatoires, souvent appelés soins primaires à l'étranger, est peu développée comparativement à d'autre pays. En Finlande et en Suède, le regroupement s'opère dans des structures publiques locales avec des équipes multidisciplinaires, tandis qu'au Canada, aux Pays-Bas et au Royaume-Uni, il s'organise dans des structures privées gérées par des professionnels de santé indépendants dans un cadre contractuel. Parmi les facteurs explicatifs forts du regroupement, on relève d'une part une réelle volonté politique de placer les soins primaires au cœur du système, et d'autre part l'évolution de la demande et de l'offre de soins : augmentation de la demande de soins dans un contexte de baisse de la densité médicale, nécessité d'une meilleure coordination des soins, recherche de conditions et de temps de travail moins contraignants? On perçoit également des règles et des pratiques nouvelles : mécanismes d'inscription volontaire des patients auprès d'un médecin en groupe, développement de la coopération entre professions de

santé, modification de la rémunération des médecins et nouveaux contrats entre groupes et autorités de santé. Certains de ces signes sont tangibles en France, précurseurs certainement d'une accélération du processus de regroupement des médecins.

Bourgueil, Y., et al. (2007). Médecine de groupe en soins primaires dans six pays européens, en Ontario et au Québec : état des lieux et perspectives. Rapport (Irdes) ; 1675. Paris Irdes**:** 175 , tabl., ann. http://www.irdes.fr/Publications/Rapports2007/rap1675.pdf

En France, si la médecine de groupe tend à augmenter, elle reste moins développée que dans d'autres pays, notamment dans les disciplines cliniques de premiers recours comme la médecine générale, qualifiées à l'étranger de « soins primaires ». Dans l'objectif d'éclairer la situation française, la situation du regroupement des médecins généralistes a été analysée dans six pays européens et deux provinces canadiennes. Dans les pays où la médecine de groupe est majoritaire (Finlande, Pays-Bas, Royaume-Uni, Suède, Québec et Ontario), les processus de regroupement et les modes d'exercice des médecins sont variés. En Suède et en Finlande, le regroupement s'opère dans des structures publiques locales avec des équipes multidisciplinaires, tandis qu'au Canada, aux Pays-Bas et au Royaume-Uni, il s'organise dans des structures privées gérées par des professionnels de santé indépendants dans un cadre contractuel. Les pays où la médecine de groupe est minoritaire (Allemagne, Belgique et Italie) se dirigent pour la plupart, comme c'est le cas pour la France, vers un exercice plus collectif de la médecine générale. Les politiques incitant au regroupement des médecins généralistes s'accompagnent le plus souvent de pratiques nouvelles : mécanismes d'inscription volontaire des patients auprès d'un médecin en groupe, coopération entre professions de santé, modification de la rémunération des médecins, etc. L'importance de la place accordée aux soins primaires dans chaque pays, de même que l'évolution de la demande et de l'offre de soins à partir des années quatre-vingt-dix, semblent constituer des déterminants importants du regroupement.

Bourgueil, Y., et al. (2009). "La pratique collective en soins primaires dans six pays européens, en Ontario et au Québec : état des lieux et perspectives dans le contexte français." Sante Publique **21**(4): S27-S38.

En France, la médecine de groupe en soins ambulatoires est peu développée comparativement à d'autres pays. En Finlande et en Suède, le regroupement des médecins s'opère dans des structures publiques locales avec des équipes multidisciplinaires, tandis qu'au Canada, aux Pays-Bas et au Royaume-Uni, il s'organise dans des structures privées gérées par des professionnels de santé indépendants dans un cadre contractuel. Parmi les facteurs explicatifs du regroupement, on relève, d'une part, une réelle volonté politique de placer les soins primaires au c?ur du système et, d'autre part, l'effet d'évolutions sociologiques, démographiques et épidémiologiques. Le regroupement s'accompagne souvent de règles et de pratiques nouvelles: mécanismes d'inscription volontaire des patients auprès d'un médecin exerçant en groupe, développement de nouvelles coopérations entre professions de santé, modification de la rémunération des médecins et nouveaux contrats entre groupes et autorités de santé. Certains signes sont tangibles en France, précurseurs certainement d'une accélération du processus de regroupement des médecins.

Bourgueil, Y. D. (2016). L'évaluation économique et la recherche sur les services de santé. Rapport(Irdes) ; 565. Paris Irdes **:** 63.
http://www.irdes.fr/recherche/rapports/565-l-evaluation-economique-et-la-recherche-sur-les-services-de-sante.pdf

Ce rapport présente les actes du colloque international organisé par la Direction de la recherche, des études, de l'évaluation et des statistiques (Drees) en collaboration avec l'Institut de recherche et documentation en économie de la santé (Irdes), à Paris, le 1er décembre 2014. Les acteurs en situation de gérer les ressources collectives en santé doivent effectuer de multiples choix : priorités d'actions, programmes de prévention, allocation de ressources, modes d'organisation, de rémunération… L'objectif de ce colloque a été de présenter des méthodes et des travaux d'évaluation qui permettent d'éclairer la décision publique et l'engagement dans les processus de changement des organisations de soins. La nette amélioration de la finesse des données de santé collectées ainsi que le développement des méthodes d'analyse transforment la façon de répondre à ces problématiques.

L'évaluation économique et la recherche sur les services de santé apportent des éléments d'objectivation et d'analyse qui sont à même d'enrichir les débats et de renforcer la légitimité de décisions publiques souvent au cœur d'intérêts contradictoires. Cette journée s'est inscrite dans la perspective d'un renforcement des démarches d'évaluation. Elle a visé à apporter des repères méthodologiques et à développer les échanges au travers d'expériences internationales et françaises. Ces expériences, aussi bien nationales que régionales, permettront des regards croisés sur les modalités d'élaboration, de mise en œuvre et d'utilisation pour l'action publique de travaux d'évaluation économique et de recherche sur les services de santé.

Cassou, M., Mousques, J. et Franc, C. (2021). "Exercer en maison de santé pluriprofessionnelle a un effet positif sur les revenus des médecins généralistes." Questions D'economie De La Sante (Irdes)(258): 8. https://www.irdes.fr/recherche/questions-d-economie-de-la-sante/258-l-exercice-en-maison-de-sante-pluriprofessionnelle-a-un-effet-positif-sur-les-revenus-des-medecins-generalistes.pdf

Entre 2008 et 2020, 1 300 Maisons de santé pluriprofessionnelles (MSP) ont été créées en France ; elles sont très majoritairement implantées dans les territoires médicalement défavorisés. Le profil des médecins généralistes y exerçant est aussi particulier. Ainsi, ceux qui ont rejoint une MSP entre 2008 et 2014 étaient un peu plus jeunes en moyenne que leurs homologues et exerçaient plus fréquemment une activité salariée en sus de leur activité libérale. Au cours de la période 2008-2014, les revenus des médecins généralistes ayant choisi d'exercer dans une MSP progressent plus rapidement que ceux de leurs confrères. Cela s'explique notamment par une augmentation plus rapide de la taille de leur file active et donc des rémunérations forfaitaires qui y sont associées. Pour autant, l'évolution du nombre de leurs consultations et visites n'apparaît pas significativement différente. La capacité des médecins en MSP à accroître leur patientèle sans augmenter le nombre d'actes dispensés peut s'interpréter comme un effet direct de la coordination entre professionnels de la MSP. Compte tenu de l'implantation géographique des MSP, plutôt en zone faiblement dotée en médecins généralistes, cette hausse de la taille de la patientèle peut également s'interpréter comme une amélioration de l'accès aux soins. Par ailleurs, cette croissance plus rapide de la patientèle pour les médecins exerçant en MSP ne semble pas avoir été réalisée au détriment de la qualité évaluée au sens de la Rémunération sur objectifs de santé publique (Rosp).

Cassou, M., Mousques, J. et Franc, C. (2021). Revenu et activité des médecins généralistes : impact de l'exercice en regroupement pluriprofessionnel en France. Document de travail Irdes ; 84. Paris Irdes**:** 35. https://www.irdes.fr/recherche/documents-de-travail/084-revenu-et-activite-des-medecins-generalistes-impact-de-l-exercice-en-regroupement-pluriprofessionnel-en-france.pdf

La France a d'abord expérimenté en 2009, puis généralisé, un paiement à la coordination au niveau de la structure pour promouvoir les regroupements pluriprofessionnels en Maison de santé pluriprofessionnelle (MSP). L'exercice en équipe vise à améliorer à la fois l'efficacité de l'offre de soins ambulatoires et l'attractivité pour les professionnels de santé, notamment dans les territoires médicalement défavorisés. Afin d'évaluer l'attractivité financière, et donc la pérennité des MSP, nous avons analysé l'évolution des revenus (revenus libéraux et salariés) des médecins généralistes (MG) exerçant en MSP par rapport à ceux des autres MG. Nous avons également étudié les impacts de l'exercice en MSP sur l'activité des MG, en termes de quantité de services médicaux fournis et de nombre de patients rencontrés. Nous avons tenu compte des biais de sélection en MSP en nous fondant, à partir de données de panel sur la période 2008-2014, sur un design quasi-expérimental associant : 1) la constitution d'un groupe de MG témoins afin d'équilibrer la répartition des médecins généralistes, à partir d'un appariement exact (coarsened exact matching, CEM) ; 2) des analyses paramétriques en type différence de différences avec effets fixes (individuels et temporels) pour tenir compte de l'hétérogénéité non observée. Nous montrons que les MG ayant choisi d'exercer dans une MSP au cours de la période ont vu leurs revenus augmenter de 2,5 % de plus que les autres MG ; le nombre de patients rencontrés par les MG (88 de plus) a davantage augmenté sans entraîner une augmentation plus importante des actes fournis. Une analyse transversale complémentaire pour l'année 2014 a montré que ces changements n'avaient pas d'impact négatif sur la qualité au sens de la Rémunération sur objectifs de santé publique (Rosp). Par conséquent, nos résultats suggèrent que les préférences en termes d'activité et de revenu ne devraient pas constituer un obstacle au

développement des MSP et que l'exercice en MSP pourrait améliorer l'accès des patients aux services de soins de premier recours.

Chevillard, G. et Mousques, J. (2020). "Les maisons de santé attirent-elles les jeunes médecins généralistes dans les zones sous-dotées en offre de soins ?" Questions D'economie De La Sante (Irdes)(247): 8.
https://www.irdes.fr/recherche/questions-d-economie-de-la-sante/247-les-maisons-de-sante-attirent-elles-les-jeunes-medecins-generalistes-dans-les-zones-sous-dotees-en-offre-de-soins.pdf

L'accessibilité géographique aux médecins généralistes diminue et les inégalités territoriales s'aggravent. Les territoires où l'accessibilité diminue le plus sont aussi les plus éloignés des pôles d'emplois, des équipements et des services. L'implantation des médecins généralistes s'inscrit donc dans une problématique territoriale plus générale. Elle est aussi, compte tenu de l'importance des questions de santé pour la population, un élément clé de la politique d'aménagement du territoire. Dans ce contexte, cette étude mesure l'impact des maisons de santé pluriprofessionnelles sur l'évolution de la densité des médecins généralistes en distinguant les effets selon les territoires et les catégories d'âge des médecins. Dans les territoires avec une faible accessibilité aux soins, l'ouverture de maisons de santé favorise-t-elle l'installation et le maintien de nouveaux médecins généralistes ? Permet-elle la consolidation et le maintien d'une offre de médecins ? L'étude compare l'évolution dans le temps de la densité de médecins généralistes entre des territoires avec maisons de santé et des territoires aux caractéristiques voisines mais sans maison de santé. Les résultats montrent que les territoires de vie avec une faible accessibilité aux soins et dans lesquels sont implantées des maisons de santé connaissent une meilleure évolution de l'offre de soins et attirent davantage les jeunes médecins généralistes de moins de 40 ou 45 ans. Ainsi, dans les espaces périurbains ayant une moindre accessibilité aux soins primaires, leurs arrivées sont supérieures aux départs et les maisons de santé participent donc à rééquilibrer la répartition de l'offre de soins. Dans les marges rurales peu attractives et aux populations fragiles, elles ont un effet positif en atténuant la diminution de l'offre due aux départs en retraite, mais cet effet est à lui seul insuffisant pour inverser la dynamique démographique défavorable. D'autres mesures complémentaires sont donc nécessaires dans ces territoires.

Chevillard, G., et al. (2013). "Répartition géographique des maisons et pôles de santé en France et impact sur la densité des médecins généralistes libéraux. Deuxième volet de l'évaluation des maisons, pôles et centres de santé dans le cadre des expérimentations des nouveaux modes de rémunération (ENMR)." Questions D'economie De La Sante (Irdes)(190): 1-8.
http://www.irdes.fr/recherche/questions-d-economie-de-la-sante/190-repartition-geographique-des-maisons-et-poles-de-sante-en-france-et-impact-sur-la-densite-des-medecins-generalistes-liberaux.pdf

Les maisons de santé sont-elles implantées dans des espaces où l'offre de soins est fragile et les besoins importants ? Le développement de ces structures a-t-il eu un effet sur l'évolution de la densité de médecins généralistes ? Ce deuxième volet de l'évaluation des sites regroupés pluriprofessionnels participant aux expérimentations des nouveaux modes de rémunération (ENMR) traite ces deux questions concernant les maisons de santé recensées par l'Observatoire des recompositions de l'offre de soins. Il s'appuie sur deux typologies caractérisant les situations socio-économiques et sanitaires des espaces français, l'une sur des espaces à dominante rurale, l'autre sur des espaces à dominante urbaine. À partir des classes de bassins de vie et de pseudo-cantons ainsi définies, les densités de médecins généralistes y exerçant sont comparées sur deux périodes consécutives 2004-2008 et 2008-2011, selon que ces espaces abritent ou non une maison de santé.

Chevillard, G., et al. (2013). Maisons et pôles de santé : places et impacts dans les dynamiques territoriales d'offre de soins en France. Document de travail (Irdes) ; 57. Paris IRDES**:** 56.
http://www.irdes.fr/recherche/documents-de-travail/057-maisons-et-poles-de-sante-places-et-impacts-dans-les-dynamiques-territoriales-d-offre-de-soins-en-france.pdf

Depuis une dizaine d'années, les pouvoirs publics encouragent le regroupement pluriprofessionnel en soins de premiers recours, notamment en direction des maisons et pôles de santé. Ces structures ont pour vocation première de maintenir ou renforcer l'offre de soins dans les espaces fragiles. Cette étude décrit les espaces dans lesquels sont implantés les maisons et pôles de santé, et analyse l'évolution de la densité de médecins généralistes dans ces espaces. Deux typologies ont été réalisées,

qui distinguent les espaces à dominante urbaine et à dominante rurale, permettant une analyse spécifique de ceux-ci. Ces typologies décrivent les espaces d'implantation des maisons et pôles de santé selon les caractéristiques de la population, de l'offre de soins et de la structure spatiale de ceux-ci. Ces typologies permettent, dans un second temps, d'analyser l'évolution de la densité de médecins généralistes dans ces espaces, selon qu'ils abritent ou non des maisons et pôles de santé. Les premiers résultats montrent que ces structures sont majoritairement implantées dans des espaces à dominante rurale plus fragiles en termes d'offre de soins, ce qui suggère une logique d'implantation des maisons et pôles de santé qui répond à l'objectif de maintenir une offre là où les besoins sont importants. On observe une moindre diminution de la densité des médecins généralistes entre 2008 et 2011 dans ces espaces, comparés à ceux du même type mais sans maisons et pôles de santé. Dans les espaces à dominante urbaine, dans lesquels ces structures sont moins présentes, la logique d'implantation suggère également une logique de rééquilibrage de l'offre de soins de premiers recours en faveur des espaces périurbains moins dotés. En outre, on constate une évolution plus favorable de la densité de médecins généralistes

Chevillard, G., et al. (2015). "Mesure de l'impact d'une politique publique visant à favoriser l'installation et le maintien de médecins généralistes : L'exemple du soutien au développement des maisons et pôles de santé en France." Revue D'economie Regionale & Urbaine(4): 657-694.

Cet article propose une première évaluation des maisons et pôles de santé à travers une démarche mobilisant des outils géographique et économétrique. L'objectif de cette double démarche est l'analyse de l'implantation de ces structures, puis une analyse de l'impact de celles-ci sur la densité de médecins généralistes libéraux. La méthodologie repose sur l'élaboration de typologies spatiales, puis d'une analyse cas-témoin comparant l'évolution de la densité de médecins généralistes dans les espaces avec et sans maisons de santé, avant et après la généralisation de cette politique. Les résultats obtenus mettent en évidence une implantation davantage rurale de ces structures, de surcroît dans des espaces fragiles, ainsi qu'une moindre diminution de l'offre dans certains espaces ruraux et périurbains dotés de maisons et pôles de santé.

Chevillard, G., et al. (2016). "Dépeuplement rural et offre de soins de premiers recours : quelles réalités et quelles solutions ?" Espace Populations Societes **2015/3-2016/1** 1-19.
http://eps.revues.org/6177

Les espaces ruraux en dépeuplement ont été peu explorés du point de vue de l'offre de soins de premiers recours et des besoins des populations résidentes, alors que ces questions y occupent une place importante. Ce travail caractérise les espaces en dépeuplement comparativement aux autres espaces ruraux à partir d'une typologie socio-sanitaire et d'une approche statistique nationale. Il met en évidence le déclin plus prononcé de l'offre de médecins généralistes libéraux dans ces espaces, alors que les besoins sanitaires demeurent élevés. Cette contribution évalue également les effets des maisons de santé mises en place pour attirer et maintenir des médecins généralistes dans les zones sous-dotées. Les maisons de santé permettent de diminuer l'érosion de l'offre de médecins généralistes dans certains espaces en dépeuplement, mais pas dans l'ensemble de ceux-ci appelant à des mesures plus larges ou spécifiques (résumé d'auteur).

Chevillard, G. et Mousquès, J. (2020). "Les maisons de santé attirent-elles les jeunes médecins généralistes dans les zones sous-dotées en offre de soins ?" Questions d'économie de la santé(247).

Fournier, C. (2020). "Travailler en équipe en maison de santé : un questionnement éthique renouvelé." La Sante En Action(453): 35-38.
https://www.santepubliquefrance.fr/docs/travailler-en-equipe-en-maison-de-sante-un-questionnement-ethique-renouvele

Une part croissante de la population fait face à des problématiques de santé chroniques, souvent rendues plus complexes par leur intrication avec les situations sociales des personnes. Insatisfaits des réponses qui peuvent être apportées à ces problèmes dans des conditions d'exercice solitaire, certains professionnels de santé libéraux de premier recours s'engagent depuis une quinzaine d'années dans des

pratiques différentes, au sein de nouvelles organisations qui reçoivent un soutien des pouvoirs publics : les maisons de santé pluriprofessionnelles (MSP). Ils réinventent ainsi d'une certaine manière une médecine sociale pratiquée par les professionnels de santé salariés des centres de santé, restée longtemps minoritaire et combattue par la plupart des syndicats de médecins, mais qui connaît aussi aujourd'hui un renouveau. L'exercice en MSP implique des transformations de pratiques qui présentent pour les professionnels un choc culturel et des questionnements éthiques. Dans certains territoires, la situation de crise liée à la pandémie de Covid-19 a conduit les professionnels des MSP à travailler autrement ensemble et au sein de collectifs élargis. Quelles transformations de l'organisation territoriale des soins primaires peut-on attendre de ces nouvelles pratiques et de ces nouvelles organisations ? Quels enjeux politiques révèlent-elles ?

Fournier, C., et al. (2018). "Action de santé libérale en équipe (Asalée) : un espace de transformation des pratiques en soins primaires." Questions D'economie De La Sante (Irdes)(232): 1-8.
http://www.irdes.fr/recherche/questions-d-economie-de-la-sante/232-action-de-sante-liberale-en-equipe-asalee.pdf

Le dispositif expérimental Asalée (Action de santé libérale en équipe) a été créé en 2004 afin d'améliorer la prise en charge des maladies chroniques en médecine de ville. Un protocole de coopération permet des délégations d'actes ou d'activités des médecins généralistes vers des infirmières comprenant des dépistages et des suivis de pathologies chroniques. Dans le cadre du programme d'évaluation Daphnee, une recherche sociologique fondée sur une approche qualitative a été menée entre 2015 et 2017. Elle s'est intéressée d'une part au déploiement et à l'organisation du dispositif Asalée et, d'autre part, aux pratiques et interactions entre patients et professionnels. D'autres aspects de cette évaluation donneront lieu à des publications de l'Irdes, notamment une typologie de la coopération entre médecins et infi rmières et des résultats concernant l'effet du dispositif Asalée sur l'activité des médecins, le suivi et les parcours de soins de leurs patients.

Fournier, C. (2015). Les maisons de santé pluriprofessionnelles, une opportunité pour transformer les pratiques de soins de premier recours : place et rôle des pratiques préventives et éducatives dans des organisations innovantes. Paris Université Paris 11, Université de Paris 11. Orsay. FRA. **Thèse de doctorat Santé Publique - sociologie:** 337.
https://tel.archives-ouvertes.fr/tel-01149605/

L'exercice des soins de premier recours en maisons et pôles de santé pluriprofessionnels (MSP) connaît depuis quelques années un développement croissant. Ces modalités d'exercice sont présentées comme une solution aux défis que représentent le vieillissement de la population, l'augmentation de la prévalence des maladies chroniques, l'accentuation des inégalités sociales de santé et l'irrésistible croissance des dépenses de santé. Elles s'inscrivent dans une remise en cause du système de santé français, construit historiquement sur un modèle curatif hospitalo-centré et sur une médecine de ville d'exercice libéral et isolé. L'impératif d'un recentrage du système sur les soins de premier recours devient un objectif partagé par l'Etat et certains professionnels libéraux, associé à celui de leur réorganisation pour en accroître la dimension préventive et éducative, dans une approche de santé publique collective, populationnelle et mieux coordonnée au niveau d'un territoire. Comment les soins primaires se transforment-ils dans les MSP ? Dans les dynamiques observées, quels places et rôles jouent les pratiques préventives et éducatives ? Ces questions sont abordées avec une posture de recherche engagée, inscrite dans une réflexion méthodologique et politique, articulant des approches médicale, de santé publique et sociologique (extrait du résumé de l'auteur).

Fournier, C., et al. (2016). Les pratiques pluriprofessionnelles dans des maisons de santé libérales : attentes, contenus, interactions et instruments mobilisés. Intervenir en première ligne : les professions de santé libérales face au défi de la santé de proximité., Paris : Editions de l'Harmattan**:** 109-122.

L'organisation des "soins de première ligne" est au cœur de la Stratégie nationale de santé et du projet de loi portés en France depuis 2013 par la ministre des Affaires sociales, de la santé et des droits des femmes.

Fournier, C., et al. (2014). "Dynamiques professionnelles et formes de travail pluriprofessionnel dans les maisons et pôles de santé. Analyse qualitative dans le cadre des Expérimentations des nouveaux modes de rémunération (ENMR)." Questions D'economie De La Sante (Irdes)(200): 1-8.
http://www.irdes.fr/recherche/questions-d-economie-de-la-sante/200-dynamiques-professionnelles-et-formes-de-travail-pluriprofessionnel-dans-les-maisons-et-poles-de-sante.pdf

Cette recherche de nature qualitative sur les dynamiques professionnelles, les formes de travail pluriprofessionnel et le rôle des Expérimentations des nouveaux modes de rémunération (ENMR) porte sur un échantillon de quatre maisons et pôles de santé (MSP) choisis parmi les 114 qui y participent. Cet article, qui s'appuie sur une analyse plus approfondie (Fournier et al., 2014), est le troisième d'une série. Le premier présentait les objectifs et la méthodologie générale de l'évaluation (Afrite et al., 2013). Le deuxième s'intéressait à la répartition géographique des maisons et pôles de santé et à son impact sur la densité des médecins généralistes (Chevillard et al., 2013 a et b). Cette recherche exploratoire poursuit trois objectifs : étudier les conditions d'émergence du travail pluriprofessionnel et la diversité des formes qu'il prend dans l'échantillon enquêté ; formuler des hypothèses concernant la nature des principaux facteurs influençant le regroupement et le travail pluriprofessionnel, en particulier, le rôle joué par les Expérimentations de nouveaux modes des rémunération (ENMR) ; enfin, alimenter le débat sur les éléments à prendre en compte dans l'optique d'une généralisation (résumé d'auteur).

Fournier, C., et al. (2014). Dynamiques et formes du travail pluriprofessionnel dans les maisons et pôles de santé. Recherche qualitative dans le cadre des Expérimentations des nouveaux modes de rémunération en maisons et pôles de santé (ENMR). Rapport (Irdes) ; 557. Paris IRDES**:** 76.
http://www.irdes.fr/recherche/rapports/557-dynamiques-et-formes-du-travail-pluriprofessionnel-dans-les-maisons-et-poles-de-sante.pdf

A partir d'entretiens réalisés avec les professionnels de quatre maisons et pôles de santé, cette recherche qualitative explore les modalités de mise en œuvre de l'exercice pluriprofessionnel au sein de ces structures regroupées et complète l'évaluation quantitative effectuée par l'Irdes dans le cadre des Expérimentations des nouveaux modes de rémunération (ENMR). Trois objectifs ont sous-tendu cette recherche : observer les conditions d'émergence et les différentes formes du travail pluriprofessionnel au sein des quatre structures, distinguer les facteurs influençant son développement et, en particulier, le rôle joué par les financements collectifs attribués spécifiquement pour faciliter la mise en place d'actions pluriprofessionnelles, réfléchir aux conditions d'une généralisation réussie de cette expérimentation.

Morize, N., Bourgeois, I. et Fournier, C. (2021). "Renouveler l'action publique en santé : un article (51) pour expérimenter avec les organisations de santé." Questions D'economie De La Sante (Irdes)(261): 1-8.
https://www.irdes.fr/recherche/questions-d-economie-de-la-sante/261-renouveler-l-action-publique-en-sante-un-article-51-pour-experimenter-avec-les-organisations-de-sante.pdf

L'article 51 de la Loi de financement de la Sécurité sociale (LFSS) pour 2018 permet la mise en place d'expérimentations de financements dérogatoires au droit commun pour les acteurs du secteur de la santé. Parmi elles, les expérimentations d'un Paiement en équipe de professionnels de santé en ville (Peps) et d'une Incitation à une prise en charge partagée (Ipep) visent à faire évoluer les modes de financement des soins primaires en France, jusqu'alors largement dispensés par des professionnels de santé libéraux dont la rémunération est principalement à l'acte. Cependant, pour mettre en place ces évolutions au niveau local, les équipes du ministère en charge de la santé et de la Caisse nationale de l'Assurance maladie (Cnam) doivent articuler deux objectifs : composer avec les enjeux des différents acteurs du dispositif afin d'expérimenter ensemble, tout en créant des dispositifs généralisables que le plus grand nombre pourra s'approprier et qui soient adaptés aux contraintes du système de santé. Comment les équipes nationales articulent-elles ces deux dimensions ? Cette enquête s'appuie sur une méthodologie qualitative mobilisant l'analyse de documents et d'une trentaine d'entretiens semi-directifs, menés entre octobre 2019 et juin. Elle montre comment les équipes nationales s'organisent pour expérimenter et sortir des processus habituels en détaillant, d'abord, la manière dont le dispositif de l'article 51 et des expérimentations a été conçu. Puis l'analyse des processus de sélection des

expérimentateurs et d'élaboration des cahiers des charges, qui définiront précisément les modèles économiques des expérimentations, souligne comment les cadres d'interaction entre professionnels de santé et pouvoirs publics se renouvellent.

Mousques, J. (2011). "Le regroupement des professionnels de santé de premiers recours : quelles perspectives économiques en termes de performance ?" Revue Francaise Des Affaires Sociales(2-3): 254-275.

Le regroupement des médecins spécialisés en médecine générale avec d'autres professionnels connaît un intérêt croissant. Cette dynamique, qui jusqu'à récemment a essentiellement été portée par les choix des professionnels et l'évolution de leurs aspirations, fait désormais l'objet d'accompagnements spécifiques de la part des pouvoirs publics. Il n'en reste pas moins que le regroupement en ambulatoire en France autour du généraliste, qui est documenté de façon parcellaire, est moins développé, de moins grande taille et moins pluriprofessionnel que dans d'autres pays. Après une description de la dynamique professionnelle et institutionnelle en faveur de l'exercice regroupé en ambulatoire, cet article se propose de faire, à travers une revue de littérature internationale, un état des lieux économique, théorique et empirique sur le lien entre regroupement et performance afin de tirer des enseignements tant sur les politiques qui accompagnent en France le développement du regroupement que sur les perspectives de recherche autour de l'exercice en groupe. Cette revue de la littérature actualise et étend le champ d'analyse d'une précédente revue conduite par Pope et Burge (1996) (résumé d'auteur).

Mousques, J. (2014). Soins primaires et performance : de la variabilité des pratiques des médecins généralistes au rôle de l'organisation des soins. Paris Université Paris Dauphine, Université Paris-Dauphine. Ecole doctorale de Dauphine. Paris. FRA. **Thèse de doctorat de sciences économiques.:** 182.

La recherche économique considère le médecin généraliste comme un agent offrant à l'échange information et services intellectuels en santé à des principaux. L'imparfaite convergence entre leurs objectifs, comme la présence d'incertitudes et d'asymétries d'information, conduisent le médecin à « fixer » les quantités, l'effort fourni et la qualité des soins et services rendus. Cette thèse vise à identifier le rôle des caractéristiques des généralistes, de leur mode d'exercice ou d'organisation, sur la performance de leur activité, en s'appuyant sur trois articles. Le premier analyse les déterminants de la variabilité de prescription d'antibiotiques pour rhinopharyngite aiguë, le second évalue l'impact du travail en équipe avec des infirmières sur la qualité et l'efficience des soins pour les patients diabétiques, et le troisième évalue l'impact de l'exercice regroupé pluriprofessionnel sur l'activité et l'efficience productive des généralistes et l'efficience des recours aux soins ambulatoires de leurs patients. Ces travaux de recherche permettent d'interroger la faiblesse relative de la régulation de l'offre de soins ambulatoire en France en matière de politique de maîtrise de l'évolution des dépenses de santé en comparaison de celle portant sur la demande.

Mousques, J., et al. (2014). L'évaluation de la performance des maisons, pôles et centres de santé dans le cadre des Expérimentations des nouveaux modes de rémunération (ENMR) sur la période 2009-2012. Rapport (Irdes) ; 559. Paris IRDES**:** 157.
www.irdes.fr/recherche/rapports/559-l-evaluation-de-la-performance-des-maisons-poles-et-centres-de-sante-dans-le-cadre-des-enmr.pdf

L'exercice pluriprofessionnel en soins primaires se développe en France sous les formes nouvelles de maisons et pôles de santé et, celle, plus ancienne de centres de santé. Souvent à l'initiative de professionnels, ces nouvelles organisations rencontrent l'intérêt des pouvoirs publics dans la mesure où elles permettraient de maintenir une offre de soins dans les zones déficitaires mais également le déploiement d'activités de soins plus cordonnées et plus efficientes. Parmi les incitations au renforcement de ces organisations innovantes, des Expérimentations de nouveaux modes de rémunération (ENMR) à destination de groupes pluriprofessionnels en soins de premiers recours ont été mises en œuvre en 2010 et ont récemment été étendues jusqu'à fin 2014. Elles visent à financer des activités de coordination de nouveaux services aux patients. Ces nouveaux services se déclinent en programmes d'éducation thérapeutique collective et de coopération entre généralistes et infirmiers au sein des maisons, pôles et centres de santé, sur la base de paiements forfaitaires complémentaires

de la rémunération à l'acte des individus ou des structures. Ces innovations organisationnelles posent deux questions principales au regard des attentes qu'elles suscitent : l'exercice collectif interprofessionnel permet-il de maintenir une offre de soins dans les zones moins bien dotées ? Est-il plus performant en termes d'activité et de productivité des professionnels, de consommation de soins des bénéficiaires, et de qualité des soins et services rendus ? Ce rapport tente de répondre à ces questions au moyen d'une évaluation de l'impact du regroupement pluriprofessionnel tel qu'observé pour les sites participant aux ENMR. Cette évaluation n'a donc pas pour principal objectif de mesurer l'impact des financements reçus par les ENMR même si certaines analyses permettent de s'en faire une idée.

Mousques, J., et al. (2010). Effect of a french experiment of team work between general practitioners and nurses on efficacy and cost of type 2 diabetes patients care. Document de travail (Irdes) ; 29. Paris Irdes**:** 17. http://www.irdes.fr/EspaceAnglais/Publications/WorkingPapers/DT29EffectExperGenePractiNursesDiabetPatientsCare.pdf

Cette étude a pour objectif d'évaluer l'efficacité et les coûts dune expérimentation de travail en équipe entre des infirmières et des généralistes (l'expérimentation ASALEE), dans le cas de la prise en charge des patients souffrant de diabète de type 2. Elle s'appuie sur un design cas/témoin dans lequel nous comparons l'évolution des résultats de soins en termes de processus (procédures standards de suivi) et de résultat final (le contrôle glycémique), ainsi qu'en termes de coûts. Cette comparaison est réalisée entre deux périodes consécutives et entre des patients diabétiques de type 2 suivis dans l'expérimentation (le groupe d'intervention) ou dans le groupe témoin (le groupe contrôle). Nous montrons qu'après onze mois de suivi, les patients ASALEE, comparés à ceux du groupe témoin, ont une plus grande probabilité de rester ou devenir bien suivis en termes d'indicateurs de processus (OR compris entre 2.1 à 6.8, p < 5 %), ainsi qu'en termes de contrôle glycémique (OR compris entre 1.8 à 2.7, p < 5 %). Ces derniers résultats sont obtenus uniquement lorsque les patients ont bénéficié au moins une consultation infirmière d'éducation et de conseils hygiéno-diététiques en complément du rôle classique des infirmières dans le cadre de l'expérimentation ASALEE, c'est-à-dire la mise à jour des dossiers médicaux informatisés avec l'inscription éventuelle de rappels informatiques à destination des généralistes.

Mousques, J., et al. (2010). "Effect of a french experiment of team work between general practitioners and nurses on efficacy and cost of type 2 diabetes patients care." Health Policy **98**(2-3): 131-143.

Cette étude a pour objectif d'évaluer l'efficacité et les coûts d'une expérimentation de travail en équipe entre des infirmières et des généralistes (l'expérimentation ASALEE), dans le cas de la prise en charge des patients souffrant de diabète de type 2. Elle s'appuie sur un design cas/témoin dans lequel nous comparons l'évolution des résultats de soins en termes de processus (procédures standards de suivi) et de résultat final (le contrôle glycémique), ainsi qu'en termes de coûts. Cette comparaison est réalisée entre deux périodes consécutives et entre des patients diabétiques de type 2 suivis dans l'expérimentation (le groupe d'intervention) ou dans le groupe témoin (le groupe contrôle). Nous montrons qu'après onze mois de suivi, les patients ASALEE, comparés à ceux du groupe témoin, ont une plus grande probabilité de rester ou devenir bien suivis en termes d'indicateurs de processus (OR compris entre 2.1 à 6.8, p < 5 %), ainsi qu'en termes de contrôle glycémique (OR compris entre 1.8 à 2.7, p < 5 %). Ces derniers résultats sont obtenus uniquement lorsque les patients ont bénéficié d'au moins une consultation infirmière d'éducation et de conseils hygiéno-diététiques en complément du rôle classique des infirmières dans le cadre de l'expérimentation ASALEE, c'est-à-dire la mise à jour des dossiers médicaux informatisés avec l'inscription éventuelle de rappels informatiques à destination des généralistes.

Mousques, J. et Daniel, F. (2015). "L'exercice regroupé pluriprofessionnel en maisons, pôles et centres de santé génère des gains en matière de productivité et de dépenses. Résultats de l'évaluation des sites participant à l'Expérimentation des nouveaux modes de rémunération (ENMR)." Questions D'economie De La Sante (Irdes)(210): 1-6.

http://www.irdes.fr/recherche/questions-d-economie-de-la-sante/210-l-exercice-regroupe-pluriprofessionnel-en-maisons-poles-et-centres-de-sante-genere-des-gains-en-matiere-de-productivite-et-de-depenses.pdf

Quels impacts l'exercice pluriprofessionnel a-t-il dans les maisons, pôles et centres de santé ayant participé aux Expérimentations des nouveaux modes de rémunération (ENMR) entre 2010 et 2014 ? Les médecins généralistes des sites ENMR sont-ils plus actifs et plus productifs que les autres ? La structure de leur activité est-elle similaire ? Leurs patients recourent-ils plus ou moins fréquemment aux différentes catégories de soins ambulatoires ? Leurs dépenses sont-elles moindres ou plus élevées ? Ces résultats sont-ils homogènes ou hétérogènes entre les différents types de sites participant aux ENMR ? Autant de questions qui sont explorées dans ce cinquième volet de l'évaluation des sites regroupés pluriprofessionnels ayant participé aux ENMR. Les analyses évaluatives quantitatives de mesure de l'impact du regroupement sur l'activité et les soins et services de santé sont effectuées à partir de designs quasi-expérimentaux.

Mousques, J. et Daniel, F. (2015). "L'impact de l'exercice regroupé pluriprofessionnel sur la qualité des pratiques des médecins généralistes. Résultats de l'évaluation des maisons, pôles et centres de santé participant à l'Expérimentation des nouveaux modes de rémunération (ENMR)." Questions D'economie De La Sante (Irdes)(211): 1-6.
http://www.irdes.fr/recherche/questions-d-economie-de-la-sante/211-l-impact-de-l-exercice-regroupe-pluriprofessionnel-sur-la-qualite-des-pratiques-des-medecins-generalistes.pdf

Quels impacts l'exercice pluriprofessionnel a-t-il dans les maisons, pôles et centres de santé ayant participé aux Expérimentations des nouveaux modes de rémunération (ENMR) entre 2010 et 2014 ? Les médecins généralistes des sites ENMR sont-ils plus actifs et plus productifs que les autres ? La structure de leur activité est-elle similaire ? Leurs patients recourent-ils plus ou moins fréquemment aux différentes catégories de soins ambulatoires ? Leurs dépenses sont-elles moindres ou plus élevées ? Ces résultats sont-ils homogènes ou hétérogènes entre les différents types de sites participant aux ENMR ? Autant de questions qui sont explorées dans ce cinquième volet de l'évaluation des sites regroupés pluriprofessionnels ayant participé aux ENMR. Les analyses évaluatives quantitatives de mesure de l'impact du regroupement sur l'activité et les soins et services de santé sont effectuées à partir de designs quasi-expérimentaux.

Mousques, J. et Lenormand, M. C. (2017). "L'expérience américaine des Accountable Care Organizations : des enseignements pour la France ?" Questions D'economie De La Sante (Irdes)(227): 1-8.
www.irdes.fr/recherche/questions-d-economie-de-la-sante/227-l-experience-americaine-des-accountable-care-organizations-des-enseignements-pour-la-france.pdf

L'Affordable Care Act, dit "Obamacare", adopté aux États-Unis en 2010, est principalement connu pour son objectif emblématique d'extension de la couverture santé à l'ensemble de la population. Un chapitre de cette loi concerne également la promotion de nouvelles formes d'organisation des soins de nature à favoriser la coordination entre les professionnels de santé et à améliorer la qualité et l'efficience des soins. Le Centre d'innovation pour Medicare et Medicaid a, dès 2012, lancé différentes expérimentations principalement destinées à renforcer les soins primaires. Les Accountable Care Organizations (ACO) constituent l'expérimentation la plus ambitieuse puisqu'elle favorise également la coordination entre les services de ville et l'hôpital. Ce type d'organisations a connu une diffusion rapide depuis leur mise en place. Plus de 800 ACO sont aujourd'hui recensées et couvrent 28 millions de personnes, soit 15 % des assurés américains. Cette synthèse de la littérature permet d'étudier les caractéristiques des ACO, leur performance, les outils et dispositifs mobilisés, et offre un éclairage intéressant pour le système de santé français.

Suchier, M., Michel, L. et Fournier, C. c. (2021). "Des tensions entre dynamiques professionnelles et interprofessionnelles dans le travail des aides à domicile, des aides-soignantes et des infirmières en soins primaires." Questions D'economie De La Sante (Irdes)(263): 1-8.
https://www.irdes.fr/recherche/questions-d-economie-de-la-sante/263-tensions-entre-dynamiques-professionnelles-et-interprofessionnelles-travail-aides-a-domicile-aides-soignantes-infirmieres.pdf

Alors que la crise sanitaire a rappelé avec acuité l'importance de la prise en charge à domicile de personnes atteintes de maladies chroniques ou en perte d'autonomie, cette enquête sociologique qualitative, réalisée en 2020, propose de plonger dans le quotidien de trois groupes professionnels (aides à domicile, aides-soignantes et infirmières) intervenant dans les soins à domicile, rarement mis sur le devant de la scène. Il s'agit d'abord de décrire le travail ordinaire des professionnelles étudiées, avant de saisir les rapports qu'elles entretiennent entre elles, dans différents contextes d'exercice. Leur travail et leurs relations professionnelles apparaissent étroitement liés à la structuration de l'offre de soins à domicile, aux modes de financement de leur exercice et à des hiérarchies implicites entre les professionnelles, dressant de nombreux obstacles à la mise en place d'un exercice coordonné. Certaines organisations s'appliquent toutefois à favoriser l'émergence de dynamiques interprofessionnelles dont nous montrons les ressorts, même si elles restent entravées par la prééminence de dynamiques mono-professionnelles.

REVUES DE LITTERATURE

Damiani, G., Silvestrini, G., Federico, B., et al. (2013). "A systematic review on the effectiveness of group versus single-handed practice." Health policy (Amsterdam, Netherlands) **113**(1-2): 180-187.

BACKGROUND: Since the 1970s, many countries have employed the use of the General practitioner group practice, but there is contrasting evidence about its effectiveness. A systematic review was performed to assess whether group practice has a more positive impact compared with the single-handed practice on different aspects of health care. METHODS: A systematic review was conducted by querying electronic databases and reviewing articles published between 1990 and 2012. A quality assessment was performed. The effect of group practice was evaluated by collecting all items analysed by the articles into four main categories: (1) studies of quality (measured in terms of clinical processes) and productivity (measured in terms of throughput), named "Clinical process measures and throughput"; (2) studies exploring physician's opinion - "Doctor's perspective"; (3) studies looking into the use of innovation, information and communication technology (ICT) and quality assurance - "Innovation, ICT and quality assurance"; (4) studies focused on patient's opinion - "Patient's perspective". The results were synthesized according to three levels of scientific evidence. RESULTS: A total of 26 studies were selected. The most studied category was Clinical process measures and throughput (58%). A positive impact of group medicine on "Clinical process measures and throughput", "Doctor's perspective", "Innovation, ICT and quality assurance" was found. There was contrasting evidence considering the "Patient's perspective". CONCLUSIONS: Group practice might be a successful organizational requirement to improve the quality of clinical practice in Primary Health Care. Further comparative studies are needed to investigate the impact of organizational and professional determinants such as physician's economic incentives, mode of payment, size of the groups and multispecialty on the effectiveness of medical primary care

Davy, L., Bleasel, J., Liu, H., et al. (2015). "Effectiveness of chronic care models: opportunities for improving healthcare practice and health outcomes: a systematic review." Bmc Health Services Research **15**(194): 11 , tabl.
http://www.biomedcentral.com/1472-6963/15/194

Background: The increasing prevalence of chronic disease and even multiple chronic diseases faced by both developed and developing countries is of considerable concern. Many of the interventions to address this within primary healthcare settings are based on a chronic care model first developed by MacColl Institute for Healthcare Innovation at Group Health Cooperative. Methods: This systematic literature review aimed to identify and synthesise international evidence on the effectiveness of elements that have been included in a chronic care model for improving healthcare practices and health outcomes within primary healthcare settings. The review broadens the work of other similar reviews by focusing on effectiveness of healthcare practice as well as health outcomes associated with implementing a chronic care model. In addition, relevant case series and case studies were also included. Results: Of the 77 papers which met the inclusion criteria, all but two reported

improvements to healthcare practice or health outcomes for people living with chronic disease. While the most commonly used elements of a chronic care model were self-management support and delivery system design, there were considerable variations between studies regarding what combination of elements were included as well as the way in which chronic care model elements were implemented. This meant that it was impossible to clearly identify any optimal combination of chronic care model elements that led to the reported improvements. Conclusions: While the main argument for excluding papers reporting case studies and case series in systematic literature reviews is that they are not of sufficient quality or generalizability, we found that they provided a more detailed account of how various chronic care models were developed and implemented. In particular, these papers suggested that several factors including supporting reflective healthcare practice, sending clear messages about the importance of chronic disease care and ensuring that leaders support the implementation and sustainability of interventions may have been just as important as a chronic care model's elements in contributing to the improvements in healthcare practice or health outcomes for people living with chronic disease.

Dozol, A., Leandre, C., Townsend, A., et al. (2017). Mission d'étude sur l'expérimentation par le NHS anglais de nouveaux modèles d'organisation et de financement intégrés. Paris DGOS**:** 21 , fig., ill., annexes. http://social-sante.gouv.fr/IMG/pdf/ipep_mission_uk_rapport_vd_word_dgos_08-12-2016.pdf

Le système de santé britannique est confronté aux mêmes enjeux que le système de santé français : contexte budgétaire contraignant avec des enjeux épidémiologiques de vieillissement. Pour y faire face, la solution privilégiée par le système britannique repose sur la mise en place de nouvellesorganisations entre acteurs, « les news care models », favorisant la coordination entre les secteurs sanitaires, social et médico-social. En effet, dans la mesure où les principaux besoins de demain relèvent davantage des secteurs médico-social et social que du secteur sanitaire, une prise en charge intégrant ces secteurs devient une nécessité. Ainsi, contrairement aux objectifs recherchés par la réforme de financement à la tarification à l'activité mise en place dans les années 2000, l'objectif principal recherché par le NHS n'est pas celui de l'efficience économique par la concurrence entre les acteurs mais celui de la performance par une collaboration et une atteinte collective des indicateurs d'accès, de continuité et de coordination de la prise en charge.

Francois, P., Cardaci, C., Lopez-Ruiz, C., et al. (2017). "Systematic revue of the tools for multiprofessional primary care teams assessment." Rev Epidemiol Sante Publique **65**(1): 61-69.

BACKGROUND: Multiprofessionnal teams in primary care are developing in many countries including France. These groups appear very heterogeneous regarding the level of integration and interprofessional cooperation. A systematic review of the literature was performed to screen the instruments which assess the organizational development of primary care groups. METHODS: Scientific literature was searched in the Pubmed database, gray literature was searched for on the Internet. The documents were selected by two independent investigators. The collected data included information on assessment instruments: origin, content, method of use, and validation process. RESULTS: Sixty-five documents involving 16 assessment instruments were selected for the study. Twelve instruments have been developed in North America and 4 in Europe. Four instruments were evaluation questionnaires, 4 accreditation tools and 8 were maturity matrices. The maturity matrices were structured by levels of organizational development. Their use were effected by an individual self-assessment of each professional and then by consensus of the group in the presence of an external facilitator. The questionnaire and accreditation tools have organizations and use patterns variable. The number of questions ranged from 25 to 200 with a median of 80. The instruments were organized into 4 to 16 dimensions with a median of 7. Six common themes were identified: practice and staff management, quality development, data patient management, interprofessional cooperation, accessibility and continuity of care, and formation. The validation process of tools were variable and often incomplete. CONCLUSION: The set of assessment tools for primary care group is heterogeneous in purpose, content and mode of use. However, common themes were found for all tools. An evaluation questionnaire, in French, would be useful to monitor over time and evaluate the organizational development of centers and health houses in France.

Fung, L., Boet, S., Bould, M. D., et al. (2015). "Impact of crisis resource management simulation-based training for interprofessional and interdisciplinary teams: A systematic review." J Interprof Care **29**(5): 433-444.

Crisis resource management (CRM) abilities are important for different healthcare providers to effectively manage critical clinical events. This study aims to review the effectiveness of simulation-based CRM training for interprofessional and interdisciplinary teams compared to other instructional methods (e.g., didactics). Interprofessional teams are composed of several professions (e.g., nurse, physician, midwife) while interdisciplinary teams are composed of several disciplines from the same profession (e.g., cardiologist, anaesthesiologist, orthopaedist). Medline, EMBASE, CINAHL, Cochrane Central Register of Controlled Trials, and ERIC were searched using terms related to CRM, crisis management, crew resource management, teamwork, and simulation. Trials comparing simulation-based CRM team training versus any other methods of education were included. The educational interventions involved interprofessional or interdisciplinary healthcare teams. The initial search identified 7456 publications; 12 studies were included. Simulation-based CRM team training was associated with significant improvements in CRM skill acquisition in all but two studies when compared to didactic case-based CRM training or simulation without CRM training. Of the 12 included studies, one showed significant improvements in team behaviours in the workplace, while two studies demonstrated sustained reductions in adverse patient outcomes after a single simulation-based CRM team intervention. In conclusion, CRM simulation-based training for interprofessional and interdisciplinary teams show promise in teaching CRM in the simulator when compared to didactic case-based CRM education or simulation without CRM teaching. More research, however, is required to demonstrate transfer of learning to workplaces and potential impact on patient outcomes.

Gocan S et Laplante, M. A. (2014). "Interprofessional Collaboration in Ontario's Family Health Teams: A Review of the Literature." Journal of Research in Interprofessional Practice and Education **3**(3). http://www.jripe.org/index.php/journal/article/view/131/84

Background: In Ontario, 200 interprofessional Family Health Teams (FHTs) have been established since 2005 to improve primary healthcare access, patient outcomes, and costs. High levels of interprofessional collaboration are important for team success; however, effective team functioning is difficult to achieve. FHTs are in their infancy, and little is known about the determinants that have influenced the quality of team collaboration or the outcomes that FHTs have achieved. The objective of this article is to examine current knowledge regarding FHT team functioning. Methods and Findings: A search of the literature resulted in eleven articles for final analysis, which were primarily qualitative in nature. A narrative synthesis of study findings was completed. A number of common challenges to interprofessional collaboration were identified. Nevertheless, patients and providers described improved healthcare access, greater satisfaction, and enhanced quality of healthcare using a FHT approach. Collaboration was fostered by effective leadership, communication, outcome evaluation, and training for both professionals and patients alike. Conclusions: Ontario FHTs have generated improvements in healthcare access and outcomes. Collaborative team functioning, while present, has not reached its full potential. Supportive public policy, education for patients and providers, and evaluation research is needed to advance FHT functioning

Hearld, L. R., Bleser, W. K., Alexander, J. A., et al. (2016). "A Systematic Review of the Literature on the Sustainability of Community Health Collaboratives." Med Care Res Rev **73**(2): 127-181.

Recent interest in community health collaboratives has been driven by the potential of these types of organizations to solve complex health problems at the local level by bringing together stakeholders that have traditionally operated independently, and often at cross-purposes. Much of the work that is central to the mission of collaboratives can take years to reach fruition, however, and there are a number of challenges to sustaining their activities. In this article, we systematically reviewed the theoretical and empirical literature on health care collaborative sustainability, focusing on definitions and antecedents of sustainability. Given the diversity and fragmentation of this literature, we used this review as a foundation to develop a synthesized definition, conceptual groups of antecedents, and potential research propositions to help guide future research, planning, and practice of sustainable community health collaboratives.

Jabbarpou, Y., De Marchis, E., Bazemore, A., et al. (2017). The Impact of Primary Care Practice Transformation on Cost, Quality, and Utilization : a systematic review of research published in 2016. Washington PCPCC**:** 40 , tab., graph., fig.
https://www.milbank.org/wp-content/uploads/2017/08/pcmh_evidence_report_08-1-17-FINAL.pdf

Ce rapport de la Patient-Centered Primary Care Collaborative (PCPCC) présente les résultats de 45 nouveaux rapports revus par les pairs et d'autres évaluations gouvernementales et étatiques sur la transformation des pratiques de soins de santé primaires. Il trouve que dans de nombreuses études, le « patient-centred medical home » et d'autres formes avancées de soins primaires démontrent des impacts importants.

Jackson, G. L. (2013). "The Patient-Centered Medical Home. A Systematic Review." Annals of Internal Medicine **158**(3).

Background: The patient-centered medical home (PCMH) describes mechanisms for organizing primary care to provide highquality care across the full range of individuals' health care needs. It is being widely implemented by provider organizations and thirdparty payers. Purpose: To describe approaches for PCMH implementation and summarize evidence for effects on patient and staff experiences, process of care, and clinical and economic outcomes. Data Sources: PubMed (through 6 December 2011), Cumulative Index to Nursing & Allied Health Literature, and the Cochrane Database of Systematic Reviews (through 29 June 2012). Study Selection: English-language trials and longitudinal observational studies that met criteria for the PCMH, as defined by the Agency for Healthcare Research and Quality, and included populations with multiple conditions. Data Extraction: Information on study design, populations, interventions, comparators, financial models, implementation methods, outcomes, and risk of bias were abstracted by 1 investigator and verified by another. Data Synthesis: In 19 comparative studies, PCMH interventions had a small positive effect on patient experiences and small to moderate positive effects on the delivery of preventive care services (moderate strength of evidence). Staff experiences were also improved by a small to moderate degree (low strength of evidence). Evidence suggested a reduction in emergency department visits (risk ratio [RR], 0.81 [95% CI, 0.67 to 0.98]) but not in hospital admissions (RR, 0.96 [CI, 0.84 to 1.10]) in older adults (low strength of evidence). There was no evidence for overall cost savings. Limitation: Systematic review is challenging because of a lack of consistent definitions and nomenclature for PCMH. Conclusion: The PCMH holds promise for improving the experiences of patients and staff and potentially for improving care processes, but current evidence is insufficient to determine effects on clinical and most economic outcomes

Kaufman, B. G., Spivack, B. S., Stearns, S. C., et al. (2019). "Impact of Accountable Care Organizations on Utilization, Care, and Outcomes: A Systematic Review." Med Care Res Rev **76**(3): 255-290.

Since 2010, more than 900 accountable care organizations (ACOs) have formed payment contracts with public and private insurers in the United States; however, there has not been a systematic evaluation of the evidence studying impacts of ACOs on care and outcomes across payer types. This review evaluates the quality of evidence regarding the association of public and private ACOs with health service use, processes, and outcomes of care. The 42 articles identified studied ACO contracts with Medicare (N = 24 articles), Medicaid (N = 5), commercial (N = 11), and all payers (N = 2). The most consistent associations between ACO implementation and outcomes across payer types were reduced inpatient use, reduced emergency department visits, and improved measures of preventive care and chronic disease management. The seven studies evaluating patient experience or clinical outcomes of care showed no evidence that ACOs worsen outcomes of care; however, the impact on patient care and outcomes should continue to be monitored.

Leandre, C., Townsend, A. et Dozol, A. (2017). Accountable Care Organisations. Enseignements d'un modèle développé aux Etats-Unis. Paris DGOS**:** 16 , tabl., graph., annexes.
http://social-sante.gouv.fr/IMG/pdf/ipep_rapport_synthese_aco_20161209.pdf

A l'instar d'autres, le système américain de santé souffre d'une fragmentation des offreurs de soins, en particulier entre la ville, les établissements de santé et le médico-social, ainsi que de la coexistence de modes de financements séparés où prédomine le paiement à l'acte (fee for service), alors même que les besoins de la population s'accroissent en raison de son vieillissement et de la croissance des maladies chroniques et multiples. Conscient de ces problèmes, le gouvernement américain a souhaité impulser un ambitieux programme de réforme du financement au profit d'un paiement intégré, s'appuyant sur les « Accountable Care Organizations », rassemblant, sur une base volontaire, une grande diversité d'acteurs du champ sanitaire, dont le premier recours. Les membres de l'ACO s'engagent collectivement pour l'ensemble de la prise en charge de leur patientèle. Si des économies sont réalisées, le payeur et l'« Accountable Care Organisations » se les partagent, sous réserve cependant que la coordination et la qualité des soins se soient améliorées. Ceci est contrôlé à travers des indicateurs mesurant l'expérience patients, ainsi que la coordination tels que les réhospitalisations, les hospitalisations sensibles au premier recours, etc. Ces modèles organisationnels et de financement innovants incitant à la coordination des professionnels et à la maitrise des dépenses de santé font l'objet de ce rapport .

Lyngso, A. M. (2014). "Instruments to assess integrated care: a systematic review." International Journal of Integrated Care.
http://www.ijic.org/index.php/ijic/article/view/1184/2563

Introduction: Although several measurement instruments have been developed to measure the level of integrated health care delivery, no standardised, validated instrument exists covering all aspects of integrated care. The purpose of this review is to identify the instruments concerning how to measure the level of integration across health-care sectors and to assess and evaluate the organisational elements within the instruments identified. Methods: An extensive, systematic literature review in PubMed, CINAHL, PsycINFO, Cochrane Library, Web of Science for the years 1980-2011. Selected abstracts were independently reviewed by two investigators. Results: We identified 23 measurement instruments and, within these, eight organisational elements were found. No measurement instrument covered all organisational elements, but almost all studies include well-defined structural and process aspects and six include cultural aspects; 14 explicitly stated using a theoretical framework. Conclusion and discussion: This review did not identify any measurement instrument covering all aspects of integrated care. Further, a lack of uniform use of the eight organisational elements across the studies was prevalent. It is uncertain whether development of a single 'all-inclusive' model for assessing integrated care is desirable. We emphasise the continuing need for validated instruments embedded in theoretical contexts

Maeda, A. et Socha-Dietrich, K. (2021). Skills for the future health workforce. OECD Health Working Papers ; 124. Paris OCDE**:** 46.
https://www.oecd-ilibrary.org/docserver/68fb5f08-en.pdf

The landscape of health services delivery is undergoing significant transformation from fragmented and disease-centred toward integrated and people-centred care. Health workers find themselves at the centre of this transformation that demands from them commensurate changes in the skill-set employed in day-to-day practice, among other challenges. The paper identifies transversal (core) skills that are becoming increasingly crucial for all front-line health workers to reap the potential benefits of people-centred care, such as better patient and population outcomes, higher productivity, and higher retention/job satisfaction combined among the workers themselves. These transversal skills include interpersonal skills, such as person-centred communication, interprofessional teamwork, self-awareness and socio-cultural sensitivity, as well as analytical skills, such as adaptive problem solving to devise customised care for individual persons, system thinking, openness to continuous learning, and the ability to use digital technologies effectively. Recognising the need to prepare health professionals for meeting the dual challenges of technically and emotionally complex healthcare workplace is a prerequisite to building and maintaining resilient and resourceful health workforce. This paper provides also a brief overview of skills assessment methods and tools that could be used to evaluate the effectiveness of health workforce policies and suggests a skills assessment strategy to evaluate the impact of reforms on the skills and performance of health workforce.

Martinez-Gonzalez, N. A., Berchtold, P., Ullman, K., et al. (2014). "Integrated care programmes for adults with chronic conditions: a meta-review." Int J Qual.Health Care **26**(5): 561-570.

OBJECTIVE: To review systematic reviews and meta-analyses of integrated care programmes in chronically ill patients, with a focus on methodological quality, elements of integration assessed and effects reported. DESIGN: Meta-review of systematic reviews and meta-analyses identified in Medline (1946-March 2012), Embase (1980-March 2012), CINHAL (1981-March 2012) and the Cochrane Library of Systematic Reviews (issue 1, 2012). MAIN OUTCOME MEASURES: Methodological quality assessed by the 11-item Assessment of Multiple Systematic Reviews (AMSTAR) checklist; elements of integration assessed using a published list of 10 key principles of integration; effects on patient-centred outcomes, process quality, use of healthcare and costs. RESULTS: Twenty-seven systematic reviews were identified; conditions included chronic heart failure (CHF; 12 reviews), diabetes mellitus (DM; seven reviews), chronic obstructive pulmonary disease (COPD; seven reviews) and asthma (five reviews). The median number of AMSTAR checklist items met was five: few reviewers searched for unpublished literature or described the primary studies and interventions in detail. Most reviews covered comprehensive services across the care continuum or standardization of care through inter-professional teams, but organizational culture, governance structure or financial management were rarely assessed. A majority of reviews found beneficial effects of integration, including reduced hospital admissions and re-admissions (in CHF and DM), improved adherence to treatment guidelines (DM, COPD and asthma) or quality of life (DM). Few reviews showed reductions in costs. CONCLUSIONS: Systematic reviews of integrated care programmes were of mixed quality, assessed only some components of integration of care, and showed consistent benefits for some outcomes but not others

Mitchell, G. K., Burridge, L., Zhang, J., et al. (2015). "Systematic review of integrated models of health care delivered at the primary–secondary interface: how effective is it and what determines effectiveness?" Australian Journal of Primary Health **21**: 391-408.

Integrated multidisciplinary care is difficult to achieve between specialist clinical services and primary care practitioners, but should improve outcomes for patients with chronic and/or complex chronic physical diseases. This systematic review identifies outcomes of different models that integrate specialist and primary care practitioners, and characteristics of models that delivered favourable clinical outcomes. For quality appraisal, the Cochrane Risk of Bias tool was used. Data are presented as a narrative synthesis due to marked heterogeneity in study outcomes. Ten studies were included. Publication bias cannot be ruled out. Despite few improvements in clinical outcomes, significant improvements were reported in process outcomes regarding disease control and service delivery. No study reported negative effects compared with usual care. Economic outcomes showed modest increases in costs of integrated primary–secondary care. Six elements were identified that were common to these models of integrated primary–secondary care: (1) interdisciplinary teamwork; (2) communication/information exchange; (3) shared care guidelines or pathways; (4) training and education; (5) access and acceptability for patients; and (6) a viable funding model. Compared with usual care, integrated primary–secondary care can improve elements of disease control and service delivery at a modestly increased cost, although the impact on clinical outcomes is limited. Future trials of integrated care should incorporate design elements likely to maximise effectiveness.

Nicholson, C. (2013). "A governance model for integrated primary/secondary care for the health-reforming first world - results of a systematic review." BMC Health Serv Res **13**(528). http://www.biomedcentral.com/1472-6963/13/528/abstract

Background : Internationally, key health care reform elements rely on improved integration of care between the primary and secondary sectors. The objective of this systematic review is to synthesise the existing published literature on elements of current integrated primary/secondary health care. These elements and how they have supported integrated healthcare governance are presented. Methods : A systematic review of peer-reviewed literature from PubMed, MEDLINE, CINAHL, the Cochrane Library, Informit Health Collection, the Primary Health Care Research and Information

Service, the Canadian Health Services Research Foundation, European Foundation for Primary Care, European Forum for Primary Care, and Europa Sinapse was undertaken for the years 2006?2012. Relevant websites were also searched for grey literature. Papers were assessed by two assessors according to agreed inclusion criteria which were published in English, between 2006?2012, studies describing an integrated primary/secondary care model, and had reported outcomes in care quality, efficiency and/or satisfaction. Results : Twenty-one studies met the inclusion criteria. All studies evaluated the process of integrated governance and service delivery structures, rather than the effectiveness of services. They included case reports and qualitative data analyses addressing policy change, business issues and issues of clinical integration. A thematic synthesis approach organising data according to themes identified ten elements needed for integrated primary/secondary health care governance across a regional setting including: joint planning; integrated information communication technology; change management; shared clinical priorities; incentives; population focus; measurement ? using data as a quality improvement tool; continuing professional development supporting joint working; patient/community engagement; and, innovation. Conclusions : All examples of successful primary/secondary care integration reported in the literature have focused on a combination of some, if not all, of the ten elements described in this paper, and there appears to be agreement that multiple elements are required to ensure successful and sustained integration efforts. Whilst no one model fits all systems these elements provide a focus for setting up integration initiatives which need to be flexible for adapting to local conditions and settings

Nicholson, C., Jackson, C. et Marley, J. (2013). "A governance model for integrated primary/secondary care for the health-reforming first world - results of a systematic review." Bmc Health Services Research **13**(528): (20), fig., tabl.
http://www.biomedcentral.com/1472-6963/13/528/abstract

Background : Internationally, key health care reform elements rely on improved integration of care between the primary and secondary sectors. The objective of this systematic review is to synthesise the existing published literature on elements of current integrated primary/secondary health care. These elements and how they have supported integrated healthcare governance are presented. Methods : A systematic review of peer-reviewed literature from PubMed, MEDLINE, CINAHL, the Cochrane Library, Informit Health Collection, the Primary Health Care Research and Information Service, the Canadian Health Services Research Foundation, European Foundation for Primary Care, European Forum for Primary Care, and Europa Sinapse was undertaken for the years 2006?2012. Relevant websites were also searched for grey literature. Papers were assessed by two assessors according to agreed inclusion criteria which were published in English, between 2006?2012, studies describing an integrated primary/secondary care model, and had reported outcomes in care quality, efficiency and/or satisfaction. Results : Twenty-one studies met the inclusion criteria. All studies evaluated the process of integrated governance and service delivery structures, rather than the effectiveness of services. They included case reports and qualitative data analyses addressing policy change, business issues and issues of clinical integration. A thematic synthesis approach organising data according to themes identified ten elements needed for integrated primary/secondary health care governance across a regional setting including: joint planning; integrated information communication technology; change management; shared clinical priorities; incentives; population focus; measurement ? using data as a quality improvement tool; continuing professional development supporting joint working; patient/community engagement; and, innovation. Conclusions : All examples of successful primary/secondary care integration reported in the literature have focused on a combination of some, if not all, of the ten elements described in this paper, and there appears to be agreement that multiple elements are required to ensure successful and sustained integration efforts. Whilst no one model fits all systems these elements provide a focus for setting up integration initiatives which need to be flexible for adapting to local conditions and settings

Pettigrew, L., Mays, N., Kumpunen, S., et al. (2016). Large-scale general practice in England: What can we learn from the literature? Londres The Nuffield Trust**:** 45 , tabl., fig.
http://www.nuffieldtrust.org.uk/publications/large-scale-general-practice-literature

Collaborative ‘at-scale’ models are increasingly being heralded as the answer to the formidable challenges facing general practice. NHS England has signalled that large-scale general practice organisations should form a core component of their vision for new care models set out in the Five Year Forward View. But can these organisations really deliver what is expected of them? This report presents findings of an extensive literature review examining the evidence.

Renzaho, A. M., Romios, P., Crock, C., et al. (2013). "The effectiveness of cultural competence programs in ethnic minority patient-centered health care--a systematic review of the literature." Int J Qual.Health Care **25**(3): 261-269.

PURPOSE: To examine the effectiveness of patient-centered care (PCC) models, which incorporate a cultural competence (CC) perspective, in improving health outcomes among culturally and linguistically diverse patients. DATA SOURCES: The search included seven EBSCO-host databases: Academic Search Complete, Academic Search Premier, CINAHL with Full Text, Global Health, MEDLINE with Full Text, PsycINFO PsycARTICLES, PsycEXTRA, Psychology and Behavioural Sciences Collection and Pubmed, Web of Knowledge and Google Scholar. STUDY SELECTION: The review was undertaken following the preferred reporting items for systematic reviews and meta-analyses, and the critical appraisals skill program guidelines, covering the period from January 2000 to July 2011. Data extraction Data were extracted from the studies using a piloted form, including fields for study research design, population under study, setting, sample size, study results and limitations. RESULTS OF DATA SYNTHESIS: The initial search identified 1450 potentially relevant studies. Only 13 met the inclusion criteria. Of these, 11 were quantitative studies and 2 were qualitative. The conclusions drawn from the retained studies indicated that CC PCC programs increased practitioners' knowledge, awareness and cultural sensitivity. No significant findings were identified in terms of improved patient health outcomes. CONCLUSION: PCC models that incorporate a CC component are increased practitioners' knowledge about and awareness of dealing with culturally diverse patients. However, there is a considerable lack of research looking into whether this increase in practitioner knowledge translates into better practice, and in turn improved patient-related outcomes. More research examining this specific relationship is, thus, needed

Saint-Pierre, C., Herskovic, V. et Sepulveda, M. (2018). "Multidisciplinary collaboration in primary care: a systematic review." Fam Pract **35**(2): 132-141.

Background: Several studies have discussed the benefits of multidisciplinary collaboration in primary care. However, what remains unclear is how collaboration is undertaken in a multidisciplinary manner in concrete terms. Objective: To identify how multidisciplinary teams in primary care collaborate, in regards to the professionals involved in the teams and the collaborative activities that take place, and determine whether these characteristics and practices are present across disciplines and whether collaboration affects clinical outcomes. Methods: A systematic literature review of past research, using the MEDLINE, ScienceDirect and Web of Science databases. Results: Four types of team composition were identified: specialized teams, highly multidisciplinary teams, doctor-nurse-pharmacist triad and physician-nurse centred teams. Four types of collaboration within teams were identified: co-located collaboration, non-hierarchical collaboration, collaboration through shared consultations and collaboration via referral and counter-referral. Two combinations were commonly repeated: non-hierarchical collaboration in highly multidisciplinary teams and co-located collaboration in specialist teams. Fifty-two per cent of articles reported positive results when comparing collaboration against the non-collaborative alternative, whereas 16% showed no difference and 32% did not present a comparison. Conclusion: Overall, collaboration was found to be positive or neutral in every study that compared collaboration with a non-collaborative alternative. A collaboration typology based on objective measures was devised, in contrast to typologies that involve interviews, perception-based questionnaires and other subjective instruments.

Struckmann, V., Leijten, F. R. M., van Ginneken, E., et al. (2017). "Relevant models and elements of integrated care for multi-morbidity: Results of a scoping review." Health Policy.

BACKGROUND: In order to provide adequate care for the growing group of persons with multi-morbidity, innovative integrated care programmes are appearing. The aims of the current scoping review were to i) identify relevant models and elements of integrated care for multi-morbidity and ii) to subsequently identify which of these models and elements are applied in integrated care programmes for multi-morbidity. METHODS: A scoping review was conducted in the following scientific databases: Cochrane, Embase, PubMed, PsycInfo, Scopus, Sociological Abstracts, Social Services Abstracts, and Web of Science. A search strategy encompassing a) models, elements and programmes, b) integrated care, and c) multi-morbidity was used to identify both models and elements (aim 1) and implemented programmes of integrated care for multi-morbidity (aim 2). Data extraction was done by two independent reviewers. Besides general information on publications (e.g. publication year, geographical region, study design, and target group), data was extracted on models and elements that publications refer to, as well as which models and elements are applied in recently implemented programmes in the EU and US. RESULTS: In the review 11,641 articles were identified. After title and abstract screening, 272 articles remained. Full text screening resulted in the inclusion of 92 articles on models and elements, and 50 articles on programmes, of which 16 were unique programmes in the EU (n=11) and US (n=5). Wagner's Chronic Care Model (CCM) and the Guided Care Model (GCM) were most often referred to (CCM n=31; GCM n=6); the majority of the other models found were only referred to once (aim 1). Both the CCM and GCM focus on integrated care in general and do not explicitly focus on multi-morbidity. Identified elements of integrated care were clustered according to the WHO health system building blocks. Most elements pertained to 'service delivery'. Across all components, the five elements referred to most often are person-centred care, holistic or needs assessment, integration and coordination of care services and/or professionals, collaboration, and self-management (aim 1). Most (n=10) of the 16 identified implemented programmes for multi-morbidity referred to the CCM (aim 2). Of all identified programmes, the elements most often included were self-management, comprehensive assessment, interdisciplinary care or collaboration, person-centred care and electronic information system (aim 2). CONCLUSION: Most models and elements found in the literature focus on integrated care in general and do not explicitly focus on multi-morbidity. In line with this, most programmes identified in the literature build on the CCM. A comprehensive framework that better accounts for the complexities resulting from multi-morbidity is needed.

Supper, I., Catala, O., Lustman, M., et al. (2015). "Interprofessional collaboration in primary health care: a review of facilitators and barriers perceived by involved actors." Journal of Public Health **37**(4): 716-727.
http://jpubhealth.oxfordjournals.org/content/37/4/716.abstract

Background The epidemiological transition calls for redefining the roles of the various professionals involved in primary health care towards greater collaboration. We aimed to identify facilitators of, and barriers to, interprofessional collaboration in primary health care as perceived by the actors involved, other than nurses. Methods Systematic review using synthetic thematic analysis of qualitative research. Articles were retrieved from Medline, Web of science, Psychinfo and The Cochrane library up to July 2013. Quality and relevance of the studies were assessed according to the Dixon-Woods criteria. The following stakeholders were targeted: general practitioners, pharmacists, mental health workers, midwives, physiotherapists, social workers and receptionists.Results Forty-four articles were included. The principal facilitator of interprofessional collaboration in primary care was the different actors' common interest in collaboration, perceiving opportunities to improve quality of care and to develop new professional fields. The main barriers were the challenges of definition and awareness of one another's roles and competences, shared information, confidentiality and responsibility, team building and interprofessional training, long-term funding and joint monitoring. Conclusions Interprofessional organization and training based on appropriate models should support collaboration development. The active participation of the patient is required to go beyond professional boundaries and hierarchies. Multidisciplinary research projects are recommended.

Tsiachristas, A., Wallenburg, I., Bond, C. M., et al. (2015). "Costs and effects of new professional roles: Evidence from a literature review." Health Policy **119**(9): 1176-1187.
http://www.ncbi.nlm.nih.gov/pubmed/25899880

One way in which governments are seeking to improve the efficiency of the health care sector is by redesigning health services to contain labour costs. The aim of this study was to investigate the impact of new professional roles on a wide range of health service outcomes and costs. A systematic literature review was performed by searching in different databases for evaluation papers of new professional roles (published 1985-2013). The PRISMA checklist was used to conduct and report the systematic literature review and the EPHPP-Quality Assessment Tool to assess the quality of the studies. Forty-one studies of specialist nurses (SNs) and advanced nurse practitioners (ANPs) were selected for data extraction and analysis. The 25 SN studies evaluated most often quality of life (10 studies), clinical outcomes (8), and costs (8). Significant advantages were seen most frequently regarding health care utilization (in 3 of 3 studies), patient information (5 of 6), and patient satisfaction (4 of 6). The 16 ANP studies evaluated most often patient satisfaction (8), clinical outcomes (5), and costs (5). Significant advantages were seen most frequently regarding clinical outcomes (5 of 5), patient information (3 of 4), and patient satisfaction (5 of 8). Promoting new professional roles may help improve health care delivery and possibly contain costs. Exploring the optimal skill-mix deserves further attention from health care professionals, researchers and policy makers.

van den Bulck, A. O. E., de Korte, M. H., Elissen, A. M. J., et al. (2020). "A systematic review of case-mix models for home health care payment: Making sense of variation." Health Policy **124**(2): 121-132. http://www.sciencedirect.com/science/article/pii/S0168851019303069

Background Case-mix based payment of health care services offers potential to contain expenditure growth and simultaneously support needs-based care provision. However, limited evidence exists on its application in home health care (HHC). Therefore, this study aimed to synthesize available international literature on existing case-mix models for HHC payment. Methods We performed a systematic review of scientific literature, supplemented with grey literature. We searched for literature using six scientific databases, reference lists, expert consultation, and targeted websites. Data on study design, case-mix model attributes, and conclusions were extracted narratively. Results Of 3303 references found, 22 scientific studies and 27 grey documents met eligibility criteria. Eight case-mix models for HHC were identified, from the US, Canada, New Zealand, Australia, and Germany. Three countries have implemented a case-mix model as part of a HHC payment system. Different combinations of in total 127 unique case-mix predictors are included across models to predict HHC use. Case-mix models also differ in targeted services, operationalization, and outcome measures and predictive power. Conclusions Case-mix based payment is not yet widely used within HHC. Multiple varieties were found between HHC case-mix models, and no one best form of a model seems to exist. Even though varieties are partly inevitable due to country-specific contexts, developing a shared vision in case-mix model attributes would be key to achieving efficient, needs-based HHC.

van Loenen, T., van den Berg, M. J., Westert, G. P., et al. (2014). "Organizational aspects of primary care related to avoidable hospitalization: a systematic review." Family Practice **31**(5): 502-516. http://fampra.oxfordjournals.org/content/31/5/502.abstract

Background. Often used indicators for the quality of primary care are hospital admissions rates for conditions which are potentially avoidable by well-functioning primary care. Such hospitalizations are frequently termed as ambulatory care sensitive conditions (ACSCs).Objective. We aim to investigate which characteristics of primary care organization influence avoidable hospitalization for chronic ACSCs.Methods. MEDLINE, Embase and SciSearch were searched for publications on avoidable hospitalization and primary care. Studies were included if peer reviewed, written in English, published between January 1997 and November 2013, conducted in high income countries, identified hospitalization for ACSC as outcome measures and researched organization characteristics of primary care. A risk of bias assessment was performed to assess the quality of the articles.Findings. A total of 1778 publications were reviewed, of which 49 met inclusion criteria. Twenty-two primary care factors were found. Factors were clustered into four primary care clusters: system-level characteristics, accessibility, structural and organizational characteristics and organization of the care process. Adequate physician supply and better longitudinal continuity of care reduced avoidable hospitalizations. Furthermore, inconsistent results were found on the effectiveness of various disease

management programs in reducing hospitalization rates.Conclusions. Available evidence suggests that strong primary care in terms of adequate primary care physician supply and long-term relationships between primary care physicians and patients reduces hospitalizations for chronic ACSCs. There is a lack of evidence for the positive effects of many other organizational primary care aspects, such as specific disease management programs

Wilson, M. G., Lavis, J. N. et Guta, A. (2012). "Community-based organizations in the health sector: a scoping review." Health Res Policy Syst **10**: 36.

Community-based organizations are important health system stakeholders as they provide numerous, often highly valued programs and services to the members of their community. However, community-based organizations are described using diverse terminology and concepts from across a range of disciplines. To better understand the literature related to community-based organizations in the health sector (i.e., those working in health systems or more broadly to address population or public health issues), we conducted a scoping review by using an iterative process to identify existing literature, conceptually map it, and identify gaps and areas for future inquiry.We searched 18 databases and conducted citation searches using 15 articles to identify relevant literature. All search results were reviewed in duplicate and were included if they addressed the key characteristics of community-based organizations or networks of community-based organizations. We then coded all included articles based on the country focus, type of literature, source of literature, academic discipline, disease sector, terminology used to describe organizations and topics discussed. We identified 186 articles addressing topics related to the key characteristics of community-based organizations and/or networks of community-based organizations. The literature is largely focused on high-income countries and on mental health and addictions, HIV/AIDS or general/unspecified populations. A large number of different terms have been used in the literature to describe community-based organizations and the literature addresses a range of topics about them (mandate, structure, revenue sources and type and skills or skill mix of staff), the involvement of community members in organizations, how organizations contribute to community organizing and development and how they function in networks with each other and with government (e.g., in policy networks).Given the range of terms used to describe community-based organizations, this scoping review can be used to further map their meanings/definitions to develop a more comprehensive typology and understanding of community-based organizations. This information can be used in further investigations about the ways in which community-based organizations can be engaged in health system decision-making and the mechanisms available for facilitating or supporting their engagement

Wood, A., Hocking, J. et Temple-Smith, M. (2016). "The practice manager role and relevance to general practice-based research: a review of the literature." Aust J Prim Health.

Research based in Australian general practice is essential to ensure that health care provided in this setting is evidenced-based and delivered effectively. Research designed for general practice must be feasible and acceptable to general practitioners (GPs) and practice managers (PMs), who are responsible for coordinating practice activities. However, little is known about the PM role and their contribution to research undertaken in general practice. The aim of this systematic review is to examine this role and its relevance to the conduct of general practice-based research. Databases searched (Medline, PubMed, CINAHL and Scopus) identified six relevant studies. One study investigated the role of the PM in general practice-based research and five examined aspects of the PM role. Data about study design, number and type of participants and findings was extracted and managed using a matrix framework. The limited findings suggested PMs are interested in managing research at the practice level. The PM is central to practice communication and coordination but the role varies depending on qualifications, size of practice and expectations of the GPs. This paper highlights the paucity of evidence about the PM role and their contribution to the conduct of research undertaken in general practice. Further investigation is required to gain insights into establishing and managing future research in Australian general practice.

Wranik, W. D., Price, S., Haydt, S. M., et al. (2019). "Implications of interprofessional primary care team characteristics for health services and patient health outcomes: A systematic review with narrative synthesis." Health Policy(Voir la biblio).
http://www.sciencedirect.com/science/article/pii/S0168851019300831

Interprofessional primary care (IPPC) teams are promoted as an alternative to single profession physician practices in primary care with focus on preventive care and chronic disease management. Characteristics of teams can have an impact on their performance. We synthesized quantitative, qualitative or mixed-methods evidence addressing the design of IPPC teams. We searched Ovid MEDLINE, Embase, CINAHL, and PAIS using search terms focused on IPPC teams. Studies were included if they discussed the influence of team structure, organization, financial arrangements, or policies and procedures, or either health care processes or outputs, health outcomes, or costs, and were conducted in Australia, Canada, the United Kingdom or New Zealand between 2003 and 2016. We screened 11,707 titles, 5366 abstracts, and selected 77 full text articles (38 qualitative, 31 quantitative and 8 mixed-methods). Literature focused on the implications of team characteristics on team processes, such as teamwork, collaboration, or satisfaction of patients or providers. Despite heterogeneity of contexts, some trends are observable: shared space, common vision and goals, clear definitions of roles, and leadership as important to good teamwork. The impacts of these on health care outputs or patient health are not clear. To move the state of knowledge beyond perception of what works well for IPPC teams, researchers should focus on quantitative causal inference about the linkages between team characteristics and patient health.

ÉTUDES FRANÇAISES

(2020). "Maison de santé Decazeville-Aubin : une dynamique de prévention et de promotion de la santé." Revue Prescrire **40**(444): 779-782.

Cet article fait un retour d'expérience de la maison de santé Decazeville-Aubin implantée dans deux communes aveyronnaises proches. L'équipe de la maison de santé a développé des coopérations avec les professionnels voisins et du secteur médico-social, organisé des délégations de tâches et favorisé l'accueil de jeunes collègues. Elle a aussi engagé de nombreuses actions de prévention et de promotion de la santé.

(2021). "Maison de santé de Vanault-les-Dames : 9 ans après, un projet de santé en mouvement." Revue Prescrire **41**(457): 863-865.

Un article de Prescrire paru en 2012 décrivait un projet de santé avec la création d'une maison de santé pluriprofessionnelle, dans une zone rurale où certains soignants commençaient à manquer. Neuf ans après, malgré la difficulté de recrutement de nouveaux médecins et la charge d'assurer le fonctionnement administratif de la structure, l'équipe s'est agrandie et propose notamment aux patients de nouvelles offres de soins et des actions de prévention.

(2017). "ACI (accord conventionnel interprofessionnel) : une avancée majeure pour les équipes." Ésop : Revue Des Équipes De Soins Primaires (La)(5): 8-17.

L'accord conventionnel interprofessionnel a été signé par 12 syndicats le 20 avril 2017 et 6 autres les ont rejoints les jours suivants. Cet accord met fin au règlement arbitral et ouvre une pérennisation du cadre conventionnel pour les équipes pluriprofessionnelles. Désormais, les équipes et les caisses primaires d'assurance maladie (CPAM) vont devoir s'emparer de ce nouveau cadre plus adapté et apportant des moyens supplémentaires au rtavail de prise en charge en équipe coordonnée. Il sera applicable à partir de la parution du décret en juillet 2017.

(2017). "Rémunération : les nouveaux modes." Concours Medical **139**(1): 20-30.

Ce dossier présente les nouveaux modes de rémunération crée par la loi de la Sécurité sociale pour 2017, qui constituent une modalité inédite de financement collectif alloué à des structures regroupées pluriprofessionnelles de soins primaires. Comment postuler à ces forfaits, que financent-ils et comment sont-ils calculés, qu'en disent les équipes qui les perçoivent ? De l'expérimentation à la généralisation, tout ce que vous devez savoir (d'après le texte)

Abramovici, F., et al. (2015). "Les maisons de santé pluri-professionnelles sont-elles "la" pratique des soins primaires de demain ?" Medecine : De La Medecine Factuelle a Nos Pratiques **11**(8): 340-342.

Aujourd'hui, un constat est fait tant au niveau des patients, des soignants que des responsables politiques : La France est, dans de nombreuses régions, au bord de la rupture pour l'accès aux soins en médecine générale. Plus de la moitié des médecins généralistes ont plus de 55 ans et les installations nouvelles ne compensent pas les départs en retraite . Aujourd'hui, l'abaissement du numerus clausus en dessous de 6 000 jusqu'en 2008 a réduit ces dernières années le nombre de médecins généralistes pouvant s'installer. L'objectif affirmé de diminuer l'offre de soins (considérée en France comme l'une des plus élevées du monde) ne garantissait la régulation ni en répartition géographique ni en spécialité. Aujourd'hui, paradoxalement même des départements franciliens comme la Seine-et-Marne sont touchés par la diminution de l'offre de soins. Elle fait partie des dix derniers de France pour le nombre de médecins par habitant, au même titre que le Cantal, la Creuse, la Sarthe : le nombre d'habitants y est en hausse alors que le nombre d'installations de nouveaux médecins ne compense pas les départs en retraite de ces dernières années. L'objectif de cet article est donc d'analyser si les maisons de santé seraient la solution à cette problématique.

Acker, D. (2007). Rapport sur les centres de santé. Paris DHOS**:** 57.

Par lettre en date du 6 février 2007, le Directeur de Cabinet du Ministre de la Santé a confié à la Direction de l'Hospitalisation et de l'Organisation des Soins (DHOS) une étude devant permettre d'établir une typologie générale des structures d'offre de soins primaires (maisons médicales, centres de santé, cabinets de groupes, hôpitaux locaux) et préciser leurs modes de coopération. Les centres de santé en constituent cependant la cible principale. Il s'agit d'en établir une typologie précise à partir de l'analyse de leur activité, de leur mode d?organisation et de financement et notamment des raisons de leurs difficultés actuelles de fonctionnement. Le présent rapport de mission s'inscrit donc dans la volonté de revisiter le concept de centres de santé à la lumière des atouts qui sont les leurs face aux enjeux auxquels est confronté le système de santé, des difficultés qu'ils rencontrent, et de placer cette analyse dans le cadre d'une réflexion plus large sur l'organisation des soins primaires en France.

Alla, F. (2006). La prise en charge multidisciplinaire de l'insuffisance cardiaque. Rennes : ENSP.

L'insuffisance cardiaque (IC) est un syndrome classiquement défini comme l'impossibilité pour le coeur d'assurer un débit sanguin suffisant pour satisfaire les besoins métaboliques de l'organisme. L'IC est une maladie grave, recensée comme la 1ère cause d'hospitalisation après 60 ans assortie de nombreuses ré-hospitalisations. Sa prise en charge se révèle extrêmement coûteuse. En effet son coût est estimé entre 1 et 2% du budget global de santé dans les pays industrialisés, en France il s'élève à environ 1 milliard d'euros par an. Un renforcement de la coopération des différents acteurs au moyen d'un réseau de santé pourrait améliorer la prise en charge de l'IC. Les réseaux de soins sont nés il y a plus de 40 ans aux États-Unis avec les "managed care". Ils permettent à plusieurs professionnels de santé de coopérer à une meilleure prise en charge du patient ayant un problème d'ordre médical ou médico-social. A l'étranger, les réseaux ont fait la preuve de leur efficacité tant au niveau de leurs impacts sur le coût des prises en charge que sur l'amélioration de la qualité des soins. En France, les réseaux ont favorisé un décloisonnement ville/hôpital et rompu l'isolement des malades en améliorant la continuité des soins. Au regard de la loi n°2004-806 relative à la politique de santé publique, les réseaux constituent un mode d'organisation privilégié de notre système de soins. Bien qu'un cadre réglementaire soit venu légitimer les réseaux, des difficultés perdurent notamment sur la question de la rémunération des professionnels libéraux et de l'articulation des différents intervenants. En effet, faire travailler ensemble différentes professions de santé a révélé des

difficultés autour des profils de compétences et d'activité. Il s'agira de résoudre le problème de partage des tâches dans le cadre d'une coopération multiprofessionnelle. Les problèmes liés à la démographie médicale et les nouvelles règles relatives au temps de travail médical ont considérablement accru les problèmes d'organisation médicale, suscitant une réflexion sur la répartition des tâches entre médecins et infirmières. Le cadre juridique actuel de la profession infirmière n'autorise pas un transfert de compétences en dehors d'un protocole pré défini. A partir de ces constats, il est possible d'élaborer la structure d'un cahier des charges d'un réseau de prise en charge multidisciplinaire de l'IC, dont les points essentiels gravitent autour de l'éducation du patient, la formation des personnels, la coordination des acteurs. (R.A.).

Anap (2021). Centres de santé pluriprofessionnels : Leviers et bonnes pratiques organisationnelles en faveur de l'équilibre économique. Paris Anap.
https://ressources.anap.fr/parcours/publication/2800

À la demande du ministère des Solidarités et de la Santé (Direction générale de l'offre de soins), en concertation avec les représentants des centres de santé (organismes gestionnaires et professionnels de santé), des ARS et de la CNAM, l'ANAP a identifié les leviers et les bonnes pratiques organisationnelles favorisant l'équilibre économique des centres de santé pluriprofessionnels. Les caractéristiques du territoire et des personnes prises en charge, les dynamiques de quartier, l'offre disponible vont modeler les projets de santé des centres de santé pluriprofessionnels. Au-delà de la définition légale, nous avons identifié 8 missions qui pourront être portées au sein du projet de santé : favoriser l'accessibilité, développer les prises en charge pluriprofessionnelles au sein du centre de santé, assurer la prise en charge en lien avec un système qualité, prendre en charge des personnes en situation de précarité, développer des solutions de 2nd recours et de plateaux techniques, favoriser la fidélité d'une patientèle médecin traitant et participer aux actions d'enseignements, de recherche et d'innovation. La question de la réponse organisationnelle à chacune de ces missions est d'autant plus cruciale pour les gestionnaires des centres de santé pluriprofessionnels que leur financement n'est pas toujours assuré par les dispositifs de droit commun et que la nature des réponses dépend, notamment, du territoire. Selon les territoires, aux difficultés des personnes (évolution des maladies chroniques, comportements à risque, précarité…) s'ajoute une mise en oeuvre organisationnelle complexe (difficulté de recrutement, problème d'attractivité territoriale…). Dans ce contexte, la forte précarité des personnes accueillies peut nécessiter une réponse spécifique (accès aux droits, aide à la modification d'habitude de santé, prévention…), requérant tout à la fois des compétences peu disponibles dans le territoire et la recherche de financements complémentaires permettant de l'exercer en interne. Aussi, pour le gestionnaire, les collectivités territoriales, la CPAM, l'ARS, des choix devront être faits pour organiser la réponse à chaque mission tout en favorisant l'équilibre économique du centre. Cette publication propose aux gestionnaires des centres de santé ainsi qu'à leurs directeurs, aux ARS et aux CPAM des pistes d'amélioration (identifiées dans les monographies et utiles pour tous les centres de santé : éléments organisationnels qui ont une incidence sur l'équilibre économique), des exemples d'organisation pour chacune des missions et des outils de gestion de ressources humaines ou de pilotage.

Anger, E. et Gimbert, V. (2011). "Quelles opportunités pour l'offre de soins de demain ? (volet 1). Les coopérations entre professionnels de santé." Note D'analyse (La)(254): 11 , graph.

À quoi ressemblera l'offre de santé en France dans vingt ans ? Les défis sanitaires sont nombreux : hausse des maladies chroniques, vieillissement de la population, évolution de la démographie médicale, etc. Pour y répondre, deux leviers d'action sont disponibles. D'une part, la télésanté, ou production de soins à distance. D'autre part, la coopération entre professionnels de santé, grâce à laquelle personnels médicaux et paramédicaux peuvent développer de nouveaux modes d'exercice collectif et opérer entre eux des transferts d'activité afin d'optimiser la production de soins. En France, ces démarches sont encore marginales, notamment dans le secteur ambulatoire, car elles nécessitent de faire évoluer certains principes d'exercice libéral. Dans d'autres pays, les coopérations sont très développées dans le champ des soins primaires, mobilisant surtout médecins généralistes et infirmiers sur l'accès aux soins courants et sur la qualité de prise en charge des pathologies chroniques. Cette évolution requiert une politique volontariste de soutien aux structures pluridisciplinaires et la

reconnaissance juridique des nouvelles compétences acquises. L'essor des coopérations en France, gage d'un renforcement du secteur ambulatoire, permettrait, sous certaines conditions, de mieux adapter l'offre aux besoins des patients et d'améliorer l'efficience du système de santé en réduisant le poids des dépenses hospitalières.

Arnault, F. (2017). Améliorer l'offre de soins : initiatives réussies dans les territoires. Paris Conseil National de l'Ordre des médecins **:** 25.

Ce rapport du CNOM identifie les principales catégories d'initiatives en matière d'offre de soins qui portent d'ores et déjà leurs fruits dans les territoires : La création de maisons pluridisciplinaires de santé, accompagnée d'un travail mené par tous les acteurs pour en assurer la meilleure répartition géographique au sein d'un territoire ; L'accompagnement et l'encouragement aux stages professionnalisants pour les étudiants en médecine ; La mise en œuvre de lieux multiples d'exercice pour les praticiens ; La promotion de l'assistanat auprès de médecins installés, sous toutes ses formes.

Arnaud, C., Blanche Le, B. et Alis, S. (2021). "Dynamiques locales de coordination dans le secteur de la perte d'autonomie : recompositions professionnelles autour de la gestion de cas." SCIENCES SOCIALES ET SANTE **39**(4): 5-31.
https://www.jle.com/fr/revues/sss/e-docs/dynamiques_locales_de_coordination_dans_le_secteur_de_la_perte_dautonomie_recompositions_professionnelles_autour_de_la_gestion_de_cas_321428/article.phtml

Mieux coordonner les secteurs social, médico-social et de santé pour éviter les ruptures des accompagnements proposés est une priorité forte des pouvoirs publics depuis les années 2010. Plusieurs dispositifs de coordination ont ainsi été créés avec cet objectif. En investiguant le déploiement local de l'un d'eux, les MAIA, nous étudions la manière dont les nouveaux professionnels qu'il introduit – les gestionnaires de cas – développent leur activité sur des territoires où préexistent d'autres formes de coordinations professionnelles. Basée sur des matériaux qualitatifs, l'analyse des stratégies mises en place par les gestionnaires de cas pour lever les résistances des autres professionnels dévoile les différentes dimensions de la dynamique locale de coordination. Cette dernière se construit dans des espaces d'interactions ordinaires, plus ou moins formels, propices à une socialisation à la coordination pluriprofessionnelle. Les difficultés inhérentes à ce processus renseignent quant à elles sur les enjeux actuels des politiques de coordination.

ARS (2014). Assistance au suivi de l'accompagnement des centres de santé dans l'amélioration de leur organisation et de leur viabilité économique. Rapport de synthèse. Paris ARS Ile de France**:** 76.

L'Ile-de-France a la chance de disposer d'une offre importante de centres de santé sur son territoire. Toutefois, face aux difficultés économiques que nombre d'entre eux rencontrent, le risque d'une disparition d'une part importante de ces centres est réel. C'est la raison pour laquelle l'ARS a souhaité qu'un travail d'accompagnement de ces centres soit engagé dans la région afin de rechercher et de mettre en œuvre, en étroite collaboration avec leurs responsables, des pistes d'améliorations de leur organisation et de leur viabilité économique. L'objectif est de maintenir et de développer sur le territoire francilien une offre de centres de santé qui constitue un complément précieux aux professionnels de santé libéraux de la région. La démarche s'est voulue partenariale. Le Comité Interministériel des Villes, la Fédération Nationale des Centres de Santé (FNCS), les Caisses Primaires d'Assurance Maladie des départements 92, 93, 94 et 75, le Conseil Régional d'Ile de France ainsi que la coordination des centres de santé de Paris ont contribué au pilotage de ce projet. Ce travail porte sur un échantillon de centres de santé des départements de la petite couronne parisienne (Hauts-de-Seine, Seine Saint-Denis, Val de Marne) (résumé d'auteur).

ARS (2015). Etude et analyse des conditions favorables à l'implantation des centres de santé sur un territoire. Paris Ars Ile de France **:** 58, tab., graph., fig.

Ce rapport vise à développer une méthodologie afin de mieux appréhender les projets de création de centres de santé et aider les porteurs de projets à se poser les bonnes questions lors de la genèse du

projet Il ressort, tout d'abord, de cette étude la nécessité d'aborder différemment son projet selon la « vocation » identifiée du centre. La définition de l'offre et de l'organisation du centre de santé ne sera pas la même selon que le centre bénéficie d'un soutien financier ou qu'il doit être autonome, et selon ce qui a motivé la création du centre. De là découlent 3 vocations distinctes, identifiées lors de l'étude : les centres de santé de proximité, qui cherchent essentiellement à répondre à une carence de l'offre de soins et proposer à la population une offre de premiers recours accessible financièrement et géographiquement. Le plus souvent, il s'agit de centres portés par des collectivités territoriales ; les centres de santé polyvalents avec une expertise forte : ces centres se sont souvent développés en proposant une expertise particulière pour répondre à un besoin précis. Ils sont ouverts à tous mais proposent une offre adaptée, soit à une pathologie particulière, soit à une population visée (personnes âgées, personnes en situation de handicap, travailleurs salariés…) ; les centres de santé polyvalents autonomes : ces centres ne bénéficient pas d'un soutien financier et proposent une offre de soins diversifiée, souvent médicale et dentaire. Bien sûr cette trinité est caricaturale et la plupart des centres se situent au confluent de deux vocations. La notion de soutien économique est elle aussi relative. Aucun gestionnaire ne gère un centre de santé « à fonds perdus », mais certains décident d'investir dans des programmes particuliers ou d'offrir gratuitement à la population une offre sociale et sanitaire accessible. L'étude identifie également 12 facteurs d'influence (démographiques, territoriaux, économiques, sociaux ou structurels). Plus ou moins importants en fonction de la vocation du projet de centre de santé, ils contribuent à évaluer la pertinence d'un projet d'implantation d'un centre de santé au sein d'un territoire. Ils permettent de suivre une progression en 3 temps : évaluer la pertinence de son projet, conforter la décision initiale, évaluer la cohérence entre le projet de centre et la vocation initiale. Le rapport d'étude propose enfin une grille d'analyse, mettant en perspective les différents facteurs et les caractéristiques du territoire choisi et de la population, afin de valider la cohérence du projet. Les éléments de ce rapport doivent permettre d'étayer la réflexion des porteurs de projet dans leur démarche de création d'un centre de santé en leur fournissant un outil pour apprécier les conditions d'implantation d'un centre de santé. L'étude, menée entre février et juin 2015, se base sur des entretiens avec des directeurs de centres de santé d'une part, et d'autre part sur l'analyse des territoires d'implantation des centres à partir de données tangibles.

Aulagnier, M., et al. (2007). "L'exercice de la médecine générale libérale : premiers résultats d'un panel dans cinq régions françaises." Etudes Et Resultats (Drees)(610): 8 , graph., tabl.

[BDSP. Notice produite par MIN-SANTE R0xVfJZ4. Diffusion soumise à autorisation]. Les médecins généralistes libéraux déclarent des durées de travail hebdomadaires comprises entre 55 et 59 heures, gardes et astreintes comprises, selon les régions du panel. Les activités en dehors du cabinet médical sont plus fréquentes dans les régions les plus rurales. Pour ceux qui exercent en groupe, pratique rencontrée plutôt chez les jeunes médecins, cette durée moyenne est inférieure de deux à quatre heures. Au total, un praticien sur deux se déclare désireux de réduire sa durée de travail hebdomadaire, d'un volume de 12 heures environ. Globalement, trois médecins sur quatre déclarent être satisfaits de leur activité professionnelle. Cette satisfaction décroît notamment avec l'âge et la durée de travail, elle augmente avec le volume d'activité et l'exercice en secteur 2.

Barba-Vasseur, M., et al. (2014). "Démographie des psychiatres et facteurs d'attractivité : l'exemple de la Franche-Comté." Sante Publique **26**(5): 639-645, carte, tabl., graph.

[BDSP. Notice produite par EHESP kBFR0xto. Diffusion soumise à autorisation]. En France, l'augmentation de la demande faite à la psychiatrie s'ajoute aux difficultés de renouvellement des générations de psychiatres, menaçant l'accessibilité aux soins, en particulier dans les secteurs ruraux et semi-ruraux. Cette étude épidémiologique observationnelle rétrospective associée à une enquête qualitative avait pour objectif de décrire le lieu d'exercice des psychiatres formés en Franche-Comté et d'analyser les facteurs associés à leur installation dans cette région, notamment au sein des zones les plus déficitaires. Entre 1994 et 2013,160 internes sont entrés en formation de psychiatrie en Franche-Comté. En octobre 2013,87 exerçaient en tant que psychiatres dont 57% en Franche-Comté. La région d'exercice apparaissait significativement liée au lieu de naissance. Les 18 entretiens réalisés ont montré qu'au-delà des facteurs familiaux et de qualité de vie, les possibilités de travailler en équipe, la

mise en place de projets novateurs et les valeurs défendues par l'établissement pouvaient constituer des facteurs d'attractivité pour les jeunes psychiatres. Si l'augmentation des effectifs annuels d'internes semble pouvoir répondre, à long terme, aux problèmes démographiques rencontrés en Franche-Comté, des mesures urgentes, structurelles et organisationnelles paraissent nécessaires. La création de postes à temps partagé, la facilitation d'installation des psychiatres au sein de maisons de santé pluridisciplinaires, les délégations de tâches et la télémédecine pourraient, entre autres, permettre une amélioration de l'offre de soins psychiatriques en Franche-Comté.

Bariol-Mathais, B. D., Chevillard, G., Lucas-Gabrielli, V., et al. (2020). Santé et territoires
http://www.fnau.org/fr/publication/sante-et-territoires/
http://www.gallimard.fr/Catalogue/GALLIMARD/Alternatives/Points-Fnau-Alternatives/Sante-et-territoires

Les agences d'urbanisme travaillent de manière croissante sur la santé dans les territoires ; des partenariats se sont construits avec les acteurs de la santé, notamment les agences régionales de santé, les ministères. Cet ouvrage collectif qui rassemble des points de vue d'experts, mais aussi des témoignages d'expériences concrètes d'acteurs de l'urbanisme, offre une vision élargie des politiques de santé et d'aménagement, pensées de manière conjointe au bénéfice de villes favorables à la santé et à la qualité de la vie.

Baudier, F., et al. (2009). "Les maisons de santé : une solution d'avenir." Sante Publique **21**(4): 111.

[BDSP. Notice produite par EHESP kBBoR0x9. Diffusion soumise à autorisation]. Ce numéro spécial de la revue Santé publique a été réalisé à la suite d'un colloque national organisé à Besançon, en juin 2008. La première contribution développe une vision à la fois historique et prospective. Elle fournit de solides repères dans un paysage complexe, plein d'évolution en matière de santé et de protection sociale. L'approche originale promue par certaines collectivités, en particulier au sein des conseils régionaux, permet ensuite de comprendre les enjeux politiques et organisationnels sous-jacents. De ce point de vue, l'aménagement du territoire est certainement une dimension essentielle à prendre en compte. Le regard porté sur les expériences étrangères est instructif. Il vient d'Europe ou du continent américain (Québec). La Belgique trace, par exemple, une voie originale ; elle est rapportée avec humour. La situation des centres de santé français, proche des maisons médicales belges, pose, quant à elle, la question de structures pionnières et de leur pérennité. La plupart des maisons de santé sont très récentes. Les professionnels qui y travaillent réfléchissent à la pertinence de leurs nouveaux modes d'organisation, se remettent en question, dialoguent avec les élus, les patients, les institutions... Ce sont des projets en construction comme le témoignent les premiers travaux français présentés dans cette publication. Ils sont certes encore limités, mais donnent des pistes de réflexion et d'amélioration déjà intéressantes. Enfin, des recommandations émanant d'un séminaire national ayant réuni près d'une centaine de personnes, acteurs engagés dans la réussite des maisons de santé, fournissent des perspectives concrètes pour ceux qui souhaitent s'y investir.

Beaucourt, C. et Roux, L. (2015). "Les formes d'agir dans la gouvernance des maisons de santé." Journal De Gestion Et D'economie Medicales **33**(6): 347-358.

[BDSP. Notice produite par ORSRA R0xJH9tq. Diffusion soumise à autorisation]. Les maisons de santé ont été initiées pour promouvoir une nouvelle approche de la santé et des relations avec les usagers. Au sein de ces maisons, les professionnels associés ont alors construit des modalités de gouvernance facilitant la coordination de leurs différentes logiques d'action. Tout cela a produit ici ou là des dynamiques collectives plus ou moins innovantes sans nécessairement modifier les modes de relations entre professionnels et avec les usagers. Là où nous avons pu voir émerger des relations nouvelles, c'est lorsque la dimension politique a été intégrée dans la gouvernance des maisons de santé. C'est ce travail d'observation et d'analyse (à partir d'une étude de cas approfondie) que nous présentons dans l'article qui suit. Après avoir caractérisé les formes d'agir stratégique dans les maisons de santé, et montrer les limites d'une approche de la gouvernance vue comme un processus de régulation entre ces agirs pluriels et évolutifs, nous complétons cette lecture en faisant émerger la place d'un agir que nous nommons "politique" dans ces nouvelles organisations de santé.

Beaupin, A. et Rey, F. (2017). "La recherche en soins primaires, un enjeu politique." Cahiers De La Sante Publique Et De La Protection Sociale (Les)(24): 17-20.

Si l'on en croit les auteurs d'un récent ouvrage collectif, les maladies chroniques invitent à inventer la 3e médecine. Ce serait la fin de l'hospitalocentrisme. Dans ce modèle, l'exercice regroupé pluriprofessionnel devient la base de la dispensiation des soins. Le professionnel devient pour le patient un facilitateur de ses actions et décisions relatives à sa propre santé. D'où partons-nous ? Comment avancer ? Telles sont quelques questions auxquelles sera confrontée la recherche en soins primaires.

Benoit, M., et al. (2017). "Chevauchement, interdépendance ou complémentarité ? la collaboration interprofessionnelle entre l'infirmière praticienne et d'autres professionnels de santé en Ontario." Sante Publique **29**(5): 693-706.

[BDSP. Notice produite par EHESP 7kR0xrjn. Diffusion soumise à autorisation]. Le rapport Naylor de 2015 précise que les infirmières praticiennes (IP) sont sous-utilisées au Canada, et ce, malgré les preuves favorables à leur égard, les avantages qu'elles apporteraient aux systèmes de santé ainsi qu'à la santé de la population plus généralement. Comment expliquer qu'elles ne soient pas plus présentes à pratiquer dans le système de santé canadien ? Une revue de littérature, sociohistorique, a permis de montrer qu'il existe un chevauchement, une interdépendance ou une complémentarité entre le rôle de l'IP et celui d'autres professionnels de la santé et que cela concerne son statut, sa formation autant que l'étendue de sa pratique. Le développement d'une approche collaborative interprofessionnelle, bien que réclamée par la plupart des associations professionnelles d'infirmières au pays, a du mal à s'implanter dans le cadre de la pratique et de la formation des IP.

Berland, Y., et al. (2016). "Pratiques avancées en soins infirmiers. Dossier." Revue Hospitaliere De France(569): 20-35, fig.

[BDSP. Notice produite par EHESP A9R0xrFo. Diffusion soumise à autorisation]. Après un premier pas avec l'article 51 de la loi HPST sur les transferts de tâches entre professionnels de santé, la loi de modernisation de notre système de santé du 26 janvier 2016 officialise "l'exercice en pratique avancée" et ouvre la voie aux pratiques infirmières avancées (PIA). Au regard des expériences étrangères, ce dossier se penche sur les enjeux que recèlent ces pratiques et sur les défis à relever pour le système de santé français : Quelle formation mettre en place pour la qualification des PIA ? Comment rémunérer l'exercice en pratique avancée ? Quelles conditions sont nécessaires pour que cette avancée ne s'enferme pas dans une énième spécialisation et qu'elle contribue à accroître l'efficience du système de santé ? Dans quels domaines un IPA apportera une plus-value ?

Bertrand, D. (2021). "Deux nouvelles procédures d'accès à l'exercice médical pour les médecins à diplôme hors union européenne en 2021. Aspect juridique et démographique." Bulletin De L'academie Nationale De Medecine **205**(8): 993-998.
https://doi.org/10.1016/j.banm.2021.07.001

Résumé La loi du 24 juillet 2019 prévoit deux nouvelles procédures d'accès au plein exercice pour des médecins à diplôme hors Union Européenne. La voie de la régularisation concerne les médecins associés ayant un exercice en France ; le dépôt d'un dossier à l'agence régionale de santé leur permet de se présenter devant une commission régionale qui rend une décision d'acceptation, de refus ou de complément à acquérir. Ce dépôt de dossier entraîne une autre conséquence, l'autorisation de poursuivre son activité en France en attendant de passer devant la commission. La procédure de la commission territoriale est destinées aux Antilles-Guyane et peut autoriser un médecin étranger titulaire d'un diplôme de médecine de tous les pays à exercer dans la région après avoir été retenu par une commission à prédominance médicale. Avant cette loi, le préfet (autorité administrative) délivrait ses autorisations. Ces deux voies complètent les trois déjà existantes.

Bourdillon, F., et al. (2008). "Des missions de santé publique pour les médecins généralistes." Sante Publique **20**(5): 489-500.

[BDSP. Notice produite par EHESP R0xn7s8F. Diffusion soumise à autorisation]. La Société française de santé publique (SFSP) et l'Association pour le développement de l'épidémiologie de terrain (Epiter) mènent, depuis maintenant deux ans une réflexion, prenant en compte les profonds changements sociologiques de la profession médicale : chute de la démographie, féminisation, vieillissement... et le besoin de réforme de l'organisation du système de soins, la SFSP et sa section médecine générale ont souhaité ouvrir deux chantiers : d'une part celui des missions de santé publique des médecins généralistes qui fait l'objet de cette note, et d'autre part celui de l'organisation du système de soins de santé primaire dans notre pays qui sera au coeur des travaux en 2008-2009. Cet article démontre en effet comment par son activité professionnelle quotidienne le généraliste participe aux mission de santé publique. En matière de prévention dite médicalisée : vaccination, dépistages opportuniste, incitation au dépistage organisé, conseils et guidance de type éducation à la santé (sexualité, parentalité, addictions, risques au travail...). De même, leur implication dans les évaluations de pratiques professionnelles (EPP) représente en soi une activité de santé publique. Enfin en s'inscrivant dans des démarches de programmes de santé et en travaillant en réseau de manière pluridisciplinaire pour mieux prendre en charge les maladies chroniques ou en participant à la veille sanitaire, certains amplifient leur démarche de santé publique. En réalité, de nombreuses activités de médecine générale relèvent de la santé publique mais le médecin généraliste apparaît avant tout comme un acteur de soins, plus rarement de prévention et jamais comme un acteur de santé publique.

Bouzige, B. (2020). "La place de la pharmacie d'officine dans la coordination des soins primaires." Revue Francaise Des Affaires Sociales(1): 295-297.
https://www.cairn.info/revue-francaise-des-affaires-sociales-2020-1-page-295.htm

L'évolution de l'exercice officinal vers la coordination des soins avec les autres professionnels de santé, en maison de santé pluriprofessionnelle (MSP) ou non, est capitale. La prise de conscience de cette nécessité est accélérée aujourd'hui par la « paupérisation » médicale qui touche de plus en plus de bassins de vie et qui incite ou pousse les clients/patients à venir plus nombreux chercher l'orientation ou le conseil médical de premier recours à la pharmacie, lieu de proximité ouvert sept jours sur sept. Nous rappelons que pour 100 personnes qui rentrent dans une officine, 70 à 80 viennent ou vont chez le médecin et une dizaine voit une infirmière. C'est dans ce contexte nouveau que le travail de relation et de coordination avec les autres professionnels de santé s'installe, lentement mais sûrement, comme l'un des éléments du service rendu à la population. Le rôle des pharmacies dans la coordination des soins repose en premier lieu sur la capacité des pharmaciens et de leurs collaborateurs à partager des dossiers et des informations utiles pour gérer la trajectoire des patients. Ce partage est rendu difficile par l'inexistence de logiciels interopérables, ce qui les oblige à ce jour à une double saisie des données patients, très chronophage et source d'erreurs (M. Naiditch, p. 237). Un travail essentiel doit être entrepris très rapidement pour y remédier. Une grande partie de la valeur ajoutée des pharmaciens tourne autour de leurs savoirs et savoir-faire spécifiques concernant le médicament et les traitements mais aussi de leur rôle de confident.

Bras, P. L. (2011). "Peut-on réformer l'organisation des soins de premier recours ?" Seve : Les Tribunes De La Sante(30): 113-126.

Le système de soins de premier recours est confronté, en France, à un double défi : d'une part la diminution prévisible du temps médical, d'autre part la nécessité d'enrichir le contenu des prises en charge, notamment des patients chroniques. L'externalisation de certaines fonctions (éducation thérapeutique, accompagnement des patients) en dehors des cabinets de médecine générale en constituant en leur sein des équipes composées de médecins et d'infirmières. Les conditions en matière de définition des fonctions, de formation ou de modes de rémunération sont loin d'être réunies pour que ce mode d'organisation puisse s'implanter en France. Il faut donc envisager une action volontariste des pouvoirs publics : financer les infirmières qui souhaiteraient travailler au sein des cabinets de médecine générale volontaires pour ce nouveau mode d'exercice.

Bremaud, A. (2016). "Un nouveau cadre réglementaire est nécessaire pour l'avenir des centres de santé." Cahiers De La Sante Publique Et De La Protection Sociale (Les)(22): 53-55.

Les centres de santé sont des acteurs reconnus dans les domaines du soin, de la santé publique, de l'accessibilité sociale comme de l'organisation et de la coordination de la formation. Mais ils rencontrent actuellement des difficultés financières et réglementaires. Cet article définit quel serait le nouveau cadre réglementaire idéal.

Brocas, A. M. (2010). "Quels enseignements tirer des expériences étrangères pour la France ?" Revue Francaise Des Affaires Sociales(3): 97-101.

Anne-Marie Brocas, directrice de la DREES, a clôturé le colloque « Politiques et organisation des soins primaires : concepts, outils et pratiques en Europe et aux États-Unis, quels enseignements pour la France ? » en s?attachant aux discussions qui ont suivi les exposés. Elle présente ici les pistes de réflexions qui se sont dégagées des différentes interventions et débats.

Brunat, M. et Fargeon, V. (2015). "Accessibilité et organisation des soins de premier recours." Journal De Gestion Et D'economie Medicales **33**(3): 175-190, tabl., rés.

[BDSP. Notice produite par ORSRA R0xrkB9H. Diffusion soumise à autorisation]. Il s'agit par cet article d'apporter une réflexion critique sur les processus de lutte contre les inégalités de santé, à travers l'analyse des "possibilités réelles d'accès" aux soins préventifs et curatifs offertes par le système de soins primaires. En France, l'assurance maladie et la mise en place de la CMU-C pour les plus démunis ont permis de diminuer largement les obstacles financiers de recours aux soins mais la façon dont est organisée l'offre de soins a un effet sur la globalité des prises en charge, les trajectoires de soins, l'accès à la prévention, et in fine, la réduction des inégalités. L'étude de l'organisation des soins de premiers recours met en évidence le rôle des principes, règles et normes formels et informels, souvent ancrés historiquement dans le système, qui constituent des facteurs ou des coûts d'accessibilité. Les apports et modalités de développement d'une offre de services intégrée et pluri-professionnelle, à l'instar des centres de santé et des maisons de santé pluridisciplinaires sont ensuite discutés à partir de monographies réalisées dans la Drôme et le Rhône. Ces formes d'organisation sont une voie intéressante en matière de coordination, continuité et globalité des soins et combinent différents facteurs d'accessibilité. Leur développement est cependant contraint par un modèle économique peu adapté. L'évolution du cadre institutionnel conditionne l'émergence de ces structures en tant qu'organisation pérenne et structurante de l'offre de soins, levier de réduction des inégalités de santé.

Cachard, J. (2020). "Développer des démarches participatives dans les maisons de santé pluriprofessionnelles : quels enseignements tirer des expériences menées en quartier populaire ?" Revue Francaise Des Affaires Sociales(1): 143-165.
https://www.cairn.info/revue-francaise-des-affaires-sociales-2020-1-page-143.htm

Les pouvoirs publics, s'appuyant sur des recommandations de santé publique, affichent l'importance de développer des démarches participatives dans le domaine de la santé. En soins primaires, de telles démarches existent dans des maisons de santé pluriprofessionnelles en quartiers populaires. À partir d'une enquête sociologique au sein de neuf d'entre elles, nous analysons les objets autour desquels ces pratiques se développent, les types d'acteurs impliqués et leurs modes d'engagement, puis nous décrivons les dynamiques et les effets qu'elles produisent. Ces pratiques participatives, qui engagent à la fois des professionnels de santé, des usagers et des décideurs politiques, nécessitent néanmoins des conditions difficiles à réunir, surtout si l'on se place dans une perspective d'extension à d'autres maisons de santé, au-delà des quartiers populaires.

Campeon, A., et al. (2012). "Formes et effets de la pluridisciplinarité dans le diagnostic et la prise en charge de la maladie d'Alzheimer." Gerontologie Et Societe(142): 129-141.

[BDSP. Notice produite par FNG CpkR0x89. Diffusion soumise à autorisation]. La maladie d'Alzheimer et les troubles apparentés sont depuis quelques années constitués en enjeux majeurs de santé publique. Cette reconnaissance s'est accompagnée de la mise en place d'un dispositif gradué et spécialisé via, notamment, la création de Centres mémoires de ressources et de recherche (CMRR) où

peuvent être effectués le diagnostic puis le suivi des patients. Si la pluridisciplinarité constitue une caractéristique majeure des CMRR, qui regroupent une diversité de professionnels de santé (gériatres, neurologues, psychiatres, psychologues, neuropsychologues, infirmières etc.) assurant l'accompagnement des patients, l'analyse comparative de trois sites montre qu'il existe des formes variées de pluridisciplinarité, en fonction de la composition des équipes. Cet article propose d'éclairer les approches différenciées de trois types de spécialistes - les gériatres, les neurologues et dans une moindre mesure les psychiatres - qui travaillent au sein de ces CMRR, ainsi que la façon dont leurs relations façonnent leurs pratiques professionnelles. (R.A.).

Chambaud, L. (2016). "Le système de santé français à l'épreuve des transitions." Socio : La Nouvelle Revue Des Sciences Sociales(6): 157-170.
https://socio.revues.org/2300

Cet article s'intéresse au concept d'integrated care, traduit par la notion d' « intégration des soins et des services » qui tend à s'imposer dans la littérature des études sur la santé, la maladie, les soins. Ce concept, qui peut être rapproché de la notion de parcours de soins actuellement prôné en France, aide à dépasser le clivage habituel entre le cure et le care, entre le soin et l'accompagnement. Sa mise en œuvre s'appuie sur un changement paradigmatique en cours à partir d'un phénomène de transition combinant cinq domaines : transition épidémiologique – avec la chronicisation de la plupart des maladies graves ; transition démographique, qui promeut la notion de service à la personne, préventif/curatif, accompagnement ; transition professionnelle, qui passe par les jeunes professionnels de santé ; transition technologique, non spécifique au monde de la santé mais qui la réalise, ne serait-ce qu'avec les technologies qui bousculent les prises en charge, ou le dépistage ; transition démocratique, dont on retrouve la trace dans le droit des malades des années 2000 et lors de l'émergence de concepts nouveaux comme le malade-expert ou l'éducation thérapeutique. Les enjeux actuels et les obstacles à cette évolution de notre système de santé sont discutés.

Chevillard, G. (2015). Dynamiques territoriales et offre de soins : l'implantation des maisons de santé en France métropolitaine. Paris Université Paris Ouest, Université Paris Ouest. Nanterre La Défense. FRA. **Thèse ; Université Paris Ouest Nanterre La Défense : La boratoire Dynamaiques sociales et recompositions des espaces ; Doctorat en Géographie.:** 376 , tab., graph., fig.
https://hal.archives-ouvertes.fr/tel-01225027

Les médecins généralistes libéraux sont inégalement répartis en France et ceci est un fait ancien. Ces inégalités se renforcent au détriment d'espaces moins attractifs. Des zones avec des difficultés d'accès aux soins, urbaines et rurales, apparaissent ou s'étendent. Depuis 2008, les pouvoirs publics accompagnent financièrement les maisons de santé pluriprofessionnelles (MSP) en espérant qu'elles attirent et maintiennent des médecins dans ces espaces. Cette recherche étudie dans quelle mesure l'espace et le territoire participent à l'implantation de MSP, et en retour quels sont les effets de ces structures sur les espaces et territoires concernés. L'implantation des MSP et leurs effets seront étudiées à différentes échelles géographiques à partir d'approches quantitative et qualitative. Au plan quantitatif, l'analyse spatiale des MSP utilise plusieurs outils (typologies et SIG). Ceci est complété par plusieurs terrains dans lesquels il s'agit d'étudier la place des MSP dans des régions et territoires donnés, en recueillant les témoignages des principaux acteurs concernés. Les effets des MSP sur l'offre de soins sont étudiés sur le territoire métropolitain selon une approche nationale comparant l'évolution de la densité de généralistes libéraux dans des espaces avec MSP comparativement à des espaces « similaires » sans MSP. La conduite de terrains dans deux régions vient compléter et discuter les résultats. Mots clés : espace défavorisé, espace fragile, espace rural, évaluation de politiques publiques, géographie de la santé, maisons de santé pluriprofessionnelles (MSP), soins de premiers recours, médecins généralistes libéraux.

Clement, M. C., et al. (2009). "Les maisons de santé : un nouvel équilibre entre accessibilité, continuité des soins et organisation des médecins libéraux. Premiers résultats de l'évaluation exploratoire des Maisons de santé de Franche-Comté et de Bourgogne." Sante Publique **21**(4): S79-S90.

Cette évaluation explore de façon empirique le concept de Maison de Santé Pluridisciplinaire, présenté aujourd'hui comme un moyen de maintenir des médecins sur le territoire et d'améliorer la qualité des soins. Notre échantillon comprend neuf maisons de santé issues de deux régions, 71 professionnels de santé dont 32 omnipraticiens. Elle associe des informations recueillies par questionnaire postal, visite sur sites et entretiens. L'activité des professionnels et le recours aux soins des patients sont analysés avec les données de remboursement de l'assurance maladie. Elles sont comparées à l'activité des professionnels et au recours aux soins des patients localisés sur une zone témoin (ZLT) définie pour chaque maison de santé pluridisciplinaire (MSP). Au-delà de la forte hétérogénéité des structures, en termes de localisation, taille et activité, nous constatons: un équipement supérieur à la moyenne, des plages d'ouverture élargies et des pratiques coopératives le plus souvent informelles. À activité comparable, les médecins des MSP déclarent prendre plus de jours de congés. Plusieurs types de pratiques collectives sont repérables selon le niveau de « substitution » des médecins entre eux. En conclusion, l'organisation au sein des MSP étudiées permet un équilibre différent entre temps de travail et loisirs pour les médecins, tout en augmentant l'accessibilité horaire et annuelle aux patients à la MSP.

Clerc, P., et al. (2015). "Restructuration des soins ambulatoires en France : propositions de gestion des patients hypertendus." Sante Publique **27**: 209-217, tabl.

[BDSP. Notice produite par EHESP 77ADR0x8. Diffusion soumise à autorisation]. Parmi les éléments qui favorisent la création de maisons ou de centres de santé pluridisciplinaires, il y a l'émergence de la polypathologie chronique en ambulatoire. À partir d'une typologie en huit classes de patients hypertendus, les auteurs exposent ici l'intrication entre organisation des soins et modification de la prise en charge. Ils mettent en évidence les effets de l'aménagement de la structure : nécessité de créer des profils de postes nouveaux pour les besoins de coordination, accompagnement des patients au travers de l'éducation thérapeutique, formation des jeunes professionnels à l'exercice pluridisciplinaire. Les effets externes sont l'amélioration des flux ville-hôpital notamment au travers de la réémergence du rôle consultant du second recours, et d'une meilleure gestion des entrées et sorties des patients. Mais sans changement des mentalités, sans nouveaux moyens de rémunérations des professionnels libéraux, et sans développement du système d'information en santé, ces évolutions ne seront pas pérennes.

Clisson, R., Angoulvant, C., Ramond-Roquin, A., et al. (2020). "Du projet professionnel d'internes de médecine générale angevins à leur exercice réel : 2012 à 2019." Sante Publique **32**(5): 507-518. https://www.cairn.info/revue-sante-publique-2020-5-page-507.htm

Objectifs : L'installation des jeunes médecins généralistes est déterminée par plusieurs facteurs dont le projet professionnel. En 2012, une étude observationnelle quantitative interrogeait les projets professionnels des internes angevins en médecine générale. En 2019, l'objectif de cette étude était d'essayer de mettre en évidence une continuité entre projet professionnel et exercice ultérieur. Méthode : Étude quantitative par questionnaire internet réalisée de mai à juillet 2019, s'intéressant aux données socio-démographiques, à l'exercice actuel et aux facteurs d'évolution du projet professionnel. Les critères d'inclusion étaient d'avoir répondu à l'étude de 2012 et d'avoir accepté d'être recontacté (n = 167). Construction d'un indicateur de suivi du projet professionnel (ISPP) envisagé en 2012 et réel en 2019, basé sur une comparaison du mode d'exercice, de la structure d'exercice et du type de patientèle envisagé. Résultats : Le taux de réponse était de 76,6 %. 48,4 % étaient libéraux, 31,3 % étaient salariés, 11,7 % avaient un exercice mixte. Selon l'ISPP, le projet professionnel envisagé a été suivi totalement par 67,7 % des internes et partiellement par 17,3 %. Le SASPAS influait sur l'évolution du projet professionnel (p = 0,026). La multiplication des stages en ambulatoire favorisait un exercice en libéral, en 2019 (p < 0,001). Les principaux facteurs déclarés d'évolution des projets professionnels étaient la formation (77,3 %) et la situation familiale (53,1 %). Conclusion : Ce suivi de cohorte a montré que plus de deux tiers des internes ont suivi leur projet initial. L'identification et le soutien de ces projets individuels durant la formation pourrait être une piste pour favoriser leur réalisation.

Cour des Comptes (2014). Les conventions avec les professions libérales de santé : répondre aux besoins des patients, mieux assurer l'efficience de la dépense. Rapport sur l'application des lois de financement de la sécurité sociale. Paris : Cour des Comptes **:** 241-266., tabl.

La France a développé un modèle spécifique visant à concilier un exercice libéral des professions de santé avec un accès aux soins de ville généralisé, garanti par une sécurité sociale organisant la solidarité collective. Les conventions nationales passées depuis 1971 entre l'assurance maladie et les différentes catégories de professionnels libéraux en constituent un outil essentiel. L'enjeu financier en est significatif : en 2013, au sein de l'objectif national des dépenses d'assurance maladie (ONDAM), le sous-objectif des soins de ville s'est élevé en exécution à 79,4 Md€, soit 46 % du total. Les conventions élaborées par profession revêtent un caractère obligatoire une fois approuvées par arrêté ministériel, sauf refus d'adhésion par le praticien concerné. Plus de 99 % des professionnels de santé libéraux sont actuellement conventionnés. Le cadre de leur négociation a été profondément réformé par la loi n° 2004-810 du 13 août 2004 relative à l'assurance maladie. La Cour a examiné les politiques conventionnelles développées à la suite de cette réforme. Elle a centré son analyse sur cinq professions, qui représentent l'essentiel des dépenses de soins de ville: médecins, chirurgiens-dentistes, pharmaciens, infirmiers, masseurs-kinésithérapeutes. Elle a constaté que les résultats de ces politiques sont insuffisants, que ce soit en termes d'accès aux soins ou d'efficience dans leur dispensation.. Le système conventionnel doit être réorienté, pour le recentrer sur les besoins des assurés sociaux et pour faciliter une réorganisation des soins de proximité en développant les approches interprofessionnelles.

Coutant, D. et Tuffreau, F. (2016). La médecine générale, une spécialité d'avenir, Rennes : Presses de l'Ehesp

Aujourd'hui en France, si globalement les effectifs de médecins augmentent, le nombre de généralistes est inférieur à son niveau de 1996, alors que la population française s'est accrue de plus de 6 millions d'habitants. Mais la crise actuelle n'est pas seulement démographique ; la question de la place de la médecine générale au sein du système de soins a été interrogée dès les années 1970. En l'absence de reconnaissance universitaire (intervenue en 2004), la construction identitaire de la médecine générale s'est faite, pour une large part, dans le cadre des conventions signées entre les syndicats médicaux et l'assurance maladie. Un espace de négociations porteur d'enjeux considérables…Pourtant, ces dernières années, une image nouvelle se dessine, celle du généraliste «responsable d'équipe de soins primaires et véritable acteur de santé publique de son territoire, dans une approche pluriprofessionnelle, au sein des maisons de santé, héritières des centres et des réseaux de santé.

De Haas, P. (2015). Monter et faire vivre une maison de santé, Brignais : Le coudrier éditions

Mode d'exercice attrayant pour les libéraux, les maisons de santé pallient les difficultés d'accès aux soins dans les zones où les soignants se raréfient, tout en permettant d'améliorer la continuité et la qualité des soins en ambulatoire. Pour autant, mener à bien de tels projets se révèle complexe. Dans cet ouvrage, l'auteur décortique le mécanisme de la construction d'une maison de santé à partir de quatre expériences récentes. Après une présentation des parties prenantes, il détaille les six briques porteuses de l'édifice : approche territoriale, dynamique d'équipe, montage juridique, financement, immobilier, projet de santé et projet professionnel. Il développe ensuite toutes les facettes du fonctionnement de la structure et trace les perspectives de ce mode d'exercice (4ème de couv.)

De Haas, P., et al. (2015). "Les maisons de santé pluri-professionnelles." Lettre Du College (La)(2): 16.

Ce fascicule rassemble les contributions d'experts français et étrangers sur les maisons de santé pluri-professionnelles. Ce mode d'exercice s'est beaucoup développé en France ces dernières années et est désormais majoritaire. Cependant, comparativement à d'autres pays, le développement est plus modeste. Ce dossier dresse un bilan pour la France et fait un retour sur des expériences étrangères (Canada, Etats-Unis).

Delanoe, J.-Y. et Offrey, C. (2011). "Maisons de santé pluriprofessionnelle : acteurs et financeurs." Revue Hospitaliere De France(542): 68-71.

[BDSP. Notice produite par EHESP 9oG9DR0x. Diffusion soumise à autorisation]. Cette réflexion porte sur le développement et la création de maisons de santé pluriprofessionnelles. Face à la désertification médicale de certaines régions voire de certains quartiers urbains, l'exercice regroupé de professionnels de santé est l'une des réponses proposées pour optimiser l'accès aux soins. En outre, il semble être particulièrement apprécié par les jeunes médecins, demandeurs de partages des contraintes et de travail en collectif. La création d'une maison de santé pluridisciplinaire rencontre malgré tout de nombreuses difficultés et résistances.

Depinoy, D. (2011). Maisons de santé, une urgence citoyenne, Paris : Editions de santé

Le système de santé est en plein changement et les défis liés aux évolutions démographiques, comportementales, épidémiologiques et des pratiques médicales imposent une nouvelle organisation. La structuration du premier niveau des soins - appelé le premier recours - peut apporter des résultats concrets rapides en matière de réduction des inégalités, d'amélioration de la qualité du service rendu et d'efficience. S'attacher de manière volontariste à soutenir l'émergence des modes d'exercice pluriprofessionnels et regroupés peut permettre de relever les enjeux majeurs de notre système de santé. Au-delà d'un effet de mode qui pousse à vouloir construire rapidement des maisons de santé, il y a matière à soutenir également d'autres formes de regroupement pluriprofessionnel pour constituer le socle d'une nouvelle médecine de premier recours. Il est nécessaire d'accompagner le changement pour donner une chance à ces nouvelles formes d'exercice en équipe mais aussi et surtout de faire preuve d'audace pour mener ces expériences à l'échelon national. Cet ouvrage détaille les enjeux de l'organisation du premier recours et propose des leviers de réussite des projets. Il s'adresse à tous les professionnels de santé qui désirent se lancer dans un projet de maison ou pôle de santé mais aussi aux élus et aux institutionnels qui ont besoin de clefs pour participer.

Douguet, F., et al. (2016). Intervenir en première ligne : les professions de santé libérales face au défi de la santé de proximité, Paris : Editions de l'Harmattan

La France dispose d'un système de santé compétitif et reconnu, mais coûteux. Il ne permet pas de garantir un accès équitable aux soins sur l'ensemble du territoire. Les enjeux économiques liés à la maîtrise des dépenses de santé imposent la nécessité d'adapter l'offre de soins de proximité. Les évolutions impliquent une redistribution des tâches entre professionnels, laquelle conduit à redessiner les contours de ces métiers, voire à en créer de nouveaux. Cet ouvrage repère et analyse les enjeux de ces reconfigurations et rend compte des pratiques et relations entre les différents professionnels de santé.

Fournier, C. (2014). "Concevoir une maison de santé pluri-professionnelle : paradoxes et enseignements d'une innovation en actes." Sciences Sociales Et Sante **32**(2): 67-95.

[BDSP. Notice produite par ORSMIP 8mGR0xJ8. Diffusion soumise à autorisation]. En soins primaires, conjuguer approche clinique et de santé publique pour répondre aux besoins complexes des patients et aux exigences des autorités de santé représente un défi croissant. Le suivi d'un projet de maison de santé pluri-professionnelle dans une zone urbaine sensible permet à la fois de comprendre les difficultés rencontrées par les soignants et de saisir les modèles de soins qu'ils défendent. Il permet également d'étudier comment l'innovation organisationnelle, par les opérations de traduction qui l'accompagnent, peut contribuer à faire évoluer les pratiques à l'articulation entre soin et prévention, sanitaire et social, médical et paramédical, premier et second recours, colloque singulier et approche collective territoriale. (R.A.).

Francois, P., et al. (2017). "Les outils d'évaluation des structures pluriprofessionnelles en soins primaires : revue systématique." Revue D'epidemiologie Et De Sante Publique **65**(1): 61-69.

[BDSP. Notice produite par ORSRA orR0xoql. Diffusion soumise à autorisation]. Position du problème : Les regroupements pluriprofessionnels en soins primaires se développent dans de nombreux pays dont la France. Ces groupements apparaissent très hétérogènes quant au niveau d'intégration et de coopération interprofessionnelle. L'objectif de cette étude était de réaliser une revue systématique des instruments d'évaluation du développement organisationnel des structures de soins primaires. Méthodes : La littérature scientifique a été recherchée dans la base de données Pubmed, la littérature grise a été recherchée sur Internet. Les données récoltées comportaient des informations sur les instruments d'évaluation : origine, contenu, mode d'utilisation, processus de validation. Résultats : Soixante-cinq documents portant sur 16 instruments d'évaluation ont été retenus. Douze ont été développés en Amérique du Nord et quatre en Europe. Quatre instruments étaient des questionnaires d'évaluation, quatre des grilles d'accréditation et huit étaient des matrices de maturité. Les matrices de maturité étaient structurées en niveaux de développement organisationnel. Leur utilisation comportait une auto-évaluation individuelle par chaque professionnel, suivie par un consensus de groupe en présence d'un facilitateur externe. Les questionnaires d'évaluation et les grilles d'accréditation avaient des structures et des modes d'utilisation variables. Les instruments étaient structurés en 4 à 16 dimensions avec une médiane à 7. Six thématiques communes ont été identifiées : la gestion de la structure et de l'équipe, la démarche qualité, la gestion des données des patients, la coopération interprofessionnelle, l'accessibilité et la continuité des soins, et la formation. Les processus de validation des outils étaient très variables et le plus souvent incomplets. Conclusion : Il existe un ensemble hétérogène d'instruments d'évaluation des structures de soins primaires. Ces instruments diffèrent par leur objectif, leur contenu et leur mode d'utilisation. On retrouve cependant des thématiques communes. Un questionnaire d'évaluation des regroupements pluriprofessionnels des soins primaires en langue française serait utile pour évaluer et suivre dans le temps le développement organisationnel des centres, maisons et pôles de santé en France.

Galam, E. (2016). "Travailler en équipe : des aspirations légitimes, des contraintes et des conflits bien réels." Medecine : De La Medecine Factuelle a Nos Pratiques **12**(5): 196-198.

La prise en compte de l'importance du travail d'équipe est finalement assez récente tant la culture médicale est influencée par le paradigme un peu mythique du « colloque singulier ». Ce référentiel est désormais largement mis en cause ne serait-ce que par la non moins paradigmatique exigence de qualité et d'économie des soins. Si l'on ajoute à cela la recherche de l'harmonie et la croyance incantatoire que « tout le monde il est beau… », on ne voit pas trop comment.

Georges, P. et Waquet, C. (2013). Les centres de santé : situation économique et place dans l'offre de soins de demain. Paris igas**:** 138 , fig., tabl., annexes.
http://www.igas.gouv.fr/IMG/pdf/RM2013-119P-Centres_de_sante.pdf

Dans un contexte où sont recherchées des formes d'exercice regroupé et coordonné de la médecine ambulatoire, ainsi que des réponses aux inégalités territoriales et sociales d'accès aux soins, les centres de santé, qui offrent des soins ambulatoires pluri-professionnels en secteur 1 et en tiers payant, méritent une attention particulière. Si leur efficacité médico-économique ne peut être prouvée, leur utilité sanitaire et sociale est réelle. Il importe alors d'analyser les causes de leur fragilité financière, ce qui conduit à proposer un nouveau modèle économique, reconnaissant aux centres de santé une rémunération forfaitaire en plus du paiement à l'acte, sous réserve d'efforts de gestion.

Godard, J., et al. (2014). "Parcours de santé : enjeux et perspectives : La mise en oeuvre des parcours sur le terrain." Actualite Et Dossier En Sante Publique(88): 24-35.

[BDSP. Notice produite par EHESP qFGIR0xB. Diffusion soumise à autorisation]. De nombreuses expériences locales ont été menées ces dernières années sur le terrain. Elles amènent les acteurs à travailler ensemble pour prendre en charge certaines populations (personnes âgées), situations (sorties d'hôpital) ou proposer de nouvelles pratiques de soins multidisciplinaires.

Grimaldi, A., et al. (2017). Les maladies chroniques : vers la 3e médecine, Paris : Odile Jacob

Vingt millions de Français souffrent de maladies chroniques, soit un tiers de la population – une véritable épidémie. Hier encore, on mourait de ces maladies, aujourd'hui, elles nous accompagnent toute notre vie. Diabète, cancers, hypertension artérielle, sida, insuffisance respiratoire, mucoviscidose, myopathies, maladies inflammatoires de l'intestin, polyarthrite rhumatoïde, asthme, lupus, insuffisance rénale, cirrhoses hépatiques, séquelles d'accidents vasculaires cérébraux, insuffisance cardiaque, sclérose en plaques, maladie de Parkinson, maladies psychiatriques, maladie d'Alzheimer, obésité… La France doit à présent se doter de tous les moyens pour améliorer la vie de tous les patients atteints de ces maladies. Nous sommes entrés dans l'ère de la 3e médecine, véritable médecine de la personne, aux côtés de la médecine des maladies aiguës bénignes et de la médecine des maladies graves. Pour le patient, une nouvelle façon de vivre ; pour le médecin, une nouvelle façon d'exercer son métier, à l'heure des grandes avancées médicales et technologiques.Soixante-quatorze médecins, patients et experts se sont associés ici pour relever le défi des maladies chroniques.

Grumillier, M. A. (2014). Evaluation du ressenti et des attentes des personnes âgées prises en charge par le Réseau de Santé du Sud Meusien. Nancy Université de Lorraine, Université de Lorraine. Nancy. FRA. **Thèse de Doctorat en Médecine.:** 330 , tab., graph., fig.
https://petale.univ-lorraine.fr/notice/view/univ-lorraine-ori-24985?lightbox=true

L'organisation du système de santé français doit être reconsidérée afin de faire face aux défis socioéconomiques que constituent les besoins de la population âgée grandissante. Les réseaux de santé gérontologiques représentent un élément majeur de la prise en charge globale et coordonnée que nécessite cette population. Une étude qualitative par entretiens semi-dirigés a été réalisée pour explorer le ressenti et les attentes des personnes âgées vis à vis de la prise en charge effectuée par le Réseau de Santé du Sud Meusien et leurs perceptions sur l'éducation thérapeutique. Il a été mis en évidence le manque d'informations délivrées aux personnes âgées concernant les motifs de leur adhésion ainsi que la finalité de l'action du réseau mais souvent l'entrée dans le réseau se fait par le repérage d'une fragilité médicale et/ou sociale. Les apports et les difficultés de la prise en charge du réseau ont conforté la nécessité d'une coordination efficace entre les acteurs de santé et ont fait émerger des nouvelles missions, notamment les moyens de lutter contre la solitude. La perception des personnes âgées sur leur environnement et leur santé a permis de définir leurs attentes dans le domaine de l'information et de l'éducation thérapeutique. L'amélioration de la médecine de parcours des personnes âgées nécessite une coordination efficace entre la médecine de ville et l'hôpital, et pourrait passer par les services de soins infirmiers à domicile comme élément de relais entre la proximité et le réseau, par la mobilisation des équipes médicales de terrain et par la formalisation du suivi du patient au moyen d'outils validés. La sensibilisation au vieillissement et à l'éducation thérapeutique des personnes âgées pourrait se concrétiser par la mise en place de séances collectives au sein des maisons de santé pluriprofessionnelles, et nécessitent des formations et des financements adaptés.

Hada, F. et Ricardo, C. (2009). L'éducation thérapeutique intégrée aux soins de premier recours. Paris HCSP **:** 36.
http://www.hcsp.fr/docspdf/avisrapports/hcspr20091112_edthsoprre.pdf

L'éducation thérapeutique aide les personnes atteintes de maladie chronique et leur entourage à comprendre la maladie et le traitement, à coopérer avec les soignants et à maintenir ou améliorer leur qualité de vie. Pour bon nombre de pathologies, il est démontré que l'éducation thérapeutique des patients améliore l'efficacité des soins et permet de réduire la fréquence et la gravité des complications. Compte tenu du nombre croissant de personnes atteintes de maladie chronique en France (environ 15 millions actuellement), les besoins en la matière sont très importants. L'éducation thérapeutique ne peut pas être assurée par les seuls établissements hospitaliers. Elle devrait s?exercer au plus près des lieux de vie et de soins des patients. Le travail mené par le HCSP a permis d'identifier plusieurs facteurs susceptibles de favoriser ou de freiner l'implication des médecins traitants et autres professionnels de santé de premier recours dans la mise en œuvre d'une éducation thérapeutique de proximité. L'analyse de ces facteurs l?amène à proposer quatre orientations stratégiques qui se déclinent en cinq mesures et quatorze recommandations.

Hasan, I. (2008). Nouvelles formes de coopération entre professionnels de santé. Rapport de synthèse des évaluations quantitatives et recueil de l'avis du malade. Rapport de synthèse. Enquêtes et études **:** 119.
http://www.has-sante.fr/portail/upload/docs/application/pdf/2008-07/rapport_de_synthese_des_evaluations_quantitatives_relatives_aux_nouvelles_formes_de_cooperation_entre_professionnels_de_sant.pdf

[BDSP. Notice produite par HAS H9ER0xr8. Diffusion soumise à autorisation]. Entre décembre 2003 et octobre 2007,15 expérimentations visant à apporter des éléments de réflexion détaillés sur les évolutions possibles des contours des métiers de la santé et sur les modalités de redéfinition de ces contours ont été menées en France. Ces expérimentations (qui se sont déroulées en deux vagues successives) se sont inscrites dans des démarches volontaires devant déboucher sur des résultats évaluables portant notamment sur l'efficacité et la sécurité des soins dispensés.

Hasan, I. (2012). Matrices de maturité en soins primaires. Note de synthèse, Saint-Denis : HAS
http://www.has-sante.fr/portail/upload/docs/application/pdf/2013-03/matrices_de_maturite_en_soins_primaires_note_de_synthese.pdf

Les maisons, pôles et centres de santé se développent en France autour de la notion d'équipe de soins de premier recours, notamment depuis ces 5 dernières années. Dans ce cadre, les réseaux de santé se repositionnent comme appui à ces initiatives. L'enjeu est de créer les conditions favorables, sur un territoire de santé, pour assurer aux patients une prise en charge coordonnée, globale, continue et conforme aux données de la science. Toutefois, la structuration de ces initiatives est encore hétérogène comme l'illustrent les expérimentations dites « article 70 » dont la HAS est responsable de l'évaluation. Elle se heurte en effet à plusieurs difficultés : le manque de temps et d'expertise des promoteurs, l'absence de cahier des charges opérationnel. Pour y faire face, les ARS et les professionnels, à travers les Unions Régionales des Professionnels de Santé (URPS), la Fédération Française des Maisons et Pôles de Santé (FFMPS), la Fédération Nationale des Centres de Santé (FNCS) ou encore l'Union Nationale des Réseaux de santé (UNR.santé), multiplient les démarches d'accompagnement et d'analyse sur le terrain. Dans ce cadre, certains d'entre eux développent des supports, notamment des matrices de maturité (FFMPS, URPS). À leur demande et à celle du ministère de la Santé, la HAS envisage d'élaborer plusieurs supports validés : un tableau de bord de suivi des interventions envisagées dans le cadre de réseaux de santé à partir du travail réalisé pour l'évaluation des expérimentations « article 70 » ; une matrice de maturité ; des indicateurs de pratique clinique. La présente note de travail a vocation à servir de base à l'élaboration d'une matrice de maturité. Elle propose pour cela : un état des lieux des matrices de maturité relatives aux regroupements pluridisciplinaires en soins primaires ; une méthode d'élaboration ; des données de cadrage (dimensions et éléments de caractérisation des niveaux de progrès) issues d'une analyse de la littérature et des matrices de maturité existantes (résumé de l'éditeur).

Hasan, I. (2014). Comment organiser les fonctions d'appui aux professionnels de soins primaires. Saint-Denis HAS**:** 2 vol. (12;45), fig., annexes.
http://www.has-sante.fr/portail/jcms/c_1764278/fr/comment-organiser-les-fonctions-dappui-aux-professionnels-de-soins-primaires

La mise en place de fonctions d'appui consiste à proposer aux professionnels de premier recours des aides pour organiser les parcours des patients en situation complexe. Il peut s'agir de prestations ponctuelles (par ex l'évaluation multidimensionnelle des personnes âgées) ou plus durables (par ex une assistance personnalisée au parcours des personnes en grande difficulté sanitaires ou sociales). Leur déploiement est une mission des ARS : il fait suite à une évaluation des besoins et est cohérent avec le projet régional de santé. Ce déploiement doit tenir compte des cinq conditions d'efficacité repérées dans la littérature :l'inscription dans une dynamique d'intégration territoriale, apportant des outils communs pour évaluer et orienter les personnes ;la localisation du dispositif d'appui en proximité des médecins et des équipes de santé primaire ;un ciblage approprié des patients pouvant en bénéficier ;l'aide à l'organisation des transitions hôpital-domicile, intervention qui a un fort niveau

de preuve sur le recours aux soins ;la transmission d'outils, de savoirs et de savoir-faire aux professionnels de santé.Cette fiche traite du contenu des fonctions d'appui et des facteurs conditionnant leur efficacité, y compris en termes d'organisation. Elle n'aborde pas les aspects réglementaires de cette organisation.s (résumé de l'éditeur).

Hasan, I. (2014). Intégration territoriale des services sanitaires, médico-sociaux et sociaux. Saint-Denis HAS**:** 2 vol. (8;37), fig., annexes.
http://www.has-sante.fr/portail/jcms/c_1764284/fr/integration-territoriale-des-services-sanitaires-medico-sociaux-et-sociaux

L'intégration vise à réduire la fragmentation des dispositifs sanitaires et sociaux, pour permettre un accès facilité aux différentes prestations sanitaires et sociales au niveau du territoire. Elle peut recourir à des modifications de financement, de fonctionnement des organisations de soins et de collaboration entre les acteurs. C'est une dynamique qui s'inscrit dans le temps et non un état stabilisé. Les invariants sont au minimum: L'harmonisation des politiques publiques au niveau régional et territorial ; Une concertation organisée à tous les niveaux : macro pour harmoniser les politiques publiques, meso pour organiser sur le territoire les services sanitaires, médico-sociaux et sociaux, micro pour faciliter le travail en équipes pluri-professionnelles ; L'animation par un pilote reconnu comme légitime par l'ensemble des acteurs et des institutions du territoire ; La mise en place d'un guichet intégré utilisant un outil commun d'évaluation et d'orientation des personnes ; Un retour d'information régulier à la gouvernance sur les difficultés et les besoins non satisfaits. L'enjeu de cette fiche est de définir l'intégration dans le contexte français, de situer les différents niveaux de la démarche d'intégration, d'identifier les publics pouvant en bénéficier le plus, et de proposer une stratégie à appliquer par les ARS pour la mettre en œuvre.(résumé de l'éditeur).

Hasan, I. (2014). Mode d'emploi du plan personnalisé de santé (PPS) pour les personnes à risque de perte d'autonomie (PAERPA). Saint-Denis HAS**:** 16.
http://www.has-sante.fr/portail/jcms/c_1638463/fr/plan-personnalise-de-sante-pps-paerpa

La HAS a élaboré un modèle de plan personnalisé de santé (PPS), à la demande du Ministère des Affaires Sociales et de la Santé, dans le cadre de la mise en œuvre des expérimentations « personnes âgées en risque de perte d'autonomie » (PAERPA). Le PPS est un plan d'action concernant les personnes âgées en situation de fragilité et/ou atteintes d'une ou plusieurs maladie (s) chronique (s), et nécessitant un travail formalisé entre acteurs de proximité. Il s'agit de favoriser la prise en charge en équipe pluriprofessionnelle dans un cadre de coopération non hiérarchique. Ce plan d'action fait suite à une évaluation globale de la situation médicale, psychologique et sociale de la personne afin d'identifier les situations à problèmes. Il débouche sur un suivi et une réévaluation. Le modèle de PPS élaboré par la HAS est un support qui peut être adapté par les professionnels pour tenir compte des spécificités de leur démarche. La première version du modèle de PPS de juillet 2013 a été adaptée suite à la prise en compte du retour d'expérience des utilisateurs : professionnels du domaine sanitaire et du domaine social. Le mode d'emploi du PPS a été révisé. Il est accompagné : d'une synthèse, d'un questionnaire d'aide à la décision d'initier un PPS chez des patients de plus de 75 ans d'un exemple de PPS complété à partir d'une vignette clinique en médecine générale d'un modèle de PPS vierge à télécharger.

Hasan, I. (2014). Rapport d'évaluation des expérimentations menées dans le cadre de l'article 70 de la Loi n° 2011-1906 du 21 décembre 2011 de financement de la sécurité sociale pour 2012. Saint-Denis HAS**:** 73 , fig., annexes.
http://www.has-sante.fr/portail/upload/docs/application/pdf/2014-06/rapport_art70_2014_05_22_collegefinal_sdc.pdf

Les parcours sont devenus depuis lors une priorité politique : lancement en décembre 2012 du « pacte territoire-santé » par le gouvernement, présentation en janvier 2013 de la Stratégie Nationale de Santé par le gouvernement. Les projets relatifs au parcours des personnes âgées à risque de dépendance retenus dans le cadre de l'article 70 de la Loi de Financement de la Sécurité Sociale 2012 s'inscrivent dans cette même priorité. Ils visent à améliorer l'organisation et la coordination des

parcours de santé des personnes âgées afin de prévenir les recours évitables à l'hospitalisation (module 1) et de coordonner les soins en sortie d'hospitalisation (module 2). La HAS a la responsabilité de l'évaluation de ces projets, mission, s'inscrivant dans son engagement à promouvoir des parcours de soins adaptés aux besoins des patients afin de concilier, au mieux, qualité des pratiques soignantes et efficience du système de santé. ». L'objectif de ce rapport 2013 est de présenter l'état d'avancement de la mise en place des projets, les facteurs clés de succès et les freins identifiés par les porteurs des projets, les principaux enseignements et les perspectives

Hasan, I. (2015). Mise en oeuvre du PPS Paerpa : bilan à 6 mois. Saint-Denis HAS**:** 30.
http://www.has-sante.fr/portail/jcms/c_2583405/fr/mise-en-oeuvre-du-plan-personnalise-de-sante-pps-paerpa-bilan-a-6-mois

Dans le cadre de la mise en oeuvre des expérimentations « personnes âgées en risque de perte d'autonomie » (Paerpa), la Haute Autorité de santé a élaboré un modèle de plan personnalisé de santé (PPS). Ce document PPS formalise un plan d'action partagé qui s'adresse en priorité aux professionnels de la coordination de proximité, en concertation avec la personne. Son élaboration est placée sous la responsabilité d'un coordinateur référent du PPS, le plus souvent le médecin traitant. Le document proposé est un support qui peut être adapté par les professionnels pour tenir compte des spécificités de leur démarche. Au printemps 2013, avant que le programme Paerpa ne soit officiellement lancé, la HAS a diffusé la première version du document PPS, et a prévu de suivre son appropriation par les acteurs des projets Paerpa. Au printemps 2014, une consultation des utilisateurs professionnels du domaine sanitaire et du domaine social ou médico-social a permis d'adapter le document PPS et de proposer un questionnaire d'aide à la décision de mise en oeuvre d'un PPS chez des patients de plus de 75 ans, ces documents étant mis à dis-position pour le lancement opérationnel des premières expérimentations en septembre 2014. Au printemps 2015, deux ans après l'élaboration de la première version du document PPS, 6 mois après la signature des premiers PPS, la Has a désiré tiré des enseignements de leur mise en oeuvre opérationnelle. À cet effet, elle a adressé un questionnaire à des professionnels de santé des territoires participant aux expérimentations Paerpa. En 2015, l'Agence nationale de d'appui à la performance (Anap) poursuit sa mission de capitalisation à des fin de diffusion et en lien avec d'autres sujets Paerpa : coordination territoriale d'appui (CTA), liens ville-hôpital, systèmes d'information. En complément du questionnaire de la HAS, l'Anap a concomitamment questionné les pilotes Paerpa des ARS au sujet des modalités de déploiement de la démarche PPS dans les territoires participant aux expérimentations. Ce rapport fait la synthèse de ces deux retours d'expérience.

HCAAM (2017). Organiser la médecine spécialisée et le second recours : un chantier prioritaire. Paris HCAAM**:** 30.

Les soins primaires et la médecine spécialisée en France sont deux sujets intimement liés, à penser dans le même mouvement, comme deux éléments d'un système qui doivent évoluer de façon cohérente. Si les soins primaires ont donné lieu à une profonde réflexion ces dernières années, cela n'a pas été le cas pour la médecine spécialisée. Cet avis a donc pour objectif de proposer des évolutions de la médecine spécialisée congruentes avec les besoins de la population (notamment la chronicisation des maladies), ainsi qu'avec les orientations retenues pour structurer les soins primaires, tout en tenant compte des dynamiques propres à la médecine spécialisée. La réflexion se base sur la réalité actuelle de l'offre de médecine spécialisée pour se projeter dans ce que pourrait être son avenir en tenant compte du temps : les décisions, ou les non décisions d'aujourd'hui peuvent avoir des conséquences et des impacts de long terme. Cette évidence justifie l'accent mis dans le présent avis sur deux leviers déterminants : la formation des médecins spécialistes et les modes d'organisation de l'offre spécialisée. Cet avis est accompagné de deux dossiers statistiques réalisés respectivement par la Cnamts et la Drees.

HCAAM (2017). Refonder les politiques de prévention et de promotion de la santé. Paris HCAAM**:** 36.

Fruit de la mise en place, en octobre 2016, d'un groupe de travail réunissant chercheurs et acteurs, cet avis s'attache, tout d'abord, à clarifier les concepts employés par les acteurs et inscrits dans les textes.

Puis il formule diverses propositions pour refonder la conduite des politiques de prévention et de promotion de la santé en France. Elles s'articulent autour des axes suivants : mise en place d'une stratégie globale aux niveaux national et régional avec une mise en œuvre coordonnée des programmes d'action, cohérence du financement entre l'État, l'assurance maladie et les collectivités locales, effort particulier en matière d'évaluation à tous les niveaux (évaluation de politique, de programme et d'action) et en matière de recherche sur l'élaboration et la conduite des politiques et sur les organisations.

Henart, L., et al. (2011). Rapport relatif aux métiers en santé de niveau intermédiaire. Professionnels d'aujourd'hui et nouveaux métiers : des pistes pour avancer. Paris Ministère chargé de la santé**:** 2 vol. (57; 39). http://www.ladocumentationfrancaise.fr/rapports-publics/114000061/

Le monde de la santé fait face à des changements majeurs. Après avoir participé de façon remarquable au cours des trente dernières années à l'amélioration de la santé publique et accompagné les évolutions sociales et économiques de la population, on perçoit que son organisation actuelle pourrait se révéler moins performante face aux défis du futur, qui sont d'un ordre différent. L'émergence des pathologies liées au vieillissement, avec en corollaire celles inhérentes à la dépendance, le développement des maladies chroniques et les enjeux de santé publique actuels, le cancer et la santé mentale entre autres, réclament que se développent de nouvelles prises en charge plus graduées et mieux coordonnées entre la ville et l'hôpital. Les professionnels de santé sont inégalement répartis en termes géographiques et certains ont une démographie qui s'annonce inquiétante. Pourtant les besoins ne vont et n'iront pas en diminuant et la régulation devient un souci prégnant pour les pouvoirs publics. Les membres de la mission ont choisi d'auditionner un très grand nombre de professionnels de toutes catégories, des employeurs, des représentants syndicaux et des associations de patients. En outre des tables rondes ont été organisées sur les thèmes : personnes âgées, maladies chroniques, cancer, maladies mentales, chirurgie et imagerie. Le rapport de la mission met en lumière les professions et les professionnels, leur environnement et propose des actions de mise en œuvre de nouveaux métiers qui prennent pleinement en compte les métiers existants. Pour l'ensemble des membres de la mission, le plus important n'était pas de dresser un inventaire de nouveaux métiers possibles, mais de dessiner un cadre conceptuel et une méthode à même d'assurer à ces nouveaux intervenants une émergence durable et une valeur ajoutée certaine, une intégration. La mission présente neuf propositions reposant sur quatre piliers : une priorité : mettre en place une politique modernisée des ressources humaines en santé ; une nouveauté : créer des professions de santé de niveau intermédiaire ; une méthode : adopter un système rigoureux de validation ; une nécessité : intégrer les formations à l'enseignement supérieur.

Holue, C. (2017). "Exercice regroupé : maison ou centre de santé ?" Concours Medical **139**(2): 20-30, fig.

Huard, P. et Schaller, P. (2014). "Éléments pour une gestion stratégique d'une maison de santé." Sante Publique **26**(4): 509-517.

[BDSP. Notice produite par EHESP rD9rR0xp. Diffusion soumise à autorisation]. L'article vise à souligner l'intérêt d'une approche stratégique pour aider au développement d'une maison de santé (MS). La méthode est adaptée de la stratégie d'entreprise : (1) Analyse de la situation de la MS et des obstacles à son développement. (2) Sélection des relations sur lesquelles la stratégie peut être élaborée. (3) Élaboration du système d'interventions susceptible de donner naissance à un processus cumulatif de développement. (4) Illustration de la méthode par une application sur un cas.

Institut Montaigne (2013). Accès aux soins : en finir avec la fracture territoriale. Paris Institut Montaigne **:** 73 , tabl., fig.

Très onéreux, d'une grande complexité institutionnelle et administrative, le système de soins français pèche également par l'archaïsme de son organisation, caractérisé par de forts cloisonnements entre ville et hôpital comme entre professionnels de santé. Au-delà des problèmes évidents de répartition sur le territoire des professionnels de santé, la question est sans doute plutôt celle du modèle d'organisation des soins en France, qui ne correspond plus aux exigences sociales, démographiques et

technologiques de notre pays. Face à ces défis et dans un contexte de finances publiques contraint, comment adapter notre système de santé ? C'est vers une organisation décloisonnée, régionalisée, construite autour des besoins des patients qu'il faut s'orienter. Le système de santé doit également s'adapter aux exigences des nouvelles générations de professionnels de santé et leur offrir les moyens d'exercer leur métier de façon regroupée, en bénéficiant de l'apport des nouvelles technologies.

Isnardi, P. (2012). "Zoom sur le premier protocole français de coopération et son arrêté d'application.; Spotlight on the first French cooperation protocol and its implementation order." SOINS. CADRES(81): 28-30.

Les conditions de travail des professionnels de santé sont en pleine mutation. Il s'agit de continuer d'assurer des soins de qualité irréprochable dans un contexte de sécurité optimal tout en s'adaptant à l'évolution de leur pratique. Retour d'expérience sur le premier protocole de coopération entre professionnels en France validé par l'Agence régionale de santé (ARS) Paca et qui a reçu son arrêté d'application fin juillet 2011. (R.A.).

Jaffiol, C., et al. (2016). Prise en charge des maladies chroniques. Redéfinir et valoriser le rôle du médecin généraliste. Paris Académie Nationale de Médecine **:** 15.

Les maladies chroniques sont la première cause de décès et la source principale des dépenses de santé. Leur dépistage précoce permet de limiter leur gravité évolutive et de réduire sensiblement leur coût. Mais, leur suivi thérapeutique se heurte à deux obstacles : le défaut fréquent d'observance du traitement par le patient et aussi, plus rarement, l'inadaptation thérapeutique à l'évolution clinique par le médecin. C'est pourquoi, il faut revoir fondamentalement la prise en charge du patient chronique pour le rendre autonome dans la gestion de sa maladie tout en donnant au praticien les moyens de gérer et de coordonner les diverses étapes de son parcours de soin. Cela exige de changer les mentalités de part et d'autre, mais aussi de donner au praticien les moyens financiers lui permettant de consacrer à ses patients plus de temps, au centre d'une nouvelle organisation interprofessionnelle. La prévention et l'éducation thérapeutique du patient (ETP) sont les clés de cette révolution thérapeutique, fondée aussi sur l'éducation à la santé, une meilleure formation des professionnels de santé, un accès accru au numérique, mais aussi et surtout la reconnaissance, par des mesures concrètes, de la place du médecin généraliste dans un nouveau parcours de soins où il doit avoir un rôle central de coordination (résumé d'auteur).

Juilhard, J. M., et al. (2009). Le bilan des maisons et des pôles de santé et les propositions pour leur déploiement. Paris Ministère chargé de la santé ; Paris La documentation française**:** 51.
http://lesrapports.ladocumentationfrancaise.fr/BRP/104000029/0000.pdf

Les maisons de santé proposent une offre libérale de soins de proximité et de suivi aux patients, ainsi qu'un environnement adapté à une pratique modernisée de l'exercice des professionnels de santé. Le projet de loi « hôpital, patients, santé, territoires» (HPST) » va renforcer leur rôle en instituant un schéma régional d'aménagement de l'offre de soins ambulatoires en partie fondé sur l'implantation de ces structures dans les territoires. Ce rapport fait le bilan de ces maisons, pôles et centres de santé, les recense, étudie leur organisation, leur fonctionnement. Il constate un besoin de sécurisation juridique et financière pour ces nouvelles entités. Il propose sept séries de mesures qui visent à faciliter l'émergence d'un dispositif de soins de premier recours en zone rurale et péri-urbaine : identification d'un cadre pour les exercices pluri professionnels ; adoption d'un nouveau cadre juridique ; promotion de nouveaux modes de financement ; accompagnement des professionnels ; inscription dans une logique d'engagements réciproques entre autorités publiques et professionnels de santé ; réponse aux attentes ; identification de ces structures comme des lieux de formation pluri professionnelle privilégiés. Le rapport conclut en alertant les pouvoirs publics et l'université sur l'importance à donner à la formation et à la recherche.

Kustosz, I. (2016). Renouveler le premier recours par les maisons de santé pluriprofessionnelles : une approche par les outils. sl Halshs archives ouvertes**:** 35 , fig.
https://halshs.archives-ouvertes.fr/halshs-01463940/

Ce travail de recherche en cours propose de comprendre le fonctionnement et les singularités des MSP en mobilisant la notion d'outil. En effet la MSP peut être considérée comme un instrument de la réforme du système de santé en cours ; mais elle peut aussi être considérée comme utilisatrice d'outils créés pour son fonctionnement quotidien et son développement. La MSP dispose ainsi d'outils spécifiquement dédiés ou régulièrement adaptés sur lesquels elle s'appuie pour fonctionner. Qu'ils soient techniques ou processuels, sanitaires ou organisationnels, destinés à faciliter l'action collective ou à servir la performance, ces outils sont souvent innovants et parfois même sont-ils encore en cours d'expérimentation. Le chapitre s'articule autour de deux parties. La première présente la MSP pouvant elle-même être considérée comme un outil de transformation du premier recours notamment en contribuant à valoriser les fonctions d'accessibilité, de collaboration et de participation dans le système de santé français. La seconde partie présente les outils actuellement en usage au sein des MSP, et dont nous voudrions montrer qu'ils ne sauraient se réduire à n'être qu'exploités, à ne constituer qu'une simple boîte à outils, pour au contraire insister sur leur dimension évolutive et leur contribution à l'exploration de nouvelles voies.

Le Boeuf, D., et al. (2016). "La coordination : un enjeu infirmier. Dossier." Soins(806): 19-55.

Participer à l coordination des soins pour la prise en charge globale des personnes fait partie intégrante des activités infirmières. L'appellation "infirmier coordinateur" (IDEc) est désormais souvent utilisée, même si elle recouvre des réalités diverses. Cet article fait le point sur le rôle des infirmiers dans le parcours et la coordination des soins afin d'améliorer la prise en charge des malades.

Lelievre, M. (2015). Travailler ensemble en soins de premiers recours : quelle place pour la coordination et la coopération. Illustrations à partir de quatre exemples. Angers Faculté de Médecine, Université d'Angers. Faculté de Médecine. Angers. FRA. **Thèse de Doctorat en Médecine.:** 240 , tab., graph., fig. http://dune.univ-angers.fr/fichiers/20107121/2016MCEM5180/fichier/5180F.pdf

En se basant sur les résultats d'une revue de la littérature, cette thèse analyse le travail en équipe au niveau des soins primaires selon quatre axes : regroupement des professionnels de santé, coopération autour des personnes âgées en risque de perte d'autonomie, coopération entre médecins et infirmières, collaboration entre médecins généralistes et pharmaciens d'officine.

Loussouarn, C., Franc, C., Videau, Y., et al. (2020). "Can General Practitioners Be More Productive? The Impact of Teamwork and Cooperation with Nurses on GP Activities." Health Economics **On line**: 19. https://doi.org/10.1002/hec.4214

The integration of primary care organizations and interprofessional cooperation is encouraged in many countries to both improve the productive and allocative efficiency of care provision and address the unequal geographical distribution of general practitioners (GPs). In France, a pilot experiment promoted the vertical integration of and teamwork between GPs and nurses. This pilot experiment relied on the staffing and training of nurses; skill mixing, including the authorization to shift tasks from GPs to nurses; and new remuneration schemes. This article evaluates the overall impact of this pilot experiment over the period 2010–2017 on GP activities based on the following indicators: number of working days, patients seen at least once, patients registered, and visits delivered. We control for endogeneity and reduce selection bias by using a case-control design combining coarsened exact matching and difference-in-differences estimates on panel data. We find a small positive impact on the number of GP working days (+1.2%) following enrollment and a more pronounced effect on the number of patients seen (+7.55%) or registered (+6.87%). However, we find no effect on the number of office and home visits. In this context, cooperation and teamwork between GPs and nurses seem to improve access to care for patients.

Lombrail, P. (2014). "Les maisons de santé pluri-professionnelles : penser localement, agir globalement ? Commentaire." Sciences Sociales Et Sante **32**(2): 97-108.

[BDSP. Notice produite par ORSMIP R0xJqFl8. Diffusion soumise à autorisation]. Ce commentaire fait suite à un article de ce même numéro de Sciences Sociales et Santé "Concevoir une maison de santé pluri-professionnelle : paradoxes et enseignements d'une innovation en actes" (p. 67-95).

Marchand, O., et al. (2015). "Développement et fonctionnement des maisons de santé pluri-professionnelles dans la région Rhône-Alpes." Sante Publique **27**(4): 539-546, tabl., fig.
http://www.cairn.info/revue-sante-publique-2015-4.htm

[BDSP. Notice produite par EHESP 99R0xsrr. Diffusion soumise à autorisation]. La nécessité d'améliorer la coopération interprofessionnelle conduit à inciter au regroupement des professionnels de santé de premier recours au sein de structures pluri-professionnelles telles que les maisons de santé. L'objectif de cette étude était d'établir un état des lieux de l'implantation des maisons de santé pluri-professionnelles (MSP) dans la région Rhône-Alpes et d'examiner leur organisation et leur fonctionnement. (introd.).

Martin, F. (2015). Enquête sur les opinions et les attentes des personnes intégrées dans la mise en place du projet Paerpa en Mayenne. Angers Faculté de Médecine, Université d'Angers. Faculté de Médecine. Angers. FRA. **Thèse de Doctorat en Médecine.** 50 , tab., graph., fig.
http://dune.univ-angers.fr/fichiers/20032143/2015MCEM5149/fichier/5149F.pdf

Devant l'augmentation de la population âgée dépendante, la mise en place d'un parcours fluide et identifié est nécessaire. De là est né le projet Personnes âgées en risque de perte d'autonomie (PAERPA). Expérimenté dans 9 territoires pilotes, il a pour but de repérer les personnes fragiles de plus de 75 ans, afin de retarder l'entrée dans la dépendance, d'éviter les hospitalisations non programmées et de retarder l'entrée en institution, par un travail coordonné entre les différents acteurs, grâce à un Plan personnalisé de santé (PPS). Ce travail a participé à l'évaluation du PAERPA au travers d'une étude qualitative exploratoire par entretiens individuels semi dirigés. Il a concerné 13 personnes âgées bénéficiant d'un PPS. Les aspects étudiés étaient leur compréhension, leurs attentes, leur opinion sur le travail coordonné et leur ressenti concernant la démarche proactive. Les réponses recueillies ont mis en évidence un manque de compréhension du projet, bien qu'elle semblait meilleure parmi les membres de la famille. La notion la mieux comprise était la coordination. Cette coordination était bien acceptée, et vécue comme sécurisante. Les attentes concernaient essentiellement les difficultés pour les actes de la vie quotidienne. La proactivité divisait : certains appréciaient que la démarche vienne des professionnels de santé, d'autres la ressentaient de manière intrusive.La différence de perception de la fragilité entre les professionnels et les patients a pu expliquer le vécu parfois intrusif de la démarche. Un des éléments importants du PAERPA est l'évaluation à distance de la mise en place, qui, associée à la coordination,semble être un atout majeur du projet.

Massin, S., et al. (2014). "Les médecins généralistes face au paiement à la performance et à la coopération avec les infirmiers." Etudes Et Resultats (Drees)(873): 8.

[BDSP. Notice produite par MIN-SANTE I9oR0xq9. Diffusion soumise à autorisation]. Les conditions d'exercice de la médecine générale connaissent d'importantes évolutions. La quasi-totalité des médecins interrogés fin 2012 déclarent avoir adhéré à la Rémunération sur objectifs de santé publique mise en place par l'Assurance maladie en janvier 2012, et 80% d'entre eux pensent pouvoir en remplir les objectifs. En revanche, ils sous-estiment la rémunération que ce dispositif leur permettrait de recevoir. Un tiers d'entre eux se déclare favorable à des coopérations avec un infirmier. Ce résultat est très sensible au mode de financement d'un tel dispositif : la coopération est nettement mieux acceptée dans le cas où l'auxiliaire médical serait entièrement rémunéré par un forfait extérieur. Les tâches relevant des compétences réglementaires du médecin, comme les prescriptions, seraient moins volontiers confiées à un infirmier, contrairement aux actes d'éducation thérapeutique ou de surveillance de la tension artérielle.

Michel, C. et Ivan, S. (2020). "Intervenir sur un autre territoire professionnel Équipes mobiles et services « sédentaires » à l'hôpital." SCIENCES SOCIALES ET SANTE **38**(4): 47-74.

L'expérience des équipes mobiles intra-hospitalières en gériatrie et soins palliatifs est l'occasion d'interroger les conditions de possibilité d'une organisation prônant la collaboration entre professions, services et disciplines. Les équipes mobiles étudiées ont des atouts dans cette entreprise : issues de pratiques pluridisciplinaires, elles drainent des volontaires armés de fortes convictions éthiques et reposent sur un fonctionnement collectif. Néanmoins, elles se heurtent à une organisation hospitalière aux frontières plus rigides, reposant sur une médecine spécialisée soucieuse de ses prérogatives, notamment dans le cadre du CHU où les équipes mobiles peinent davantage à se faire accepter. Leur mission de confort du patient âgé ou en fin de vie est plus légitime que leur positionnement disciplinaire dans le champ médical. Elles sont ainsi conduites à user de diverses tactiques pour se faire accepter, au prix d'une insatisfaction professionnelle, voire d'une usure morale, notamment pour les médecins mobiles qui vivent mal leur manque de maîtrise de la prise en charge des patients suivis par les collègues des services sédentaires. Elles trouvent des appuis inégaux dans les services et s'en remettent à leurs réseaux informels. Elles comptent un allié potentiel parmi les infirmières des services, sensibilisées à la question du confort du patient âgé ou en phase palliative, mais n'ont pas la possibilité institutionnelle de passer par elles du fait du contrôle médical du patient.

Moisi, L. (2015). Place du réseau AGEP dans le territoire de santé de l'Est parisien. Etat des lieux et évolutions futures. Paris Université Pierre et Marie Curie, Université Paris 6 Pierre et Marie Curie. Faculté de Médecine. Paris. FRA. **Thèse de Doctorat en Médecine.:** 166 , tab., graph., fig.
http://www.cmge-upmc.org/IMG/pdf/moisi-these.pdf

La prévention des hospitalisations intempestives et de la perte d'autonomie des personnes âgées dépendantes impose une réflexion sur de nouveaux modes d'organisation des soins. Le premier objectif était d'établir les fonctions actuelles du réseau AGEP, qui intervient auprès des patients de plus de 60 ans sur l'Est parisien, de manière régulière ou ponctuelle lors des sorties d'hospitalisations précaires. Le second était d'en étudier les évolutions futures en s'appuyant sur les directives officielles et les avis des intervenants du réseau.

Morel, A., et al. (2012). Évaluation de la prise en charge du diabète. Rapport IGAS ; 2012 033.**:** 2 vol. (104+249), annexes.

[BDSP. Notice produite par MIN-SANTE DIt8rR0x. Diffusion soumise à autorisation]. L'Inspection générale des affaires sociales (IGAS) a mené une mission d'évaluation transversale de la politique de santé publique relative à la prise en charge du diabète, devenue en 2010 la première des maladies chroniques en France (3 millions de personnes atteintes). La mission observe que le coût du diabète progresse ces dernières années à raison d'un milliard d'euros par an, et ce en dépit des actions volontaristes des pouvoirs publics et de l'assurance maladie, mises en place depuis plus de dix ans. Au-delà de stratégies de dépistage ou de prévention spécifiques qui gagneraient à être améliorées, elle estime que cette pathologie chronique, comme toutes les autres, questionne le système de soin de premier recours sur son organisation et son efficacité à accompagner des patients au long cours, notamment par l'éducation thérapeutique (ET), mais aussi le rôle de l'hôpital et son articulation avec la ville. Cette réflexion est complétée par une analyse de l'accessibilité de certains actes en ville ainsi que de la qualité et sécurité des antidiabétiques oraux. Une synthèse des recommandations figure en fin du rapport.

Moyal, A. (2020). "L'exercice pluriprofessionnel en MSP : une division du travail sous contrôle médical." Revue Francaise Des Affaires Sociales(1): 103-123.
https://www.cairn.info/revue-francaise-des-affaires-sociales-2020-1-page-103.htm

Cet article se propose d'étudier la forme que prend la coordination entre professionnels de santé qui exercent en maisons de santé pluriprofessionnelles (MSP). À travers une étude qualitative dans cinq MSP signataires de l'ACI, nous montrons que les nouvelles procédures de coordination qui formalisent la division du travail en MSP, ainsi que les pratiques informelles de coordination entre professionnels, reconfigurent les territoires professionnels. Les professionnels non médecins voient notamment leurs périmètres d'activité s'étendre, sous l'effet de délégations de tâches des médecins généralistes, qui peuvent être volontaires ou contraintes par le contexte organisationnel. Nous soutenons que ces

délégations soient volontaires ou contraintes par le contexte organisationnel, elles demeurent sous le contrôle des médecins généralistes, qui s'affirment ce faisant comme les orchestrateurs des prises en charge pluriprofessionnelles en soins primaires.

MSA (2017). "Patients pris en charge dans une maison de santé pluridisciplinaire, impact sur trois postes de remboursement : hospitalisations, visites à domicile et consultations chez le dentiste." Syntheses: 17 , tabl.

Afin d'apprécier et d'évaluer l'impact économique de prise en charge des patients au sein d'une maison de santé pluridisciplinaire, la consommation de soins ambulatoires des patients tous régimes de plus de 70 ans dont le médecin traitant exerce dans l'une des six maisons de santé pluridisciplinaire (MSP) accompagnées historiquement par la MSA, a été comparée à celle des ressortissants du régime agricole de la même tranche d'âge en 2013, indépendamment de la structure ambulatoire de prise en charge. Une première étude a montré que le montant moyen des dépenses du 1er groupe était inférieur de 12 % à celui du second. Dans ce deuxième volet, l'intérêt est porté sur l'impact de l'exercice de groupe sur le recours à l'hospitalisation. Il ressort que les hospitalisations non programmées et les hospitalisations évitables sont moins importantes chez les ressortissants du régime agricole que chez les patients des MSP. Le recours aux visites à domicile effectuées par les généralistes est également exploré dans cette étude, elles s'étaient révélées plus coûteuses dans la première étude chez les patients dont le médecin traitant exerce en MSP. La présente étude ne met pas en évidence un poids plus important des visites dans l'activité des médecins généralistes exerçant en MSP. Par ailleurs, aucune différence significative n'est mise en évidence dans la comparaison de la consommation de soins dentaires entre les deux groupes.

ONDPS (2008). Rapport 2006-2007 de l'ONDPS. Tome 1 : la médecine générale. Paris ONDPS**:** 76 , tabl., carte, ann.

Le tome 1 du troisième rapport de l'Observatoire national de la démographie des professions de santé (ONDPS) établit un état des lieux de l'exercice de la spécialité médicale que constitue la médecine générale. La mutualisation des données relatives aux effectifs, ainsi que la prise en compte de leur activité, permettent de produire un diagnostic des ressources disponibles pour la prise en charge des patients en premier recours. Les modalités de formation qui préparent au métier de médecin généraliste, ainsi que les conditions d'exercice,sont examinées dans l?optique de saisir les facteurs qui peuvent conduire à la «désaffection» dont l?exercice libéral de cette profession semble faire l?objet. Deux contributions complètent l'analyse. La première présente les souhaits et aspirations des médecins qui envisagent l'exercice de la médecine générale. La deuxième contribution fait ressortir, à travers l'histoire de l'institution médicale, les principales scènes et les différents moments de la construction de cette "valeur" de la médecine générale.

ONDPS (2014). Avis sur la coopération entre professionnels de santé. Annexe 1 : état des lieux des dispositifs de coopération. Paris HCAAM **:** 58 , tabl., fig.

La question de la coopération entre professionnels de santé est au coeur des préoccupations des pouvoirs publics et des acteurs du champ de la santé dans la perspective du renforcement d'une médecine de parcours. A la demande de Mme la Ministre des affaires sociales et de la santé, le Haut Conseil pour l'avenir de l'assurance maladie a conduit au cours du premier semestre de 2014 une réflexion sur les modèles cibles pertinents pour mieux organiser une telle coopération, au-delà des expérimentations ou transformations partielles déjà engagées dans le système de santé. Cet avis rassemble les éléments de la réflexion. Cette annexe 1 à l'avis dresse un état des lieux des dispositifs de coopération en France : médecin traitant, profession d'infirmière, délégation de soins, le regroupement des professionnels de santél, asalée...

ONDPS (2014). Avis sur la coopération entre professionnels de santé. Annexe 2 : Les expressions du HCAAM sur la coordination des interventions des professionnels autour du patient. Paris HCAAM **:** 6 , tabl., fig.

La question de la coopération entre professionnels de santé est au coeur des préoccupations des pouvoirs publics et des acteurs du champ de la santé dans la perspective du renforcement d'une

médecine de parcours. A la demande de Mme la Ministre des affaires sociales et de la santé, le Haut Conseil pour l'avenir de l'assurance maladie a conduit au cours du premier semestre de 2014 une réflexion sur les modèles cibles pertinents pour mieux organiser une telle coopération, au-delà des expérimentations ou transformations partielles déjà engagées dans le système de santé. Cet avis rassemble les éléments de la réflexion. Cette annexe 2 présente les expressions du HCAAM sur la coordination des interventions des professionnels autour du patient

ONDPS (2014). Avis sur la coopération entre professionnels de santé. Annexe 3 : les enseignements des systèmes de santé étrangers. Paris HCAAM**:** 17 , tabl., fig.

La question de la coopération entre professionnels de santé est au coeur des préoccupations des pouvoirs publics et des acteurs du champ de la santé dans la perspective du renforcement d'une médecine de parcours. A la demande de Mme la Ministre des affaires sociales et de la santé, le Haut Conseil pour l'avenir de l'assurance maladie a conduit au cours du premier semestre de 2014 une réflexion sur les modèles cibles pertinents pour mieux organiser une telle coopération, au-delà des expérimentations ou transformations partielles déjà engagées dans le système de santé. Cet avis rassemble les éléments de la réflexion. Cette annexe 3 présente une étude comparée des organisations pluri-professionnelles mises en place dans les pays de l'Union européenne.

ONDPS (2014). Avis sur la coopération entre professionnels de santé. Annexe 4 : Enseignements des théories économiques et des évaluations sur le sujet des coopérations des professionnels de santé. Paris HCAAM**:** 4 , tabl., fig.

La question de la coopération entre professionnels de santé est au coeur des préoccupations des pouvoirs publics et des acteurs du champ de la santé dans la perspective du renforcement d'une médecine de parcours. A la demande de Mme la Ministre des affaires sociales et de la santé, le Haut Conseil pour l'avenir de l'assurance maladie a conduit au cours du premier semestre de 2014 une réflexion sur les modèles cibles pertinents pour mieux organiser une telle coopération, au-delà des expérimentations ou transformations partielles déjà engagées dans le système de santé. Cet avis rassemble les éléments de la réflexion. Cette annexe 4 présente les enseignements des théories économiques et des évaluations sur le sujet des coopérations des professionnels de santé.

ONDPS (2014). Avis sur la coopération entre professionnels de santé. Annexe 5 : Comparaison par la DREES entre les projections d'effectifs de 2008 et les données observées. Paris HCAAM **:** 11 , tabl., fig.

La question de la coopération entre professionnels de santé est au coeur des préoccupations des pouvoirs publics et des acteurs du champ de la santé dans la perspective du renforcement d'une médecine de parcours. A la demande de Mme la Ministre des affaires sociales et de la santé, le Haut Conseil pour l'avenir de l'assurance maladie a conduit au cours du premier semestre de 2014 une réflexion sur les modèles cibles pertinents pour mieux organiser une telle coopération, au-delà des expérimentations ou transformations partielles déjà engagées dans le système de santé. Cet avis rassemble les éléments de la réflexion. Cette annexe 5 présente les comparaisons réalisées par la DREES

ORS (2013). L'exercice en cabinet de groupe des médecins généralistes des Pays de la Loire. Panel 2010 -2012 d'observation des pratiques et des conditions d'exercice en médecine générale. Panel en médecine générale - 2010-2012 - Pays de la Loire; 4. Nantes ORS Pays de la Loire**:** 8 , fig., tabl.

Dans les Pays de la Loire, 67 % des médecins généralistes sont installés en groupe, taux qui atteint 88 % chez les moins de 45 ans. L'enquête menée début 2011 auprès de 400 praticiens de la région permet d'estimer à 700 le nombre de cabinets de groupe de médecine générale. 80 % d'entre eux rassemblent deux à trois praticiens, et entre 150 et 180 sont des cabinets pluri professionnels. Le fait d'exercer en groupe influence les conditions d'exercice. La majorité des médecins en groupe partagent les dossiers patients avec leurs confrères du cabinet, disposent d'un secrétariat, exercent exclusivement sur rendez-vous. Ils organisent différemment leur temps de travail hebdomadaire, avec moins de jours de consultations que les médecins en cabinet individuel, pour un volume d'activité

équivalent. L'exercice en groupe favorise l'accueil d'étudiants en médecine, le recours aux remplaçants et facilite les congés. Le regroupement ne diminue pas le temps consacré aux tâches de gestion et de comptabilité. Il n'influence pas non plus l'implication des médecins généralistes dans la permanence des soins, ni leur pratique d'autres activités médicales.

Pellet, F. et Picard, J. M. (2012). Place d'une consultation infirmière de suivi de patients atteints de maladie chronique dans les maisons et pôles de santé en France. Quelques éléments de réflexion et perspectives tirés d'une enquête (09/2011). Les Vans Unité transversale d'éducation et de promotion de la santé du Pays des Vans.**:** 96 + annexes, tabl., fig.

Cette étude avait pour but de connaître, par le biais d'une enquête comment les médecins généralistes et les infirmier(e)s se représentaient la consultation infirmière dans les maisons et pôles de santé. Elle s'est surtout centrée sur les consultations en lien avec la prévention, la santé publique, l'éducation thérapeutique et l'éducation pour la santé qui s'appuient sur le rôle propre de l'infirmier(e). Cet état des lieux comportait, entre autres, une évaluation de la place accordée à une démarche de soins basée sur la classification internationale des diagnostics, interventions et résultats de soins infirmiers, aux représentations de l'éducation et de la santé, mais aussi à la place attribuée aux concepts de santé, d'éducation et aux théories infirmières.

Prot, M. (2015). Ressenti et attentes des aidants naturels de personnes âgées prises en charge par le réseau de santé du Sud-Meusien. Etude qualitative par entretiens semi-dirigés. Nancy Université de Lorraine, Université de Lorraine. Nancy. FRA. **Thèse de Doctorat en Médecine.:** 330 , tab., graph., fig.

L'organisation du système de santé français doit être reconsidérée afin de faire face aux défis socioéconomiques que constituent les besoins de la population âgée grandissante. Les réseaux de santé gérontologiques représentent un élément majeur de la prise en charge globale et coordonnée que nécessite cette population. Une étude qualitative par entretiens semi-dirigés a été réalisée pour explorer le ressenti et les attentes des personnes âgées vis à vis de la prise en charge effectuée par le Réseau de Santé du Sud Meusien et leurs perceptions sur l'éducation thérapeutique. Il a été mis en évidence le manque d'informations délivrées aux personnes âgées concernant les motifs de leur adhésion ainsi que la finalité de l'action du réseau mais souvent l'entrée dans le réseau se fait par le repérage d'une fragilité médicale et/ou sociale. Les apports et les difficultés de la prise en charge du réseau ont conforté la nécessité d'une coordination efficace entre les acteurs de santé et ont fait émerger des nouvelles missions, notamment les moyens de lutter contre la solitude. La perception des personnes âgées sur leur environnement et leur santé a permis de définir leurs attentes dans le domaine de l'information et de l'éducation thérapeutique. L'amélioration de la médecine de parcours des personnes âgées nécessite une coordination efficace entre la médecine de ville et l'hôpital, et pourrait passer par les services de soins infirmiers à domicile comme élément de relais entre la proximité et le réseau, par la mobilisation des équipes médicales de terrain et par la formalisation du suivi du patient au moyen d'outils validés. La sensibilisation au vieillissement et à l'éducation thérapeutique des personnes âgées pourrait se concrétiser par la mise en place de séances collectives au sein des maisons de santé pluriprofessionnelles, et nécessitent des formations et des financements adaptés.

Ramond-Roquin, A., Allory, E. et Fiquet, L. (2020). "La concertation pluriprofessionnelle au sein des maisons de santé pluriprofessionnelles : pratiques hétérogènes et stratégies locales." Revue Francaise Des Affaires Sociales(1): 125-141.
https://www.cairn.info/revue-francaise-des-affaires-sociales-2020-1-page-125.htm

La création des maisons de santé pluriprofessionnelles (MSP) vise le développement des pratiques interprofessionnelles en soins primaires. Le soutien financier des MSP depuis 2017 via l'accord conventionnel interprofessionnel (ACI) implique que les équipes rendent compte de leurs activités, en particulier de concertation pluriprofessionnelle (CPP) dont la nature et les formes développées en soins primaires restent encore largement méconnues. Un projet de recherche interdisciplinaire intitulé Concert-MSP est en cours de déploiement pour analyser en profondeur les activités de concertation pluriprofessionnelle développées par les équipes dans les MSP. Cet article se propose de présenter la

démarche du projet puis, à partir des résultats de l'enquête exploratoire du projet auprès de six MSP, d'illustrer la diversité des pratiques labellisées CPP par les équipes ainsi que leurs stratégies de valorisation, puis d'analyser comment la spécificité des soins primaires oblige à repenser la notion de concertation pluriprofessionnelle. L'hétérogénéité des pratiques révèle la nouveauté de l'instauration de ces concertations, une volonté de s'adapter au contexte local et le souhait d'amener progressivement les professionnels de santé vers un changement de pratiques. La mise en œuvre de ces CPP oblige à repenser la place des différents acteurs de soins primaires et les mécanismes de coordination au sein des équipes de MSP.

Ray, M., Bourgueil, Y. et Sicotte, C. (2020). "Les maisons de santé pluriprofessionnelles : un modèle organisationnel au carrefour de multiples logiques." Revue Francaise Des Affaires Sociales(1): 57-77. https://www.cairn.info/revue-francaise-des-affaires-sociales-2020-1-page-57.htm

En France, le champ organisationnel des soins primaires connaît des transformations significatives depuis une vingtaine d'années, avec l'émergence de nouvelles formes de régulation et de nouveaux modèles organisationnels. Parmi ces derniers, les maisons de santé pluriprofessionnelles ont bénéficié du soutien des pouvoirs publics depuis le milieu des années 2000. À travers l'étude rétrospective de documents d'archive sur les politiques de développement des maisons de santé en France, nous proposons une analyse logique de ces politiques publiques et de ce modèle organisationnel. Nous caractérisons ensuite, en nous appuyant sur les théories néo-institutionnelles, les logiques qui sous-tendent la diffusion de ces nouvelles organisations formelles et discutons l'utilité de ce cadre d'analyse pour appréhender les transformations associées aux réformes de l'organisation des soins primaires.

Rioux-Dubois, A. et Perron, A. (2021). "Intégration des infirmières praticiennes en soins de santé primaires : repenser la négociation de dynamiques complexes." Recherche en soins infirmiers **145**(2): 38-52. https://www.cairn.info/revue-recherche-en-soins-infirmiers-2021-2-page-38.htm

L'intégration des infirmières praticiennes en soins de santé primaires est hautement complexe mais peu étudiée au regard de changements socioprofessionnels plus larges dans le système de santé.Objectif : le but de cette étude était d'examiner l'intégration et la négociation du rôle des infirmières praticiennes en contexte interprofessionnel dans divers modèles de soins de santé primaires. Méthode : une ethnographie multisite critique, combinant la théorie de l'acteur-réseau et les concepts foucaldiens de discours et pouvoir, a été menée au sein de trois différents modèles de soins dans lesquels des entrevues semi-dirigées (n=23 infirmières praticiennes), de l'observation directe et de l'analyse documentaire ont été réalisées.Résultats : les finalités organisationnelles, les normes de pratique, le droit des infirmières praticiennes à l'autodétermination, les dynamiques de collaboration avec les médecins, ainsi que la prise en charge des patients ont été identifiés comme des facteurs d'intégration produisant davantage d'instabilités, de négociations et de contrecoups professionnels, identitaires et moraux chez ces professionnelles.Discussion : ces résultats remettent en question la perception répandue d'un manque de clarté du rôle des infirmières praticiennes et permettent une compréhension renouvelée de leur intégration en soins de santé primaires.

Rousset, G. (2014). "Les maisons de santé - un mode d'exercice favorisant l'accès aux soins ?" Revue De Droit Sanitaire Et Social(3): 450-453.

Schweyer, F. X., Fiquiet, L., Fleuret, S., et al. (2021). "Cinq équipes de soins primaires face à la pandémie. Analyse des mobilisations territoriales." Revue Francophone Sur La Sante Et Les Territoires (Rfst): epub. https://journals.openedition.org/rfst/779

Cet article propose une lecture territoriale de la pandémie de Covid-19 en analysant sa gestion par cinq équipes de soins primaires organisées en maisons de santé pluri-professionnelles (MSP) dans deux régions, les Pays de la Loire et la Bretagne. A partir de l'exploitation de résultats intermédiaires d'un programme de recherche (Concert-MSP) qui étudie les formes et modalités de concertation pluri-professionnelle dans les MSP, l'analyse combine deux dimensions territoriales : les territoires de proximité dans lesquels des équipes de MSP se sont adaptées à la situation inédite et les territoires

régionaux qui ont été les espaces du déploiement des mesures de sécurité sanitaire décidées par l'Etat. La première partie présente la diversité des contextes territoriaux (territoires à tendance rurale, rural intermédiaire ou à tendance urbaine) des 5 MSP étudiées qui ont des logiques de fonctionnement variés : maintien d'une offre de soins local, logique de fonctionnement centrée sur les professionnels ou logique populationnelle. La deuxième partie, centrée sur la gestion de la crise sanitaire en soins primaires, étudie le territoire régional comme espace d'application d'un plan national, avec deux approches différentes quant à la mobilisation des acteurs locaux et de l'élaboration de nécessaires compromis à passer localement pour assoir l'autorité de l'Etat, mais aussi comment les équipes ont mis en place de nouveaux modes d'organisation. La troisième partie analyse comment les équipes des MSP ont modifié leurs pratiques de soins et de coopération pour gérer la crise. Leur mobilisation a permis l'émergence ou le renforcement de réseaux d'entraide locaux, et a interrogé les territoires professionnels et la division symbolique du travail contribuant ainsi à donner de nouveaux rôles et à instaurer de nouvelles pratiques. Si l'existence d'un collectif de travail a été facilitant pour élaborer des réponses appropriées, le rôle central des médecins a, lui, été plutôt renforcé. L'élargissement des réseaux relationnels et l'interconnaissance entre acteurs des territoires pourraient compter parmi les acquis de la crise.

Sebai, J. (2016). "Une analyse théorique de la coordination dans le domaine des soins : application aux systèmes de soins coordonnés." Sante Publique **28**(2): 223-234, tabl.

[BDSP. Notice produite par EHESP R0x9D9Bs. Diffusion soumise à autorisation]. Différents enjeux d'ordre organisationnel, fonctionnel ou structurel ont été à l'origine de la remise en question des fondements de l'ancien système de soin basé sur une segmentation traditionnelle du marché entre médecine de ville et médecine hospitalière, entre secteur sanitaire et secteur social et marqué par une concurrence entre le secteur privé et le secteur public. La reconfiguration actuelle du système de soins se démarque par de "nouveaux" leviers expliqués par le développement d'une nouvelle reconfiguration organisationnelle du modèle sanitaire de premiers recours. C'est dans ce contexte que les structures de soin coordonné (SSC) se sont développées faisant de la coordination la pierre angulaire des relations entre professionnels pour une prise en charge globale, continue et de qualité. Notre contribution se propose de souligner les apports de différentes approches théoriques ainsi que leur contribution dans la compréhension du concept de la coordination dans l'analyse de la spécificité actuelle du domaine de santé.

Sebai, J. et Yatim, F. (2017). "Les maisons de santé pluriprofessionnelles en France : une dynamique réelle mais un modèle organisationnel à construire." Revue française d'administration publique **164**(4): 887-902. https://www.cairn.info/revue-francaise-d-administration-publique-2017-4-page-887.htm

En France, les Maisons de santé pluriprofessionnelles (MSP) sont présentées comme une réponse efficace aux nouveaux besoins en matière de santé. Le but de cet article est de proposer des éléments d'analyse pour un premier bilan de l'ensemble des structures de ce type en France, et plus particulièrement sur le plan organisationnel. Nous nous appuyons sur les données de l'enquête nationale réalisée en 2014 par la Direction générale de l'offre de soins. Nous montrons ainsi qu'il existe une réelle dynamique d'implantation des Maisons de santé pluriprofessionnelles sans que cette dynamique ne s'accompagne pas toujours des évolutions organisationnelles attendues.

Vergès, Y., Vernhes, S., Vanneste, P., et al. (2021). "Collaboration entre médecins généralistes et psychologues en libéral." Annales Médico-psychologiques, revue psychiatrique. https://doi.org/10.1016/j.amp.2021.08.014

Psychologues et médecins généralistes (MG) sont les acteurs les plus consultés par les patients présentant des difficultés psychologiques. Ils ont chacun leur identité professionnelle, leur propre cadre de travail, leurs références et leur langage. En France, les interactions entre eux semblent rares en libéral. L'intérêt de développer la collaboration entre médecins généralistes et psychologues est étayé par les données de pratiques collaboratives en santé mentale développées à l'international, ayant montré une amélioration significative de la prise en soins et des bénéfices sur la santé des patients, ainsi que des bénéfices pour les MG et les psychologues et pour la communauté. La Haute

Autorité de santé (HAS) a publié en 2018 un état des lieux et des recommandations pour améliorer la coordination entre le médecin généraliste et les différents acteurs de soins dans la prise en charge des patients adultes atteints de troubles mentaux, invitant à travailler sur de meilleures convictions, implications et cultures partagées, ainsi que sur la reconnaissance des rôles et compétences de chacun. Les professionnels interrogés dans cet entretien, trois psychologues et trois médecins généralistes, ébauchent un état des lieux de la collaboration entre psychologues et MG en France et en Belgique, rapportent leurs expériences de réalité de terrain et d'initiatives mises en place, questionnent les orientations souhaitables – notamment autour de cadres institutionnels mis en place et d'une formation professionnelle partagée – et la définition même de la notion de collaboration.

Vernus, A. L., et al. (2016). "Maisons et pôles de santé pluriprofessionnels incluant des pharmaciens : un état des lieux." Ann Pharm Fr.

RésuméIntroduction La réorganisation actuelle des soins de santé primaire en France s'accompagne du développement des structures d'exercice coordonné et de nouvelles missions de santé pour les pharmaciens. Les objectifs de cette étude étaient d'identifier l'ensemble des maisons et pôles de santé pluriprofessionnels (MSP et PSP) en activité intégrant des pharmaciens et de décrire leur organisation et leur fonctionnement. Méthodes Cette étude a inclus les MSP et PSP métropolitains en activité au deuxième semestre 2013, intégrant un ou plusieurs pharmaciens. L'identification des MSP et PSP a été réalisée à partir des informations issues des ARS et de la Fédération française des maisons et pôles de santé (FFMPS). Les données ont été recueillies grâce à un questionnaire électronique. Résultats Au total, 60 structures, dont 35 MSP et 25 PSP, intégraient des pharmaciens. Les sociétés interprofessionnelles de soins ambulatoires (SISA) étaient la principale forme de société choisie pour ces structures. La majorité des MSP et des PSP avait bénéficié de financements publics, principalement des ARS, et les propriétaires des murs des MSP étaient le plus souvent les collectivités territoriales. Les pharmaciens étaient systématiquement conviés à des réunions interprofessionnelles dans les MSP et PSP, et il existait souvent des protocoles de soins transversaux. Les pharmaciens n'avaient jamais accès au secrétariat partagé en MSP et rarement en PSP, et ils avaient inconstamment accès aux dossiers des patients dans les MSP et PSP. Conclusion Les pharmaciens sont actuellement présents dans près d'un quart des MSP et PSP, mais leur intégration dans ces structures est encore partielle.

Vezinat, N. (2020). "La promotion conjointe des maisons de santé pluriprofessionnelles : une « communauté d'intérêt » entre association professionnelle et autorités sanitaires." Revue Francaise Des Affaires Sociales(1): 79-101.
https://www.cairn.info/revue-francaise-des-affaires-sociales-2020-1-page-79.htm

Cet article étudie la fédération française des maisons et pôles de santé en tant que groupe d'intérêt qui se situe à une échelle intermédiaire entre l'État et les maisons de santé pluriprofessionnelles. En se positionnant comme un interlocuteur des pouvoirs publics, la fédération a permis leur légitimation mutuelle. Si les maisons pluriprofessionnelles de santé étaient il y a une dizaine d'années un mode d'exercice encore atypique dans l'offre de soins primaires, leur fédération a su, par le développement d'une dialectique partenariale, résoudre la tension entre logiques ascendante et descendante en instaurant une instrumentalisation réciproque avec les autorités sanitaires.

Vigneron, E. (2014). Les centres de santé. Une géographie rétroprospective. Paris Fehap**:** 247 , cartes.

Cet ouvrage met en lumière les défis auxquels les centres de santé peuvent répondre en France en fonction des caractéristiques propres à leur implantation territoriale. L'étude apporte des réponses à de nombreuses questions : les centres de santé, très anciens, répondent-ils aux besoins contemporains ? Existe-t-il une complémentarité entre centres de santé et maisons de santé ? Comment penser l'implantation des centres de santé en France ? L'ouvrage réalise une première : un recensement exhaustif des 1842 centres de santé en France et de leur implantation sur l'ensemble du territoire national. Il en explique les raisons tenant à l'histoire des territoires et des différentes initiatives qui ont porté ces centres de santé. L'ouvrage propose également des actions pour permettre aux centres de santé de se développer ; il met en texte mais également en image, avec plusieurs cartographies rendant compte des problématiques territoriales. Une carte prospective et

originale propose notamment 398 cantons où les besoins de la population, les difficultés socio-économiques et de démographie médicale pourraient conduire au développement de nouveaux centres de santé. Les résultats montrent que les centres de santé constituent une réponse indéniable aux difficultés d'accessibilité géographique et financière aux soins, aussi bien médicale que paramédicale : ils apportent une offre de soins de premier recours, porte d'entrée indispensable dans des parcours de soins cohérents ; ils ne pratiquent pas de dépassements d'honoraires ; ils sont capables de se projeter sur des territoires excentrés ou défavorisés, où la médecine libérale s'implante peu ou n'existe plus ; enfin, la pratique pluri-professionnelle permet à un praticien de ne pas être isolé, facteur déterminant de l'attractivité, ce qui contribue à lutter contre les déserts médicaux (tiré du dossier de presse).

ÉTUDES INTERNATIONALES

(2016). Patient-Centred Medical Homes and the Care of Older Adults: How comprehensive care coordination, community connections, and person-directed care can make a difference. New York John A. Hartford Foundation**:** 44.

This paper provides a roadmap to guide primary care practices in how to enhance care to older, complex patients and their families. Primary care practices are uniquely positioned to provide outstanding care for older adults by embracing approaches to care that are whole person-oriented, coordinated, and comprehensive, with an emphasis on safety and quality of care. In focusing on their older patients, these practices can achieve their goals of great patient care to their most vulnerable populations and succeed in the emerging value-based payment health care environment. This paper point out different approaches that describe challenges and opportunities for five areas: comprehensive care, whole-person care, patient empowerment & support, care coordination & communication, and ready access to care. The paper also provides links to resources and integrate a compilation of stories on how primary care practices have transformed outcomes for older adults.

(2017). "Implementing Integrated Care for Older Adults with Complex Health Needs." International Journal of Integrated Care **17**(2.

L'International Journal of Integrated Care publie neuf articles qui documentent l'implantation de soins de santé primaires intégrés dans la communauté. Les exemples viennent de l'Ontario, du Québec et de la Nouvelle-Zélande. Dans chaque cas, on a cherché à savoir quelles étaient les étapes nécessaires pour implanter des services innovants qui permettent de bien répondre aux besoins de soins complexes des personnes âgées.

Abimbola, S., et al. (2014). "Towards people-centred health systems: a multi-level framework for analysing primary health care governance in low- and middle-income countries." Health Policy Plan **29 Suppl 2**: ii29-ii39.

Although there is evidence that non-government health system actors can individually or collectively develop practical strategies to address primary health care (PHC) challenges in the community, existing frameworks for analysing health system governance largely focus on the role of governments, and do not sufficiently account for the broad range of contribution to PHC governance. This is important because of the tendency for weak governments in low- and middle-income countries (LMICs). We present a multi-level governance framework for use as a thinking guide in analysing PHC governance in LMICs. This framework has previously been used to analyse the governance of common-pool resources such as community fisheries and irrigation systems. We apply the framework to PHC because, like common-pool resources, PHC facilities in LMICs tend to be commonly owned by the community such that individual and collective action is often required to avoid the 'tragedy of the commons'-destruction and degradation of the resource resulting from lack of concern for its continuous supply. In the multi-level framework, PHC governance is conceptualized at three levels, depending on who influences the supply and demand of PHC services in a community and how: operational governance (individuals and providers within the local health market), collective governance (community coalitions) and constitutional governance (governments at different levels

and other distant but influential actors). Using the example of PHC governance in Nigeria, we illustrate how the multi-level governance framework offers a people-centred lens on the governance of PHC in LMICs, with a focus on relations among health system actors within and between levels of governance. We demonstrate the potential impact of health system actors functioning at different levels of governance on PHC delivery, and how governance failure at one level can be assuaged by governance at another level

AbuAlRub, R. F., et al. (2013). "The challenges of working in underserved areas: a qualitative exploratory study of views of policy makers and professionals." Int J Nurs Stud **50**(1): 73-82. http://www.ncbi.nlm.nih.gov/pubmed/22996037

BACKGROUND: The inadequate number of health care providers, particularly nurses, in underserved areas is one of the biggest challenges for health policymakers. There is a scarcity of research in Jordan about factors that affect nurse staffing and retention in underserved areas. PURPOSE: To elucidate the views of staff nurses working in underserved areas, directors of health facilities in underserved areas and key informants from the policy and education arena on issues of staffing and retention of nurses in underserved areas. METHODS: An exploratory study using a qualitative approach with semi-structured interviews was utilized to elucidate the views of 22 key informants from the policy and education arena, 11 directors of health centers, and 19 staff nurses on issues that contribute to low staffing and retention of nurses in underserved areas. The five stage 'framework approach' proposed by Bryman et al. (1993) was utilized for data analysis. RESULTS: Nursing shortage in underserved areas in Jordan are exacerbated by a lack of financial incentives, poor transportation and remoteness of these areas, bad working conditions, and lack of health education institutions in these areas, as well as by opportunities for internal and external migration. Young Jordanian male nurses usually grab any opportunity to migrate and work outside the country to improve their financial conditions; whereas, female nurses are more restricted and not encouraged to travel abroad to work. Several strategies are suggested to enhance retention in these areas, such as promoting financial incentives for staff to work there, enhancing the transportation system, and promoting continuous and academic education. CONCLUSION: Nurses' administrators and health care policy makers could utilize the findings of the present study to design and implement comprehensive interventions to enhance retention of staff in underserved areas.

Addicott, R. et Shortell, S. M. (2014). "How ‘‘accountable’’ are accountable care organizations ?" Health Care Management Review **en ligne**: 35-47.

Afendulis, C. C., et al. (2017). "Early Impact Of CareFirst’s Patient-Centered Medical Home With Strong Financial Incentives." Health Affairs **36**(3): 468-475.

In 2011 CareFirst BlueCross BlueShield, a large mid-Atlantic health insurance plan, implemented a payment and delivery system reform program. The model, called the Total Care and Cost Improvement Program, includes enhanced payments for primary care, significant financial incentives for primary care physicians to control spending, and care coordination tools to support progress toward the goal of higher-quality and lower-cost patient care. We conducted a mixed-methods evaluation of the initiative’s first three years. Our quantitative analyses used spending and utilization data for 2010–13 to compare enrollees who received care from participating physician groups to similar enrollees cared for by nonparticipating groups. Savings were small and fully shared with providers, which suggests no significant effect on total spending (including bonuses). Our qualitative analysis suggested that early in the program, many physicians were not fully engaged with the initiative and did not make full use of its tools. These findings imply that this and similar payment reforms may require greater time to realize significant savings than many stakeholders had expected. Patience may be necessary if payer-led reform is going to lead to system transformation.

Ahgren, B. (2010). "Competition and integration in Swedish health care." Health Policy **96**(2): 91-97. https://www.ncbi.nlm.nih.gov/pubmed/20153910

Despite of an insignificant track record of quasi-market models in Sweden, new models of this kind have recently been introduced in health care; commonly referred to as "choice of care". This time citizens act as purchasers; choosing the primary care centre or family physician they want to be treated by, which, in turn, generates a capitation payment to the chosen unit. Policy makers believe that such systems will be self-remedial, that is, as a result of competition the strong providers survive while unprofitable ones will be eliminated. Because of negative consequences of the fragmented health care delivery, policy makers at the same time also promote different forms of integrated health care arrangements. One example is "local health care", which could be described as an upgraded community-oriented primary care, supported by adaptable hospital services, fitting the needs of a local population. This article reviews if it is possible to combine this kind of integrated care system with a competition driven model of governance, or if they are incompatible. The findings indicate that some choice of care schemes could hamper the development of integration in local health care. However, geographical monopolies like local health care, enclosed in a non-competitive context, lack the stimulus of competition that possibly improves performance. Thus, it could be argued that if choice of care and local health care should be combined, patients ought to choose between integrated health care arrangements and not among individual health professionals.

Alderwick, H., et al. (2015). Population health systems. Going beyond integrated care. Londres King's Fund Institute**:** 37.
http://www.kingsfund.org.uk/sites/files/kf/field/field_publication_file/population-health-systems-kingsfund-feb15.pdf

Integrated care has become a key focus of health service reform in England in recent years, as a response to fragmentation within the NHS and social care system. Yet efforts to integrate care services have rarely extended into a concern for the broader health of local populations and the impact of the wider determinants of health. This is a missed opportunity. This paper aims to challenge those involved in integrated care and public health to ‘join up the dots’, seeing integrated care as part of a broader shift away from fragmentation towards an approach focused on improving population health. Using examples from organisations and systems in other countries that are making this shift, the authors argue that improving population health is not just the responsibility of health and social care services or of public health professionals – it requires co-ordinated efforts across population health systems.

Alexander, J. A., et al. (2015). "Implementation of Patient-Centered Medical Homes in Adult Primary Care Practices." Med Care Res Rev **72**(4): 438-467.

There has been relatively little empirical evidence about the effects of patient-centered medical home (PCMH) implementation on patient-related outcomes and costs. Using a longitudinal design and a large study group of 2,218 Michigan adult primary care practices, our study examined the following research questions: Is the level of, and change in, implementation of PCMH associated with medical surgical cost, preventive services utilization, and quality of care in the following year? Results indicated that both level and amount of change in practice implementation of PCMH are independently and positively associated with measures of quality of care and use of preventive services, after controlling for a variety of practice, patient cohort, and practice environmental characteristics. Results also indicate that lower overall medical and surgical costs are associated with higher levels of PCMH implementation, although change in PCMH implementation did not achieve statistical significance.

Amico, P. R., et al. (2014). "Community health center efficiency: the role of grant revenues in health center efficiency." Health Services Research **49**(2): 666-682.

OBJECTIVE: To test the relationship between external environments, organizational characteristics, and technical efficiency in federally qualified health centers (FQHCs). We tested the relationship between grant revenue and technical efficiency in FQHCs. DATA SOURCES/STUDY DESIGN: Secondary data were collected in each year from the Uniform Data System (UDS) on 644 eligible U.S.-based FQHCs between 2005 and 2007. The study employs a retrospective longitudinal cohort design with instrumental variables. PRINCIPAL FINDINGS: Increased grant revenues did not increase the probability

that a health center would be on the efficiency frontier. However, increased grant revenues had a negative association with technical efficiency for health centers that were not fully efficient. CONCLUSION: If all health centers were operating efficiently, anywhere from 39 to 45 million patient encounters could have been delivered instead of the actual total of 29 million in 2007. Policy makers should consider tying grant revenues to performance indicators, and future work is needed to understand the mechanisms through which diseconomies of scale are present in FQHCs

Anell, A. et Glenngard, A. H. (2014). "The use of outcome and process indicators to incentivize integrated care for frail older people: a case study of primary care services in Sweden." International Journal of Integrated Care **14**: 11, tabl.

Background: A number of reforms have been implemented in Swedish health care to support integrated care for frail older people and to reduce utilization of hospital care by this group. Outcomes and process indicators have been used in pay-for-performance (P4P) schemes by both national and local governments to support developments. Objective: To analyse limitations in the use of outcome and process indicators to incentivize integrated care for elderly patients with significant health care needs in the context of primary care. Method: Data were collected from the Region Skåne county council. Eight primary care providers and associated community services were compared in a ranking exercise based on information from interviews and registered data. Registered data from 150 primary care providers were analysed in regression models. Results and conclusion: Both the ranking exercise and regression models revealed important problems related to risk-adjustment, attribution, randomness and measurement fixation when using indicators in P4P schemes and for external accountability purposes. Instead of using indicators in incentive schemes targeting individual providers, indicators may be used for diagnostic purposes and to support development of new knowledge, targeting local systems that move beyond organizational boundaries.

Angelis, J., et al. (2017). Management Practices and the Quality of Primary Care. IFN Working Paper ; 1114. Stochkolm IFN**:** 18.
http://www.ifn.se/wfiles/wp/wp1174.pdf

Using the World Management Survey method, we map and analyse management quality in Swedish primary care centres. On average, private providers have higher management quality than public ones. We also find that centres with a high overall social deprivation among enrolled patients tend to have higher management quality. Regarding quality of care, we find that management quality is positively associated with accessibility, but not with patient reported experience.

Armeni, P., et al. (2014). "Multiprofessional Primary Care Units: What Affects the Clinical Performance of Italian General Practitioners?" Med Care Res Rev **71**(4): 315-336.

Multiprofessional primary care models promise to deliver better care and reduce waste. This study evaluates the impact of such a model, the primary care unit (PCU), on three outcomes. A multilevel analysis within a "pre- and post-PCU" study design and a cross-sectional analysis were conducted on 215 PCUs located in the Emilia-Romagna region in Italy. Seven dimensions captured a set of processes and services characterizing a well-functioning PCU, or its degree of vitality. The impact of each dimension on outcomes was evaluated. The analyses show that certain dimensions of PCU vitality (i.e., the possibility for general practitioners to meet and share patients) can lead to better outcomes. However, dimensions related to the interaction and the joint works of general practitioners with other professionals tend not to have a significant or positive impact. This suggests that more effort needs to be invested to realize all the potential benefits of the PCU's multiprofessional approach to care

Ashcroft, R. (2014). "Inadequate Performance Measures Affecting Practices, Organizations and Outcomes of Ontario's Family Health Teams." Healthc.Policy **10**(1): 86-96.

Background: Emphasis on quantity as the main performance measure may be posing challenges for Family Health Team (FHT) practices and organizational structures. This study asked: What healthcare practices and organizational structures are encouraged by the FHT model? Methods: An exploratory

qualitative design guided by discourse analysis was used. This paper presents findings from in-depth semi-structured interviews conducted with seven policy informants and 29 FHT leaders. Results: Participants report that performance measures value quantity and are not inclusive of the broad scope of attributes that comprise primary healthcare. Performance measures do not appear to be accurately capturing the demand for healthcare services, or the actual amount of services being provided by FHTs. Results suggest that unintended consequences of performance measures may be posing challenges to access and health outcomes. Conclusion: It is recommended that performance measures be developed and used to measure, support and encourage FHTs to achieve the goals of PHC

Aysola, J., et al. (2013). "Quality and equity of primary care with patient-centered medical homes: results from a national survey." Med Care **51**(1): 68-77.

BACKGROUND: : The patient-centered medical home (PCMH) model has gained support, but the impact of this model on the quality and equity of care merits further evaluation. OBJECTIVE: : To determine if PCMHs are associated with improved quality and equity in pediatric primary care. RESEARCH DESIGN: : Using the 2007/2008 National Survey of Children's Health, a nationally representative survey of parents/guardians of children (age, 0-17 y), we evaluated the association of PCMHs with 10 quality-of-care measures using multivariable regression models, adjusting for demographic and socioeconomic covariates. For quality indicators that were significantly associated with medical homes, we determined if this association differed by race/ethnicity. RESULTS: : Compared with children without medical homes, those with medical homes had significantly better adjusted rates for 6 of 10 quality measures (all P</=0.02), such as obtaining a developmental history [adjusted rates % (SE): 41.7 (1.3) vs. 52.0 (1.1), P<0.001]. Having a medical home was associated with better adjusted rates of receiving a developmental history exam for both white and black children, but the disparity between these groups was not significantly narrowed [difference in risk differences (SE): 0.9 (4.3) for whites vs. blacks; P=0.83]. CONCLUSIONS: : Our results underscore the benefits of the medical home model for children while highlighting areas for improvement, such as narrowing disparities. Our findings also emphasize the key role of patient experience measures in the evaluation of medical homes

Aysola, J., et al. (2015). "Patient-centered Medical Homes and Access to Services for New Primary Care Patients." Med Care **53**(10): 857-862.

BACKGROUND: Recent efforts to revitalize primary care have centered on the patient-centered medical home (PCMH). Although enhanced access is an integral component of the PCMH model, the effect of PCMHs on access to primary care services is understudied. OBJECTIVE: To determine whether PCMH practices are associated with better access to new appointments for nonelderly adults by direct measurement. RESEARCH DESIGN: We estimated the relationship between practice PCMH status and access to care in multivariate regression models, adjusting for a robust set of patient, practice, and geographic characteristics; using data on 11,347 simulated patient calls to 7266 primary care practices across 10 US states merged with data on PCMH practices. PARTICIPANTS: Trained field staff posing as patients (age younger than 65 y) seeking a new primary care appointment with varying insurance status (private, Medicaid, or self-pay). MEASURES: Our primary predictor was practice PCMH status and our primary outcome was the ability of simulated patients to schedule a new appointment. Secondary outcomes included the number of days to that appointment; availability of after-hour appointments; and an appointment with an ongoing primary care provider. RESULTS: Of the 7266 practices contacted for an appointment, 397 (5.5%) were National Committee for Quality Assurance-recognized PCMHs. In adjusted analyses, callers to PCMH practices compared with non-PCMH practices were more likely to schedule a new appointment (adjusted odds ratio=1.26 (95% CI, 1.01-1.58); P=0.04] and be offered after-hour appointments [adjusted odds ratio=1.36 (95% CI, 1.04-1.75); P=0.02]. DISCUSSION: PCMH practices maybe associated with better access to new primary care appointments for nonelderly adults, those most likely to gain insurance under the Affordable Care Act.

Baker, L. C., et al. (2017). Does Multispecialty Practice Enhance Physician Market Power? NBER Working Paper Series ; n° 23871. Cambridge NBER**:** 36, fig., tabl.+, annexes.
http://www.nber.org/papers/w23871

In markets for health services, vertical integration – common ownership of producers of complementary services – may have both pro- and anti-competitive effects. Despite this, no empirical research has examined the consequences of multispecialty physician practice – a common and increasing form of vertical integration – for physician prices. We use data on 40 million commercially insured individuals from the Health Care Cost Institute to construct indices of the price of a standard office visit to general-practice and specialist physicians for the years 2008-2012. We match this to measures of the characteristics of physician practices and physician markets based on Medicare Part B claims, aggregating physicians into practices based on their receipt of payments under a common Taxpayer Identification Number. Holding fixed the degree of competition in their own specialty, we find that generalist physicians charge higher prices when they are integrated with specialist physicians, and that the effect of integration is larger in uncompetitive specialist markets. We find the same thing in the reciprocal setting – specialist prices are higher when they are integrated with generalists, and the effect is stronger in uncompetitive generalist markets. Our results suggest that multispecialty practice has anticompetitive effects.

Barnes, A. J., et al. (2014). "Accountable care organizations in the USA: Types, developments and challenges." Health Policy.

A historically fragmented U.S. health care system, where care has been delivered by multiple providers with little or no coordination, has led to increasing issues with access, cost, and quality. The Affordable Care Act included provisions to use Medicare, the U.S. near universal public coverage program for older adults, to broadly implement Accountable Care Organization (ACO) models with a triple aim of improving the experience of care, the health of populations, and reducing per capita costs. Private payers in the U.S. are also embracing ACO models. Various European countries are experimenting with similar reforms, particularly those in which coordinated (or integrated) care from a network of providers is reimbursed with bundled payments and/or shared savings. The challenges for these reforms remain formidable and include: (1) overcoming incentives for ACOs to engage in rationing and denial of care and taking on too much financial risk, (2) collecting meaningful data that capture quality and enable rewarding quality improvement and not just volume reduction, (3) creating incentives for ACOs that do not accept much risk to engage in prevention and health promotion, and (4) creating effective governance and IT structures that are patient-centered and integrate care

Barrett, J., et al. (2007). CHSRF Synthesis: Interprofessional Collaboration and Quality Primary Healthcare. Ottawa Canadian Health Services Research Foundation.**:** 41.
http://www.cfhi-fcass.ca/SearchResultsNews/2007/12/01/e8d6e160-ca07-46b0-8cf6-bf0d19c13cb7.aspx

This synthesis was initiated to help the gain a better understanding of the evidence surrounding interprofessional collaboration in Canadian primary healthcare, and the potential benefits for patients and healthcare providers. It focuses on existing evaluations of interprofessional collaboration initiatives in the literature and projects funded through the Primary Health Care Transition Fund. The synthesis report incorporates findings from initiatives or projects that involved primary healthcare provision; a systematic review of peer-reviewed literature regarding outcomes of interprofessional collaboration in primary healthcare and a Canadian environmental scan to obtain stakeholder feedback. The process used to assess the quality of initiatives and projects included: examination of the qualitative and quantitative characteristics of the study design, and the nature of the health services intervention; rating of the study design characteristics based on level of evidence criteria and grading of each study by an expert in primary healthcare research.

Beaulieu, M. D. (2012). Facteurs organisationnels qui soutiennent des pratiques cliniques de qualité en première ligne. Résultats d'une étude québécoise. Montréal Chaire Docteur Sadok Besrour en médecine familiale**:** 35 , fig., annexes.

L'objectif principal de cette recherche était d'identifier les facteurs organisationnels associes à des services de première ligne de qualité auprès de deux types de clientèle : celle suivie pour des maladies chroniques et celle qui consulte pour des problèmes aigus épisodiques. Plus précisément, l'étude visait

à répondre aux questions suivantes : Quels sont les attributs organisationnels (caractéristiques structurelles et processus de fonctionnement) associés a des soins de première ligne de qualité. Qu'est-ce qui distingue, à ce niveau, les cliniques qui parviennent à dispenser des soins de première ligne de qualité élevée. Certains attributs organisationnels sont-ils plus spécifiquement associés à la qualité des soins pour les problèmes aigus épisodiques ou pour la gestion des maladies chroniques.

Beaulieu, M. D., et al. (2006). L'implantation des Groupes de médecine de famille : le défi de la réorganisation de la pratique et de la collaboration interprofessionnelle. Montréal Chaire Docteur Sadok Besrour en médecine familiale **:** 26 , annexes.

Un GMF est une nouvelle organisation composée de médecins de famille travaillant en groupe, en collaboration étroite avec des infirmières, et qui offre une gamme étendue de services à une clientèle qui s'y inscrit librement. La politique GMF reprend à son compte les éléments d'accessibilité accrue, d'équipes multidisciplinaires et de technologies d'information, qui caractérisent les diverses initiatives canadiennes visant à réorganiser les services de santé de première ligne et à mieux les coordonner à l'ensemble du système. Elle ne modifie toutefois pas de façon significative le mode de rémunération des médecins et les modalités entourant l'inscription des clientèles y sont moins contraignantes. Cette étude a évalué, sur une période de deux ans, la mise en place de 5 GMF faisant partie de la première vague d'implantation de cette politique au Québec. L'étude s'est intéressée à la manière dont le fonctionnement du GMF redéfinissait la pratique de groupe et la collaboration entre les professionnel s; elle s'est intéressée également aux résultats de cette redéfinition pour les clientèles inscrites.

Bekelman, D. B., et al. (2013). "Patient-centered disease management (PCDM) for heart failure: study protocol for a randomised controlled trial." BMC Cardiovasc.Disord. **13**(1): 49.

BACKGROUND: Chronic heart failure (HF) disease management programs have reported inconsistent results and have not included comorbid depression management or specifically focused on improving patient-reported outcomes. The Patient Centered Disease Management (PCDM) trial was designed to test the effectiveness of collaborative care disease management in improving health status (symptoms, functioning, and quality of life) in patients with HF who reported poor HF-specific health status. Methods/design: Patients with a HF diagnosis at four VA Medical Centers were identified through population-based sampling. Patients with a Kansas City Cardiomyopathy Questionnaire (KCCQ, a measure of HF-specific health status) score of < 60 (heavy symptom burden and impaired quality of life) were invited to enroll in the PCDM trial. Enrolled patients were randomized to receive usual care or the PCDM intervention, which included: (1) collaborative care management by VA clinicians including a nurse, cardiologist, internist, and psychiatrist, who worked with patients and their primary care providers to provide guideline-concordant care management, (2) home telemonitoring and guided patient self-management support, and (3) screening and treatment for comorbid depression. The primary study outcome is change in overall KCCQ score. Secondary outcomes include depression, medication adherence, guideline-based care, hospitalizations, and mortality. DISCUSSION: The PCDM trial builds on previous studies of HF disease management by prioritizing patient health status, implementing a collaborative care model of health care delivery, and addressing depression, a key barrier to optimal disease management. The study has been designed as an 'effectiveness trial' to support broader implementation in the healthcare system if it is successful.Trial registration: Unique identifier.

Benzer, J. K., et al. (2016). "Team Process Variation Across Diabetes Quality of Care Trajectories." Med Care Res Rev **73**(5): 565-589.

Conceptual frameworks in health care do not address mechanisms whereby teamwork processes affect quality of care. We seek to fill this gap by applying a framework of teamwork processes to compare different patterns of primary care performance over time. We thematically analyzed 114 primary care staff interviews across 17 primary care clinics. We purposefully selected clinics using diabetes quality of care over 3 years using four categories: consistently high, improving, worsening, and consistently low. Analyses compared participant responses within and between performance categories. Differences were observed among performance categories for action processes

(monitoring progress and coordination), transition processes (goal specification and strategy formulation), and interpersonal processes (conflict management and affect management). Analyses also revealed emergent concepts related to psychological and organizational context that were reported to affect team processes. This study is a first step toward a comprehensive model of how teamwork processes might affect quality of care.

Berchet, C. et Nader, C. (2016). The organisation of out-of hours primary care in OECD countries. OECD Health Working Papers ; 89. Paris OCDE**:** 44 , tab., fig.
http://www.oecd-ilibrary.org/social-issues-migration-health/the-organisation-of-out-of-hours-primary-care-in-oecd-countries_5jlr3czbqw23-en

Out-of-hours (OOH) services provide urgent primary care when primary care physician (PCP) offices are closed, most often from 5pm on weekdays and all day on weekends and holidays. Based on a policy survey (covering 27 OECD countries) and the existing literature, the working paper describes the current challenges associated with the organisation of OOH primary care and reviews the existing models of delivering OOH primary care. The paper pays particular attention to policies which have been pursued to improve access and quality of OOH primary care. Findings of the paper show that most OECD health systems report key challenges to provide OOH primary care in an accessible and safe way. These challenges relate to (i) PCPs' reluctance to practise due to high workload and insufficient remuneration; and (ii) geographical variations in access to OOH primary care within each health system. Together these challenges are leading sources of inappropriate hospital emergency department (ED) visits. Results also indicate that several models of OOH primary care exist alongside each other in the 27 OECD countries participating in the policy survey. Hospital EDs, rota groups and practice-based services remain the most common OOH arrangements, but there is a tendency to shift OOH primary care towards primary care centres and large-scale organisations known as general practice cooperatives (GPCs). A range of solutions have been implemented to improve access and quality of OOH primary care across OECD countries. These include providing organisational and financial support to PCPs; using other health care professionals (such as nurse practitioners), making OOH care participation compulsory, setting up a telephone triage system, using new technologies, and developing rich information systems (résumé des auteurs)

Berenson, R. A., et al. (2016). "Do accountable care organizations (ACOs) help or hinder primary care physicians'ability to deliver high-quality care?" HealthCare **4**(3): 155-159.

Bernstein, D. (2008). "Les réformes dans l'organisation des soins primaires en Angleterre." Points De Repere(17): 12.
http://www.ameli.fr/fileadmin/user_upload/documents/Points_de_repere_n__17.pdf

[BDSP. Notice produite par CNAMTS mR0xJmBI. Diffusion soumise à autorisation]. Les soins primaires ont fait l'objet, en Angleterre, de nombreuses réformes depuis les années 1990, avec la constitution des Primary Care Trusts, organismes responsables au niveau local du financement et de l'organisation des soins. La convention avec les généralistes, signée en 2004, comporte des incitations nouvelles au regroupement entre praticiens et à la délégation des tâches, et modifie la structure de rémunération, puisqu'une part significative y est désormais conditionnée à l'atteinte d'objectifs. Afin de développer l'offre de soins, de multiples canaux se mettent en place : médecin gestionnaire, services médicaux des Primary Care Trusts, émergence de grandes entreprises recrutées sur appels d'offres. Si des éléments tangibles permettant de peser clairement les avantages et les coûts des nouvelles formes d'organisation manquent, les réformes visent à agir à la fois sur la qualité des soins, la régulation des dépenses et la satisfaction des patients.

Bienkowska-Gibbs, T., et al. (2015). New organisational models of primary care to meet the future needs of the NHS. A brief overview of recent reports. Santa-Monica Rand Corporation**:** 46.
http://www.rand.org/pubs/research_reports/RR1181.html

The NHS in England faces several future challenges for primary care, including an ageing population, increasing numbers of patients with multiple long-term conditions and a limited workforce. The Health

Education England Primary Care Workforce Commission has set out to identify innovative models of primary care that will meet these future challenges. As part of this work, RAND Europe was commissioned to present a brief overview of reports from professional bodies and policy-focused organisations — from England and internationally — that describe new models for delivering primary care. These models include: Models that introduce new roles, or change existing roles, in general practice (e.g. introducing physician associates and pharmacists into general practice, extending roles for allied health professionals and primary care nurses); Models of collaboration among professionals and among the primary care, secondary care and social care sectors (e.g. 'micro-teams', GPs and specialists working together and/or specialists working in the community, extended roles for community pharmacists); and New organisational forms for general practice (e.g. primary care federations or networks, super-practices, regional multipractice organisations, community health organisations, polyclinics and multispecialty community providers). In addition, we present some examples of communication/information technology used in primary care and discuss recruitment and retention challenges facing health professionals in general practice. Most reports included in this overview are descriptive, and they include recommendations regarding how new models of care could be implemented. From these reports, it was evident that there is no 'one size fits all' model for delivering primary care and that the way in which new models are implemented may be as important as the models themselves.

Bilazarian, A., Hovsepian, V., Kueakomoldej, S., et al. (2021). "A Systematic Review of Primary Care and Payment Models on Emergency Department Use in Patients Classified as High Need, High Cost." J Emerg Nurs **47**(5): 761-777.e763.

INTRODUCTION: Reducing costly and harmful ED use by patients classified as high need, high cost is a priority across health care systems. The purpose of this systematic review was to evaluate the impact of various primary care and payment models on ED use and overall costs in patients classified as high need, high cost. METHODS: Using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines, a search was performed from January 2000 to March 2020 in 3 databases. Two reviewers independently appraised articles for quality. Studies were eligible if they evaluated models implemented in the primary care setting and in patients classified as high need, high cost in the United States. Outcomes included all-cause and preventable ED use and overall health care costs. RESULTS: In the 21 articles included, 4 models were evaluated: care coordination (n = 8), care management (n = 7), intensive primary care (n = 4), and alternative payment models (n = 2). Statistically significant reductions in all-cause ED use were reported in 10 studies through care coordination, alternative payment models, and intensive primary care. Significant reductions in overall costs were reported in 5 studies, and 1 reported a significant increase. Care management and care coordination models had mixed effects on ED use and overall costs. DISCUSSION: Studies that significantly reduced ED use had shared features, including frequent follow-up, multidisciplinary team-based care, enhanced access, and care coordination. Identifying primary care models that effectively enhance access to care and improve ongoing chronic disease management is imperative to reduce costly and harmful ED use in patients classified as high need, high cost.

Bitton, A., et al. (2012). "Off the Hamster Wheel? Qualitative Evaluation of a Payment-Linked Patient-Centered Medical Home (PCMH) Pilot." Milbank Q. **90**(3): 484-515.
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3479381/pdf/milq0090-0484.pdf

Context: Many primary care practices are moving toward the patient-centered medical home (PCMH) model and increasingly are offering payment incentives linked to PCMH changes. Despite widespread acceptance of general PCMH concepts, there is still a pressing need to examine carefully and critically what transformation means for primary care practices and their patients and the experience of undergoing such change in a practice. Methods: We used a qualitative case study approach to explore the underlying dynamics of change at five practices participating in PCMH transformation efforts linked to payment reform. The evaluation consisted of structured site visits, interviews, observations, and artifact reviews followed by a structured review of transcripts and documents for patterns, themes, and insights related to PCMH implementation. Findings: We describe both the detailed components of each practice's transformation efforts and a grounded taxonomy of eight insights

stemming from the experiences of these medical homes. We identified specific contextual factors related to wide variations in change tactics. We also observed widely varying approaches to catalyzing change using (or not) external consultants, specific challenges regarding health information technology implementation, team and staff role restructuring, compensation, and change fatigue, and several unexpected potential confounders or alternative explanations for practice success. Conclusions: Our evaluation affirms the value and necessity of qualitative methods for understanding primary care practice transformation, and it should encourage ongoing and future pilots to include assessments of the PCMH change process beyond clinical markers and claims data. The results raise insights into the heterogeneity of medical home transformation, the central but complex role of payment reform in creating a space for change, the ability of small practices to achieve substantial change in a short time period, and the challenges of sustaining it

Block, L., Petersen, C., Coletti, D. J., et al. (2020). "Access and Continuity: A Multidisciplinary Education Workshop to Teach Patient-Centered Medical Home (PCMH) Principles." MedEdPORTAL **16**: 10974.

INTRODUCTION: As more practices move to patient-centered medical home (PCMH) models, future health care professionals must train to work in collaborative settings. We implemented a 3-hour workshop for multidisciplinary trainees on the PCMH principles of access and continuity based on the EFECT framework (eliciting a patient-centered narrative, facilitating an interprofessional team discussion, evaluating the clinical evidence, creating a shared care plan, and tracking outcomes). METHODS: Participants included internal medicine residents and medical, physician assistant (PA), and clinical psychology students. The workshop incorporated reflective activities identifying patient and provider health care delivery priorities, plus a PCMH presentation and group activities focusing on access and continuity. Evaluations were analyzed qualitatively and quantitatively. RESULTS: The workshop had 39 participants (seven physicians, one PA, one educator, one psychologist, three staff, nine residents, one PA student, one psychology extern, and 15 medical students). On a 0-10 Likert scale (0 = don't agree at all, 10 = completely agree), learners reported higher knowledge of PCMH principles (M = 8.8), feeling better prepared for PCMH work (M = 8.6), and having obtained real-world skills (M = 8.3). Open-ended responses describing the workshop's take-home message included the role of patient-centeredness in clinical redesign, the value of the multidisciplinary team in optimizing access and continuity, and how to use a quality improvement approach for access and continuity. DISCUSSION: This workshop increased PCMH-related knowledge and encouraged discussion of professional roles within the team. Learners recognized the benefits of team-based rather than provider-centric approaches to access and continuity.

Boeijen, E. R. K., Peters, J. W. B. et van Vught, A. (2020). "Nurse practitioners leading the way: An exploratory study on the added value of nurse practitioners in outpatient care in the Netherlands." J Am Assoc Nurse Pract **32**(12): 800-808.

BACKGROUND: Many Dutch nurse practitioners (NPs) work together with physicians and specialized nurses (SNs) in outpatient clinics, although the latter have questioned the added value of NPs in the outpatient clinic. Clarification of the distinction between and the added value of both nursing professions in relation to each other could lead to optimal use of the unique competencies of each type of nurse. PURPOSE: To explore NPs' perspectives on their added value in relation to SNs in the outpatient clinic. METHODOLOGICAL ORIENTATION: Data were analyzed by Braun and Clarke's thematic analysis. The CanMEDS competences were used to identify the NPs' comments about their practice. SAMPLE: Twelve semi-structured interviews were conducted with NPs from two hospital settings. CONCLUSIONS: The added value of NPs was most evident in: nursing leadership, integrating care and cure and performing an expert level of nursing expertise, and competencies in science. To optimize their roles, NPs and SNs need to make all team members aware of their unique competences and promote role clarification. IMPLICATIONS FOR PRACTICE: This study provides barriers in barriers that influence optimal positioning of NPs within the interdisciplinary team, stresses the importance of discussion on the optimal skill mix within the interdisciplinary team, and describes the NPs' leadership role because this is the encompassing link between the main competencies of their practice. Addressing and overcoming these findings could improve the NPs' positioning and effective collaboration within (the outpatient clinic's) interprofessional teams.

Borgermans, L., et al. (2017). "How to Improve Integrated Care for People with Chronic Conditions: Key Findings from EU FP-7 Project INTEGRATE and Beyond." International Journal of Integrated Care **17**(2): 1-12. https://www.ijic.org/articles/10.5334/ijic.3096/

Background: Political and public health leaders increasingly recognize the need to take urgent action to address the problem of chronic diseases and multi-morbidity. European countries are facing unprecedented demand to find new ways to deliver care to improve patient-centredness and personalization, and to avoid unnecessary time in hospitals. People-centred and integrated care has become a central part of policy initiatives to improve the access, quality, continuity, effectiveness and sustainability of healthcare systems and are thus preconditions for the economic sustainability of the EU health and social care systems. Purpose: This study presents an overview of lessons learned and critical success factors to policy making on integrated care based on findings from the EU FP-7 Project Integrate, a literature review, other EU projects with relevance to this study, a number of best practices on integrated care and our own experiences with research and policy making in integrated care at the national and international level. Results: Seven lessons learned and critical success factors to policy making on integrated care were identified. Conclusion: The lessons learned and critical success factors to policy making on integrated care show that a comprehensive systems perspective should guide the development of integrated care towards better health practices, education, research and policy.

Breton, M., et al. (2011). "Primary Care Reform: Can Quebec's Family Medicine Group Model Benefit from the Experience of Ontario's Family Health Teams?" Healthcare Policy **7**(2): e122-e135.

Canadian politicians, decision-makers, clinicians and researchers have come to agree that reforming primary care services is a key strategy for improving healthcare system performance. However, it is only more recently that real transformative initiatives have been undertaken in different Canadian provinces. One model that offers promise for improving primary care service delivery is the family medicine group (FMG) model developed in Quebec. A FMG is a group of physicians working closely with nurses in the provision of services to enrolled patients on a non-geographic basis. The objectives of this paper are to analyze the FMG's potential as a lever for improving healthcare system performance and to discuss how it could be improved. First, it briefly reviews the history of primary care in Quebec. Then it presents the FMG model in relation to the four key healthcare system functions identified by the World Health Organization: (a) funding, (b) generating human and technological resources, (c) providing services to individuals and communities and (d) governance. Next, it discusses possible ways of advancing primary care reform, looking particularly at the family health team (FHT) model implemented in the province of Ontario. It concludes with recommendations to inspire other initiatives aimed at transforming primary care.

Briot, P., et al. (2015). "Prise en charge intégrée des maladies mentales : l'exemple d'Intermountain Healthcare (USA)." Sante Publique **27**: 199-208, tabl.

[BDSP. Notice produite par EHESP 7qmR0xnp. Diffusion soumise à autorisation]. Parmi les maladies chroniques, la santé mentale est une priorité de santé publique en France et aux États-Unis. Si des progrès sont possibles en France, l'expérience d'Intermountain Healthcare (IH), Utah, aux États-Unis, peut être source d'expérimentations probantes. L'objectif de cette étude était donc d'identifier les enseignements de l'intégration clinique des spécialistes en santé mentale avec la médecine de ville de soins primaires, appelé Mental Health Integration (MHI). La recherche s'appuie sur l'analyse qualitative de données issues de travaux entre experts, de recherches bibliographiques, et de regroupements par item correspondant aux trois objectifs du Triple Aim de l'Institute for Healthcare Improvement (IHI). Les résultats vont dans le sens d'une plus grande efficience et efficacité clinique et organisationnelle : satisfaction de l'usager, amélioration de la santé de la population, réduction des coûts des soins de santé par habitant. MHI améliore le modèle des soins chroniques en y intégrant une équipe de spécialistes en santé mentale, créant ainsi une équipe pluridisciplinaire centrée sur les besoins des patient et de leur famille, qui deviennent co-responsables de leur santé.

Browne, A. J., et al. (2012). "Closing the health equity gap: evidence-based strategies for primary health care organizations." International Journal for Equity in Health: 1-29. http://www.equityhealthj.com/content/pdf/1475-9276-11-59.pdf

International evidence shows that enhancement of primary health care (PHC) services for disadvantaged populations is essential to reducing health and health care inequities. However, little is known about how to enhance equity at the organizational level within the PHC sector. Drawing on research conducted at two PHC Centres in Canada whose explicit mandates are to provide services to marginalized populations, the purpose of this paper is to discuss the key dimensions of equity-oriented services to guide PHC organizations, and strategies for operationalizing equity-orie- nted PHC services, particularly for marginalized populations.The PHC Centres are located in two cities within urban neighborhoods recognized as among the poorest in Canada. Using a mixed methods ethnographic design, data were collected through intensive immersion in the Centres, and included: in-depth interviews with a total of 114 participants (73 patients; 41 staff), over 900 hours of participant observation, and an analysis of key organizational documents, which shed light on the policy and funding environments.Through our analysis, we identified four key dimensions of equity-oriented PHC services: inequity-responsive care; trauma-informed care; contextually-tailored care; and culturally competent care. The operationalization of these key dimensions are identified as 10 strategies that intersect to optimize the effectiveness of PHC services, particularly through improvements in the quality of care, an improved 'fit' between people's needs and services, enhanced trust and engagement by patients, and a shift from crisis-oriented care to continuity of care. Using illustrative examples from the data, these strategies are discussed to illuminate their relevance at three inter-related levels: organizational, clinical programming, and at the level of patient-provider interactions

Bruen, B. K., et al. (2013). "No evidence that primary care physicians offer less care to medicaid, community health center, or uninsured patients. Health Aff.(Millwood.) **32**(9): 1624-1630.

The Affordable Care Act increases US investment in Medicaid and community health centers, yet many people believe that care in such safety-net programs is substandard. Using data from more than 31,000 visits to primary care physicians in the period 2006-10, we examined whether the length or content of a visit was different for safety-net patients-those insured by Medicaid, those who are uninsured, and those seen in a community health center-compared to patients with private insurance. We found no significant differences in the average length of a primary care visit or in the likelihood of a patient's receiving preventive health counseling. Medicaid patients received more diagnostic and treatment services, and uninsured patients received fewer services, compared to privately insured patients, but the differences were small. This analysis indicates that length and content of primary care visits are comparable for safety-net and other patients. The main factors that contribute to differences in visit length and content are patients' health needs and the type of visit involved

Brun-Fain, E. (2015). Quelle rémunération pour les médecins exerçant dans des structures interprofessionnelles ambulatoires, aux Etats-Unis, au Canada, aux Pays Bas et au Royaume Uni ? Revue de la littérature. Paris Université de Paris Dauphine. **Master Evaluation Médico-Economique et accès au marché (ENAM) ; Université Paris Dauphine:** 53.

Le projet de loi de santé de « Modernisation de notre système de santé » prévoit une évolution de la rémunération des médecins généralistes français. Or, « le droit à des honoraires pour tout malade soigné et le paiement direct par le malade » est un des principes de la chartre fondatrice de la médecine libérale de 1927, d'où l'indignation de nombreux médecins généralistes à ce propos. Bien qu'ils perçoivent aujourd'hui une partie de leur rémunération selon d'autres modalités (forfait par patient dont ils sont le médecin traitant, par patient présentant une maladie chronique, Rémunération sur Objectifs de Santé Publique) la plupart craint une évolution de son mode de rémunération, ainsi qu'une perte d'autonomie, chère à la médecine libérale. Or, le système de soins primaires français est aujourd'hui face à la nécessité d'évoluer : le vieillissement de la population et la croissance exponentielle du nombre de malades chroniques le place devant un défi considérable de financement mais avant cela même, d'organisation des soins. En 2008, la Loi de Financement de la Sécurité Sociale

a mis en place une Expérimentation de Nouveaux Modes de Rémunération. destinés aux structures interprofessionnelles visant à valoriser les initiatives de coordination et de coopération. Ce système de rémunération a été généralisé en 2015, mais son évolution dépendra des résultats de l'évaluation de ces Nouveaux Modes de Rémunération (NMR) ainsi que d'éléments de comparaison étrangers. Afin de répondre à ce dernier objectif, cette étude propose une revue de la littérature visant à décrire différents modes de rémunération alternatifs au paiement à l'acte, à destination de groupes interprofessionnels aux Etats-Unis, au Canada, au Royaume Uni et aux Pays Bas. Dans une première partie, elle définit des concepts utiles à la compréhension du sujet, puis expose la méthode utilisée pour la recherche bibliographique. Dans une partie consacrée aux résultats, elle présente séparément pour chaque pays, le contexte d'évolution du système de santé, les structures interprofessionnelles en ambulatoire qui s'y sont développées et leur mode de financement. L'impact de ces modes de financement sera analysé de façon globale dans une courte seconde partie.

Busse, R. et Stahl, J. (2014). "Integrated care experiences and outcomes in Germany, the Netherlands, and England." Health Aff.(Millwood.) **33**(9): 1549-1558.

Care for people with chronic conditions is an issue of increasing importance in industrialized countries. This article examines three recent efforts at care coordination that have been evaluated but not yet included in systematic reviews. The first is Germany's Gesundes Kinzigtal, a population-based approach that organizes care across all health service sectors and indications in a targeted region. The second is a program in the Netherlands that bundles payments for patients with certain chronic conditions. The third is England's integrated care pilots, which take a variety of approaches to care integration for a range of target populations. Results have been mixed. Some intermediate clinical outcomes, process indicators, and indicators of provider satisfaction improved; patient experience improved in some cases and was unchanged or worse in others. Across the English pilots, emergency hospital admissions increased compared to controls in a difference-in-difference analysis, but planned admissions declined. Using the same methods to study all three programs, we observed savings in Germany and England. However, the disease-oriented Dutch approach resulted in significantly increased costs. The Kinzigtal model, including its shared-savings incentive, may well deserve more attention both in Europe and in the United States because it combines addressing a large population and different conditions with clear but simple financial incentives for providers, the management company, and the insurer

Bustachini, A. et Tedeschi, P. (2009). Primary care and interdisciplinary collaboration within primary care teams, Pisa : St Anna school of Advanced Studies

The aim of this position paper is to appraise and address the issue of interdisciplinary collaboration (IdC) within primary care teams in order to highlight solutions which are likely to improve service delivery, quality of care, patient experience and satisfaction. We intentionally use the expression ?primary care teams? for two reasons: on one hand, the diversity of primary care organisations and settings throughout Europe recommends for the use of a general term, on the other, the assumption that IdC is intrinsically related to ?teaming up? among different professionals for the benefit of patients.

Cameron, A., et al. (2013). "Factors that promote and hinder joint and integrated working between health and social care services: a review of research literature." Health & Social Care in the Community: n/a-n/a.

This article reports the results of a review of the research evidence related to joint working in the field of adult health and social care services in the UK. It explores whether recent reforms to joint working have met the objectives set by policy-makers. The review followed an established methodology: electronic databases were searched using predetermined terms, abstracts were screened against inclusion criteria, studies that met the criteria were read in full and assessed for inclusion and data were extracted systematically. The findings of the review suggest that there is some indication that recent developments, in particular the drive to greater integration of services, may have positive benefits for organisations as well as for users and carers of services. However, the evidence consistently reports a lack of understanding about the aims and objectives of integration, suggesting

that more work needs to be done if the full potential of the renewed policy agenda on integration is to be realised. Additionally, while the review acknowledges that greater emphasis has been placed on evaluating the outcome of joint working, studies largely report small-scale evaluations of local initiatives and few are comparative in design and therefore differences between ~usual care and integrated care are not assessed. This makes it difficult to draw firm conclusions about the effectiveness of UK-based integrated health and social care services

Chan, C. S., Davis, D., Cooper, D., et al. (2021). "VA home-based primary care interdisciplinary team structure varies with Veterans' needs, aligns with PACE regulation." J Am Geriatr Soc **69**(7): 1729-1737.

BACKGROUND: Interdisciplinary team (IDT) care is central to home-based primary care (HBPC) of frail elders. Traditionally, all HBPC disciplines managed a patient (Full IDT), a costly approach to maintain. The recent PACE (Program of All-inclusive Care for the Elderly) regulation provides for a flexible approach of annual assessments from a core team with involvement of additional disciplines dependent upon patient needs (Core+). Current Department of Veterans Affairs (VA) HBPC guidance specifies Full IDTs care for medically complex and functionally impaired Veterans similar to PACE participants. We evaluated whether VA HBPC has adopted the flexible structure of the PACE regulation, aligned to Veteran needs. DESIGN: Cross-sectional analysis. SETTING: All 139 VA HBPC programs administered across 379 sites. PARTICIPANTS: About 55,173 Veterans enrolled in HBPC during fiscal year 2018. MEASUREMENTS: Patients' HBPC physician, nurse, psychologist/psychiatrist, social worker, therapist, dietitian, and pharmacist visits were grouped into interdisciplinary team types. Patient frailty was classified using VA HNHR v2 (High-Need High-Risk version 2, a measure of high, medium, and low risk of long-term institutionalization). Medical complexity was measured by clusters of impairment in the JEN frailty index (JFI). JFI clusters were validated by VA's Nosos measure to project cost and Care Assessment Need (CAN) measure of hospitalization and mortality risk. RESULTS: HBPC provided Full IDT care to 21%, Core+ care to 54%, and Home Health+ (HHA+) care (skilled home health services plus additional disciplines, without primary care) to 16% of Veterans. Team type was associated with medical complexity (X(2) 2863.5 [66 df], $p < 0.0001$). High-risk Veterans (72% of sample) were more likely to receive Full IDT care (X(2) 62.9, 1 df), $p < 0.0001$), while low-risk Veterans (28%) were more likely to receive HHA+ care (X(2) 314.8, 1 df, $p < 0.0001$). CONCLUSION: There is a strong association between HBPC team patterns and patient frailty, indicating tailoring of care to match Veteran needs.

Casalino, L. P., et al. (2013). "Independent practice associations and physician-hospital organizations can improve care management for smaller practices." Health Aff.(Millwood.) **32**(8): 1376-1382.

Pay-for-performance, public reporting, and accountable care organization programs place pressures on physicians to use health information technology and organized care management processes to improve the care they provide. But physician practices that are not large may lack the resources and size to implement such processes. We used data from a unique national survey of 1,164 practices with fewer than twenty physicians to provide the first information available on the extent to which independent practice associations (IPAs) and physician-hospital organizations (PHOs) might make it possible for these smaller practices to share resources to improve care. Nearly a quarter of the practices participated in an IPA or a PHO that accounted for a significant proportion of their patients. On average, practices participating in these organizations provided nearly three times as many care management processes for patients with chronic conditions as nonparticipating practices did (10.4 versus 3.8). Half of these processes were provided only by IPAs or PHOs. These organizations may provide a way for small and medium-size practices to systematically improve care and participate in accountable care organizations

Christianson, J. B., et al. (2014). "The dynamics of community health care consolidation: acquisition of physician practices." Milbank Q **92**(3): 542-567.

Policy Points: In order to develop effective policies on the consolidation of community health systems, policymakers must understand both the motivations and processes for consolidation. We found that physician practice consolidation is often a strategic response by providers to public and private cost

containment efforts; therefore, it will be difficult to reverse using traditional policy options. Many current health care cost containment policies incentivize continued provider consolidation, which presents a direct challenge to health care reform models that rely on competition among providers to accomplish cost control and quality improvement. CONTEXT: Health care delivery systems are becoming increasingly consolidated in urban areas of the United States. While this consolidation could increase efficiency and improve quality, it also could raise the cost of health care for payers. This article traces the consolidation trajectory in a single community, focusing on factors influencing recent acquisitions of physician practices by integrated delivery systems. METHODS: We used key informant interviews, supplemented by document analysis. FINDINGS: The acquisition of physician practices is a process that will be difficult to reverse in the current health care environment. Provider revenue uncertainty is a key factor driving consolidation, with public and private attempts to control health care costs contributing to that uncertainty. As these efforts will likely continue, and possibly intensify, community health care systems now are less consolidated than they will be in the future. Acquisitions of multispecialty and primary care practices by integrated delivery systems follow a common process, with relatively predictable issues relating to purchase agreements, employment contracts, and compensation. Acquisitions of single-specialty practices are less common, with motivations for acquisitions likely to vary by specialty type, group size, and market structure. Total cost of care contracting could be an important catalyst for practice acquisitions in the future. CONCLUSIONS: In the past, market and regulatory forces aimed at controlling costs have both encouraged and rewarded the consolidation of providers, with important new developments likely to create momentum for further consolidation, including acquisitions of physician practices

Chuang, E., et al. (2012). "A Configurational Approach to the Relationship between High-Performance Work Practices and Frontline Health Care Worker Outcomes." Health Serv.Res. **47**(4): 1460-1481. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3401394/pdf/hesr0047-1460.pdf

OBJECTIVE: To identify high-performance work practices (HPWP) associated with high frontline health care worker (FLW) job satisfaction and perceived quality of care. METHODS: Cross-sectional survey data from 661 FLWs in 13 large health care employers were collected between 2007 and 2008 and analyzed using both regression and fuzzy-set qualitative comparative analysis. PRINCIPAL FINDINGS: Supervisor support and team-based work practices were identified as necessary for high job satisfaction and high quality of care but not sufficient to achieve these outcomes unless implemented in tandem with other HPWP. Several configurations of HPWP were associated with either high job satisfaction or high quality of care. However, only one configuration of HPWP was sufficient for both: the combination of supervisor support, performance-based incentives, team-based work, and flexible work. These findings were consistent even after controlling for FLW demographics and employer type. Additional research is needed to clarify whether HPWP have differential effects on quality of care in direct care versus administrative workers. CONCLUSIONS: High-performance work practices that integrate FLWs in health care teams and provide FLWs with opportunities for participative decision making can positively influence job satisfaction and perceived quality of care, but only when implemented as bundles of complementary policies and practices

Colla, C. H., et al. (2016). "Accountability across the Continuum: The Participation of Postacute Care Providers in Accountable Care Organizations." Health Serv Res.

OBJECTIVE: To examine the extent to which accountable care organizations (ACOs) formally incorporate postacute care providers. DATA SOURCES: The National Survey of ACOs (N = 269, response rate 66 percent). STUDY DESIGN: We report statistics on ACOs' formal inclusion of postacute care providers and the organizational characteristics and clinical capabilities of ACOs that have postacute care. PRINCIPAL FINDINGS: Half of ACOs formally include at least one postacute service, with inclusion at higher rates in ACOs with commercial (64 percent) and Medicaid contracts (70 percent) compared to ACOs with Medicare contracts only (45 percent). ACOs that have a formal relationship with a postacute provider are more likely to have advanced transition management, end of life planning, readmission prevention, and care management capabilities. CONCLUSIONS: Many ACOs have not formally engaged postacute care, which may leave room to improve service integration and care management.

Collins, B. (2016). New care models: Emerging innovations in governance and organisational form. Londres King's Fund Institute**:** 64 , fig.

The 23 vanguard sites chosen to develop the multispecialty community provider (MCP) and primary and acute care system (PACS) new care models have been working to pool budgets and integrate services more closely. Some are continuing to use informal partnerships, but others are opting for more formal governance arrangements. Commissioners are grappling with how to contract for the new systems, while providers are exploring how to work together within emerging partnerships, how to allocate funding, and how to share risk and rewards. This report looks at the different approaches being taken by MCP and PACS vanguards to contracting, governance and other organisational infrastructure. It focuses on developments at five sites: Dudley; Sandwell and West Birmingham (Modality Partnership); Salford; Northumberland; and South Somerset (Symphony Project).

Conseil Canadien de la Santé (2009). Getting It Right: Case Studies of Effective Management of Chronic Disease Using Primary Health Care Teams. Toronto Conseil canadien de la santé**:** 46, fig.

The Health Council of Canada wants to know how the health care system can adapt to improve the quality of life for Canadians dealing with chronic diseases. The concept of collaborative primary health care teams is one way to make life better, prevent or manage disease progression and minimize complications. As Canadians, do we know if such teams are making a difference? What do they have in common? How are they different from one another? To find out, the Health Council of Canada commissioned a study in five communities, four in Canada and one international.

Coyle, N., et al. (2014). "Characteristics of physicians and patients who join team-based primary care practices: Evidence from Quebec's Family Medicine Groups." Health Policy **116**(2-3): 264-272.

PURPOSE: New models of delivering primary care are being implemented in various countries. In Quebec, Family Medicine Groups (FMGs) are a team-based approach to enhance access to, and coordination of, care. We examined whether physicians' and patients' characteristics predicted their participation in this new model of primary care. METHODS: Using provincial administrative data, we created a population cohort of Quebec's vulnerable patients. We collected data before the advent of FMGs on patients' demographic characteristics, chronic illnesses and health service use, and their physicians' demographics, and practice characteristics. Multivariate regression was used to identify key predictors of joining a FMG among both patients and physicians. RESULTS: Patients who eventually enrolled in a FMG were more likely to be female, reside outside of an urban region, have a lower SES status, have diabetes and congestive heart failure, visit the emergency department for ambulatory sensitive conditions and be hospitalized for any cause. They were also less likely to have hypertension, visit an ambulatory clinic and have a usual provider of care. Physicians who joined a FMG were less likely to be located in urban locations, had fewer years in medical practice, saw more patients in hospital, and had patients with lower morbidity. CONCLUSIONS: Physicians' practice characteristics and patients' health status and health care service use were important predictors of joining a FMG. To avoid basing policy decisions on tenuous evidence, policymakers and researchers should account for differential selection into team-based primary health care models

Cramm, J. M. et Nieboer, A. P. (2012). "Disease-management partnership functioning, synergy and effectiveness in delivering chronic-illness care." Int.J Qual.Health Care **24**(3): 279-285.

OBJECTIVE: /st> This study explored associations among disease-management partnership functioning, synergy and effectiveness in the delivery of chronic-illness care. DESIGN: /st> This study had a cross-sectional design. SETTING AND PARTICIPANTS: /st> The study sample consists of 218 professionals (out of 393) participating in 22 disease-management partnerships in various regions of the Netherlands. MAIN OUTCOME MEASURES: /st> We assessed the relationships among partnership functioning, synergy and effectiveness in the delivery of chronic-illness care. Partnership functioning was assessed through leadership, resources, administration and efficiency. Synergy was considered the proximal outcome of partnership functioning, which, in turn, influenced the effectiveness of

disease-management partnerships [measured with the Assessment of Chronic Illness Care (ACIC) survey instrument]. RESULTS: /st> Overall ACIC scores ranged from 3 to 10, indicating basic/intermediate to optimal/comprehensive delivery of chronic-illness care. The results of the regression analysis demonstrate that partnership effectiveness was positively associated with leadership (beta = 0.25; P</= 0.01), and resources (beta = 0.31; P</= 0.001). No significant relationship was found between administration, efficiency and partnership effectiveness. Partnership synergy acted as a mediator for partnership functioning and was statistically significantly associated with partnership effectiveness (beta = 0.25; P</= 0.001). CONCLUSION: /st> Disease-management partnerships seemed better able to deliver higher levels of chronic-illness care when synergy is created between partners. Synergy was more likely to emerge with boundary-spanning leaders who understood and appreciated partners' different perspectives, could bridge their diverse cultures and were comfortable sharing ideas, resources and power. In addition, the acknowledgement of and ability to use members' resources are valuable in engaging partners' involvement and achieving synergy in disease-management partnerships

David, G., et al. (2015). "Do Patient-Centered Medical Homes Reduce Emergency Department Visits?" Health Services Research **50**(2): 418-439.

Objective To assess whether adoption of the patient-centered medical home (PCMH) reduces emergency department (ED) utilization among patients with and without chronic illness. Data Sources Data from approximately 460,000 Independence Blue Cross patients enrolled in 280 primary care practices, all converting to PCMH status between 2008 and 2012. Research Design We estimate the effect of a practice becoming PCMH-certified on ED visits and costs using a difference-in-differences approach which exploits variation in the timing of PCMH certification, employing either practice or patient fixed effects. We analyzed patients with and without chronic illness across six chronic illness categories. Principal Findings Among chronically ill patients, transition to PCMH status was associated with 5–8 percent reductions in ED utilization. This finding was robust to a number of specifications, including analyzing avoidable and weekend ED visits alone. The largest reductions in ED visits are concentrated among chronic patients with diabetes and hypertension. Conclusions Adoption of the PCMH model was associated with lower ED utilization for chronically ill patients, but not for those without chronic illness. The effectiveness of the PCMH model varies by chronic condition. Analysis of weekend and avoidable ED visits suggests that reductions in ED utilization stem from better management of chronic illness rather than expanding access to primary care clinics.

De Stampa, M., et al. (2009). "Fostering participation of general practitioners in integrated health services networks: incentives, barriers, and guidelines." Bmc Health Services Research **9**(48): 11. http://www.biomedcentral.com/content/pdf/1472-6963-9-48.pdf

While the active participation of general practitioners (GPs) in integrated health services networks (IHSNs) plays a critical role in their success, little is known about the incentives and barriers to their actual participation. Data were gathered through semi-structured interviews and a mail survey with GPs enrolled in SIPA (system of integrated care for older persons) at 2 sites in Montreal. A total of 61 GPs completed the questionnaire, from which 22 were randomly selected for the qualitative study, with active and non-active participation in the IHSN. The key themes associated with GP participation were clinician characteristics, consequences perceived at the outset, the SIPA implementation process, relationships with the SIPA team and professional consequences. The incentive factors reported were collaborative practices, high rates of elderly and SIPA patients in their clienteles, concerns about SIPA, the selection of frail elderly patients, close relationships with the case manager, the perceived efficacy of SIPA, and improved professional practices. Barriers to GP participation included high expectations, GP recruitment, lack of information on SIPA, difficult relationships with SIPA geriatricians and deterioration of physician-patient relationships. Four profiles of participation were identified: 2 groups of participants active in SIPA and 2 groups of participants not active in SIPA. The active GPs were familiar with collaborative practices, had higher IHSN patient rates, expressed more concerns than expectations, reported satisfactory relationships with case managers and perceived the efficacy of SIPA. Both active and non-active GPs reported quality care in the IHSN and improved professional practice. Throughout the implementation process, the participation of GPs in

an IHSN depends on numerous professional (clinician characteristics) and organizational factors (GP recruitment, relationships with case managers). Our study provides guiding principles for establishing future integrated models of care. It suggests practical guidelines to support the active participation of GPs in these networks such as physicians with collaborative practices, recruitment of significant number of patients per physicians, the information provided and the accompaniment by geriatricians.

Deloitte (2012). Primary care: today and tomorrow: improving general practice by working differently. Londres Deloitte**:** 36.

This report examines the capacity and capability of general practice now and in the future, with a focus on GPs and general practice nurses. The report highlights the need for general practice to work differently to cope effectively with the increasing demands it faces. This will be especially pertinent as GPs take on the role of commissioners of local healthcare services. Rising life expectancy, accompanied by increasingly complex long-term health conditions, a stretched primary care workforce and unprecedented financial and healthcare reform are amongst the greatest challenges facing primary care in the UK.

Denis, S., et al. (2009). "What evidence is there to support skill mix changes between GPs, pharmacists and practice nurses in the care of elderly people living in the community?" Australia and New Zealand Health Policy **6**(23): 7 , tabl., fig.
http://www.anzhealthpolicy.com/content/pdf/1743-8462-6-23.pdf

Background: Workforce shortages in Australia are occurring across a range of health disciplines but are most acute in general practice. Skill mix change such as task substitution is one solution to workforce shortages. The aim of this systematic review was to explore the evidence for the effectiveness of task substitution between GPs and pharmacists and GPs and nurses for the care of older people with chronic disease. Published, peer reviewed (black) and non-peer reviewed (grey) literature were included in the review if they met the inclusion criteria. Results: Forty-six articles were included in the review. Task substitution between pharmacists and GPs and nurses and GPs resulted in an improved process of care and patient outcomes, such as improved disease control. The interventions were either health promotion or disease management according to guidelines or use of protocols, or a mixture of both. The results of this review indicate that pharmacists and nurses can effectively provide disease management and/or health promotion for older people with chronic disease in primary care. While there were improvements in patient outcomes no reduction in health service use was evident. Conclusion: When implementing skill mix changes such as task substitution it is important that the health professionals' roles are complementary otherwise they may simply duplicate the task performed by other health professionals. This has implications for the way in which multidisciplinary teams are organised in initiatives such as the GP Super Clinics.

Dinh, T. (2012). Improving Primary Health Care Through Collaboration: Briefing 2 - Barriers to Successful Interprofessional Teams. Ottawa The Conference Board of Canada**:** 13, tabl.

Barriers to collaboration impede the optimization of interprofessional primary care teams. Individual-level barriers include lack of role clarity and trust, and hierarchical roles and relationships. Practice-level barriers include lack of strong governance and leadership; difficulties in establishing appropriate skill mix and team size; and inadequate tools for communication. System-level barriers include inadequate interprofessional education and training, suboptimal funding models, and lack of appropriate monitoring and evaluation.

Dinh, T., et al. (2014). Recommendations for Action: Getting the Most out of Interprofessional Primary Health Care Teams. Ottawa The Conference Board of Canada**:** 92, tabl., fig.
http://www.conferenceboard.ca/e-library/abstract.aspx?did=5988

This is the final report in a series on primary care by the Conference Board of Canada. It uses three research approaches to arrive at recommendations for improving interprofessional primary care in

Canada. The nine recommendations are designed to help government decision-makers, primary care leaders, other care providers and patients get the most out of the interprofessional team experience.

Diop, M., et al. (2017). "Does enrollment in multidisciplinary team-based primary care practice improve adherence to guideline-recommended processes of care? Quebec's Family Medicine Groups, 2002-2010." Health Policy **121**(4): 378-388.

BACKGROUND: We investigated whether multidisciplinary team-based primary care practice improves adherence to process of care guidelines, in the absence of financial incentives related to pay-for-performance. METHODS: We conducted a natural experiment including 135,119 patients, enrolled with a general practitioner (GP) in a multidisciplinary team Family Medicine Group (FMG) or non-FMG practice, using longitudinal data from Quebec's universal insurer over the relevant time period (2000-2010). All study subjects had diabetes, chronic obstructive pulmonary disease, or heart failure and were followed over a 7-year period, 2 years prior to enrollment and 5 years after. We constructed indicators on adherence to disease-specific guidelines and composite indicators across conditions. We evaluated the effect of FMGs using propensity score methods and Difference-in-Differences (DD) models. RESULTS: Rates of adherence to chronic disease guidelines increased for both FMG and non-FMG patients after enrollment, but not differentially so. Adherence to prescription-related guidelines improved less for FMG patients (DD [95% CI]=-2.83% [-4.08%, -1.58%]). We found no evidence of an FMG effect on adherence to consultation-related guidelines, (DD [95% CI]=-0.24% [-2.24%; 1.75%]). CONCLUSIONS: We found no evidence that FMGs increased adherence to the guidelines we evaluated. Future research is needed to assess why this reform did not improve performance on these quality-of-care indicators.

Dower, C., et al. (2013). "It is time to restructure health professions scope-of-practice regulations to remove barriers to care." Health Aff.(Millwood.) **32**(11): 1971-1976.

Regulation and licensure of health professionals-nurses, physicians, pharmacists, and others-currently falls to the states. State laws and regulations define legal scopes of practice for these practitioners. Concern is growing that this system cannot support workforce innovations needed for an evolving health care system or for successful implementation of the Affordable Care Act. Existing state-based laws and regulations limit the effective and efficient use of the health workforce by creating mismatches between professional competence and legal scope-of-practice laws and by perpetuating a lack of uniformity in these laws and regulations across states. State laws limit needed overlap in scopes of practice among professions that often share some tasks and responsibilities, and the process for changing the laws is slow and adversarial. We highlight reforms needed to strengthen health professions regulation, including aligning scopes of practice with professional competence for each profession in all states; assuring the regulatory flexibility needed to recognize emerging and overlapping roles for health professionals; increasing the input of consumers; basing decisions on the best available evidence and allowing demonstration programs; and establishing a national clearinghouse for scope-of-practice information

Drennan, V. M., et al. (2017). "Physician associates in primary health care in England: A challenge to professional boundaries?" Soc Sci Med **181**: 9-16.

Like other health care systems, the National Health Service (NHS) in England has looked to new staffing configurations faced with medical staff shortages and rising costs. One solution has been to employ physician associates (PAs). PAs are trained in the medical model to assess, diagnose and commence treatment under the supervision of a physician. This paper explores the perceived effects on professional boundaries and relationships of introducing this completely new professional group. It draws on data from a study, completed in 2014, which examined the contribution of PAs working in general practice. Data were gathered at macro, meso and micro levels of the health care system. At the macro and meso level data were from policy documents, interviews with civil servants, senior members of national medical and nursing organisations, as well as regional level NHS managers (n = 25). At the micro level data came from interviews with General Practitioners, nurse practitioners and practice staff (n = 30) as well as observation of clinical and professional meetings. Analysis was both

inductive and also framed by the existing theories of a dynamic system of professions. It is argued that professional boundaries become malleable and subject to negotiation at the micro level of service delivery. Stratification within professional groups created differing responses between those working at macro, meso and micro levels of the system; from acceptance to hostility in the face of a new and potentially competing, occupational group. Overarching this state agency was the requirement to underpin legislatively the shifts in jurisdictional boundaries, such as prescribing required for vertical substitution for some of the work of doctors.

Dusheiko, M., et al. (2006). Trends in Health Care commissioning in the English NHS : an empirical analysis. CHE Research Paper ; n° 11. York University of York**:** 17 , tabl., graph., fig.
http://www.york.ac.uk/inst/che/pdf/rp11.pdf

In recent years there have been marked changes in organisational structures and budgetary arrangements in the English NHS, potentially altering the relationships between purchasers (primary care organisations (PCOs) and general practices) and providers. Using data on elective hospital admissions from 1997/98 to 2002/03 we find that commissioning has become significantly more concentrated at PCO and GP level. There was a reduction in the average number of different providers used by PCOs (16.7 to 14.2), an increase in the average share of admissions accounted for by the main provider (49% to 69%), and an increase in the average Herfindahl index (0.35 to 0.55). About half the increase in concentration arose from the increase in the number of purchasing organisations from 100 to 302. The rest was due to mergers amongst providers and the abolition of fundholding. GP fundholding practices which held budgets for elective admissions had less concentrated admission patterns than non-fundholders whose admissions were paid for by their primary care organisation. There was an increase in concentration of admissions for both types of GP practice but fundholders used more providers, had smaller shares at their main provider, and had smaller Herfindahl indices.

Ersnt & Young (2015). A Model for Australian General Practice: The Australian Person-Centred Medical Home. Sydney Ernst & Young**:** 54 , fig.

This paper proposes a sustainable model of General Practice and primary health care at a time of significant primary health care reform and change. Within the context of the creation of Primary Health Networks (PHNs), the release of the National Review of Mental Health Programmes and Services report1 and the Reform of the Federation, and the establishment of Medicare Benefits Schedule (MBS) Review Taskforce and the Primary Health Care Advisory Group (PHCAG), this model will help ensure optimal future outcomes for patients with chronic conditions and complex care needs. The model aims to embed the concept of a Patient-Centred Medical Home (PCMH) within primary care that also incorporates a multimodal payment system for General Practice which aligns incentives with outcome-focused care. To ensure the model is evidence-based, sustainable and scalable, the paper recommends a pilot programme which will focus, in particular, on testing the efficacy of the design of incentives to achieve the expected benefits. To this end, the paper's strength and novelty lies in analysing and addressing the practicalities of implementation rather than simply identifying the issues which have already been comprehensively assessed in the PHCAG's Discussion Paper,

Faber, M., et al. (2013). "Survey of 5 European countries suggests that more elements of patient-centered medical homes could improve primary care." Health Aff.(Millwood.) **32**(4): 797-806.

The patient-centered medical home is a US model for comprehensive care. This model features a personal physician or registered nurse who is augmented by a proactive team and information technology. Such a model could prove useful for advanced European systems as they strive to improve primary care, particularly for chronically ill patients. We surveyed 6,428 chronically ill patients and 152 primary care providers in five European countries to assess aspects of the patient-centered medical home. Although most patients reported that they had a personal physician and no problems in contacting the practice after hours, for example, other aspects of the patient-centered medical home, such as provision of written self-management support to patients, were not as widespread. We conclude that despite strong organizational structures, European primary care systems need

additional efforts to recognize chronically ill patients as partners in care and can embrace patient-centered medical homes to improve care for European patients

Farrar, M. (2014). Inquiry into Patient Centred Care in the 21st Century.Implications for general practice and primary care. Londres Royal College of General Practitioners**:** 73, tabl.
http://www.rcgp.org.uk/policy/rcgp-policy-areas/~/media/Files/Policy/A-Z-policy/RCGP-Inquiry-into-Patient-Centred-Care-in-the-21st-Century.ashx

The inquiry into patient centred care in the 21st century was commissioned by the RCGP to identify cost effective solutions to the medical, social and financial challenges posed by rising levels of multimorbidity in England. Our terms of reference asked us to focus specifically on general practice, in the context of the broader range of primary, community and social care services. This enquiry concludes that clinicians must work with patients in a very different way, providing personalised care and empowering patients to play an active role in managing their health. The report also calls for a seismic shift in the way that general practice is delivered, so that practices come together as federations or networks and work with a range of other services to deliver coordinated and proactive care in the community. To support these changes, the inquiry calls on the Government, NHS England and other stakeholders to work with patients and clinicians to:move away from tick box clinical guidelines and performance indicators to an approach that recognises the need for care to be tailored to patients with multiple conditions and rewards professionals for respecting patients' preferences; increase resources for primary and community based care and create a primary care 'transformation fund' to enable changes in the way care is delivered to happen at pace and scale; introduce flexible commissioning and funding arrangements that help to break down barriers between providers (in particular GPs and hospital-based physicians) and promote collaborative working; implement NHS England's 'new deal for general practice', building on its key strengths including an easily accessible, local point of access; comprehensive services from a generalist clinician; continuity of care; and the registered patient list.

Ferrer, L. (2015). Engaging patients, carers and communities for the provision of coordinated/integrated health services: strategies and tools. Copenhague OMS Bureau régional de l'Europe**:** 56.

The paper illustrates strategies aimed at engaging patients, their families, and carers to be an active part of health disease management and treatment, guiding them to make informed choices. Furthermore, it outlines strategies aimed at empowering populations to adopt responsible health lifestyles and act as protagonists in influencing determinants of health in a human-rights based approach to health. Exemplary tools for each type of strategies are proposed to support the realization of coordinated and integrated health services delivery.

Fisher, E. S., et al. (2012). "A framework for evaluating the formation, implementation, and performance of accountable care organizations." Health Aff.(Millwood.) **31**(11): 2368-2378.

The implementation of accountable care organizations (ACOs), a new health care payment and delivery model designed to improve care and lower costs, is proceeding rapidly. We build on our experience tracking early ACOs to identify the major factors-such as contract characteristics; structure, capabilities, and activities; and local context-that would be likely to influence ACO formation, implementation, and performance. We then propose how an ACO evaluation program could be structured to guide policy makers and payers in improving the design of ACO contracts, while providing insights for providers on approaches to care transformation that are most likely to be successful in different contexts. We also propose key activities to support evaluation of ACOs in the near term, including tracking their formation, developing a set of performance measures across all ACOs and payers, aggregating those performance data, conducting qualitative and quantitative research, and coordinating different evaluation activities

Freund, T., et al. (2016). "Medical Assistant–Based Care Management for High-Risk Patients in Small Primary Care PracticesA Cluster Randomized Clinical TrialMedical Assistant–Based Care Management in Small Primary Care Practices." Annals of Internal Medicine **164**(5): 323-330.

Background: Patients with multiple chronic conditions are at high risk for potentially avoidable hospitalizations, which may be reduced by care coordination and self-management support. Medical assistants are an increasingly available resource for patient care in primary care practices.Objective: To determine whether protocol-based care management delivered by medical assistants improves care in patients at high risk for future hospitalization in primary care.Design: Two-year cluster randomized clinical trial. (Current Controlled Trials: ISRCTN56104508)Setting: 115 primary care practices in Germany.Patients: 2076 patients with type 2 diabetes, chronic obstructive pulmonary disease, or chronic heart failure and a likelihood of hospitalization in the upper quartile of the population, as predicted by an analysis of insurance data.Intervention: Protocol-based care management, including structured assessment, action planning, and monitoring delivered by medical assistants, compared with usual care.Measurements: All-cause hospitalizations at 12 months (primary outcome) and quality-of-life scores (12-Item Short Form Health Survey [SF-12] and EuroQol instrument [EQ-5D]).Results: Included patients had an average of 4 co-occurring chronic conditions. All-cause hospitalizations did not differ between groups at 12 months (risk ratio [RR], 1.01 [95% CI, 0.87 to 1.18]) and 24 months (RR, 0.98 [CI, 0.85 to 1.12]). Quality of life (differences, 1.16 [CI, 0.24 to 2.08] on SF-12 physical component and 1.68 [CI, 0.60 to 2.77] on SF-12 mental component) and general health (difference on EQ-5D, 0.03 [CI, 0.00 to 0.05]) improved significantly at 24 months. Intervention costs totaled $10 per patient per month.Limitation: Small number of primary care practices and low intensity of intervention.Conclusion: This low-intensity intervention did not reduce all-cause hospitalizations but showed positive effects on quality of life at reasonable costs in high-risk multimorbid patients.Primary Funding Source: AOK Baden-Württemberg and AOK Bundesverband.

Friedman, A., et al. (2014). "A Typology of Primary Care Workforce Innovations in the United States Since 2000." Medical Care **52**(2).

Purpose: Innovative workforce models are being developed and implemented to meet the changing demands of primary care. A literature review was conducted to construct a typology of workforce models used by primary care practices. Methods: Ovid Medline, CINAHL, and PsycInfo were used to identify published descriptions of the primary care workforce that deviated from what would be expected in the typical practice in the year 2000. Expert consultants identified additional articles that would not show up in a regular computerized search. Full texts of relevant articles were read and matrices for sorting articles were developed. Each article was reviewed and assigned to one of 18 cells in the matrices. Articles within each cell were then read again to identify patterns and develop an understanding of the full spectrum of workforce innovation within each category. Results: This synthesis led to the development of a typology of workforce innovations represented in the literature. Many workforce innovations added personnel to existing practices, whereas others sought to retrain existing personnel or even develop roles outside the traditional practice. Most of these sought to minimize the impact on the existing practice roles and functions, particularly that of physicians. The synthesis also identified recent innovations which attempted to fundamentally transform the existing practice, with transformation being defined as a change in practice membersâ€™ governing variables or values in regard to their workforce role. Conclusions: Most conceptualizations of the primary care workforce described in the literature do not reflect the level of innovation needed to meet the needs of the burgeoning numbers of patients with complex health issues, the necessity for roles and identities of physicians to change, and the call for fundamentally redesigned practices. However, we identified 5 key workforce innovation concepts that emerged from the literature: team care, population focus, additional resource support, creating workforce connections, and role change

Gandré, C., Beauguitte, L., Lolivier, A., et al. (2020). "Care coordination for severe mental health disorders: an analysis of healthcare provider patient-sharing networks and their association with quality of care in a French region." Bmc Health Services Research **20**(1): 548-548.
https://pubmed.ncbi.nlm.nih.gov/32552821
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7298939/

BACKGROUND: For patients with multiple and complex health needs, such as those suffering from mental health disorders, outcomes are determined by the combined actions of the care providers they

visit and their interactions. Care coordination is therefore essential. However, little is known on links between hospitals providing psychiatric care and community-based care providers which could serve as a basis for the creation of formal mental care networks supported by recent policies. In this context, we first aimed to identify and characterize existing types of healthcare provider patient-sharing networks for severe mental health disorders in one French region. Second, we aimed to analyse the association between their characteristics and the quality of the care they provide. METHODS: Patient flows among healthcare providers involved in treating severe mental health disorders in the Provence-Alpes-Côte-d'Azur region were extracted from the French national health data system, which contains all billing records from the social health insurance. Healthcare provider networks that have developed around public and private non-profit hospitals were identified based on shared patients with other providers (hospitals, community-based psychiatrists, general practitioners and nurses). Hierarchical clustering was conducted to create a typology of the networks. Indicators of quality of care, encompassing multiple complementary dimensions, were calculated across these networks and linked to their characteristics using multivariable methods. RESULTS: Three main types of existing healthcare provider networks were identified. They were either networks strongly organized around the main hospital providing psychiatric care; scattered networks involving numerous and diverse healthcare providers; or medically-oriented networks involving mainly physician providers. Few significant associations between the structure and composition of healthcare provider networks and indicators of quality of care were found. CONCLUSIONS: Our findings provide a basis to develop explicit structuring of mental care based on pre-existing working relationships but suggest that healthcare providers' patient-sharing patterns were not the main driver of optimal care provision in the context explored. The shift towards a stronger integration of health and social care in the mental health field might impact these results but is currently not observable in the administrative data available for research purpose which should evolve to include social care.

Gervits, M. et Anderson, M. (2014). "Community-Oriented Primary Care (COPC) in Barcelona, Spain: An Urban COPC Experience." International Journal of Health Services **44**(2): 383-398.

Community-oriented primary care (COPC) integrates comprehensive primary care with community health. Although it has had limited application in the United States, this model has been widely promoted among urban family physicians in Barcelona, Spain. This article describes the current status of COPC in four community clinics in Barcelona. Data were derived from a site visit that included direct observation and interviews with professionals involved in community health. The interviews explored how COPC has been implemented in each of the four primary care centers. We found that the degree to which COPC is practiced is quite varied and that it often coexists with other community health programs. A number of obstacles, including lack of support and funding from the government and lack of motivation and participation among health professionals, make practicing COPC in Barcelona a challenge. Despite these obstacles, COPC is flourishing in Barcelona. This experience may offer guidance for COPC implementation in the United States and other countries

Glazier, R. H., et al. (2015). Comparison of Family Health Teams to Other Ontario Primary Care Models, 2004/05 to 2011/12. Toronto ICES**:** vii-37.
http://www.ices.on.ca/~/media/Files/Atlases-Reports/2015/Comparison-of-Family-Health-Teams/ICES-083-Ontario-Primary-Care-Model-Report_mk06B_CC.ashx

This report compares outcomes of Family Health Team patients in relation to other major models of primary care in Ontario over time. Very few longitudinal analyses are available that compare Ontario's primary care models with each other, so this report serves to fill that knowledge gap.

Glazier, R. H., et al. (2015). Examining Community Health Centres According to Geography and Priority Populations Served, 2011/12 to 2012/13. An ICES chartbook. Toronto ICES**:** 31 , tabl.
http://www.ices.on.ca/~/media/Files/Atlases-Reports/2015/Comparison-of-Family-Health-Teams/ICES-083-Ontario-Primary-Care-Model-Report_mk06B_CC.ashx

The Chartbook serves the following purposes: • It provides demographic and health care utilization data for CHCs in Ontario, stratified according to the priority populations they serve. These analyses

demonstrate a large amount of diversity among CHCs. • It provides a snapshot of the care provided by CHCs in Ontario and describes the demographic and socioeconomic characteristics of clients who receive primary care from physicians and nurse practitioners (NPs) in Ontario's CHCs.

Goldsmith, J. (2011). "Accountable care organizations: the case for flexible partnerships between health plans and providers." Health Aff.(Millwood.) **30**(1): 32-40.

Under the Affordable Care Act, the new Center for Medicare and Medicaid Innovation will guide a number of experimental programs in health care payment and delivery. Among the most ambitious of the reform models is the accountable care organization (ACO), which will offer providers economic rewards if they can reduce Medicare's cost growth in their communities. However, the dismal history of provider-led attempts to manage costs suggests that this program is unlikely to accomplish its objectives. What's more, if ACOs foster more market concentration among providers, they have the potential to shift costs onto private insurers. This paper proposes a more flexible payment model for providers and private insurers that would divide health care services into three categories: long-term, low-intensity primary care; unscheduled care, including unscheduled emergency services; and major clinical interventions that usually involve hospitalization or organized outpatient care. Each category of care would be paid for differently, with each containing different elements of financial risk for the providers. Health plans would then be encouraged to provide logistical and analytic support to providers in managing health costs in these categories

Goodwin, N., et al. (2014). Providing integrated care for older people with complex needs. Lessons from seven international case studies. Londres King's Fund Institute**:** 27.

Around the world, rapidly ageing populations are resulting in increased demand for health and social care services, which presents significant challenges for national health and care systems. Many have adopted an integrated care approach to meet the needs of older people with chronic or multiple conditions. This approach often involves a single point of entry – designating a care manager to help with assessing needs, sharing information, and co-ordinating care delivery by multiple caregivers (formal and informal). This report synthesises evidence from seven case studies covering Australia, Canada, the Netherlands, New Zealand, Sweden, the United Kingdom and the United States. It considers similarities and differences of programmes that are successfully delivering integrated care, and identifies lessons for policy-makers and service providers to help them address the challenges ahead.

Gort, M., et al. (2013). "How teams use indicators for quality improvement - a multiple-case study on the use of multiple indicators in multidisciplinary breast cancer teams." Soc Sci Med **96**: 69-77.

A crucial issue in healthcare is how multidisciplinary teams can use indicators for quality improvement. Such teams have increasingly become the core component in both care delivery and in many quality improvement methods. This study aims to investigate the relationships between (1) team factors and the way multidisciplinary teams use indicators for quality improvement, and (2) both team and process factors and the intended results. An in-depth, multiple-case study was conducted in the Netherlands in 2008 involving four breast cancer teams using six structure, process and outcome indicators. The results indicated that the process of using indicators involves several stages and activities. Two teams applied a more intensive, active and interactive approach as they passed through these stages. These teams were perceived to have achieved good results through indicator use compared to the other two teams who applied a simple control approach. All teams experienced some difficulty in integrating the new formal control structure, i.e. measuring and managing performance, in their operational task, and in using their 'new' managerial task to decide as a team what and how to improve. Our findings indicate the presence of a network of relationships between team factors, the controllability and actionability of indicators, the indicator-use process, and the intended results

Graetz, I., et al. (2014). "The Association between EHRs and Care Coordination Varies by Team Cohesion." Health Services Research **49**(1pt2): 438-452.

Objective To examine whether primary care team cohesion changes the association between using an integrated outpatient-inpatient electronic health record (EHR) and clinician-rated care coordination across delivery sites. Study Design Self-administered surveys of primary care clinicians in a large integrated delivery system, collected in 2005 (N- =- 565), 2006 (N- =- 678), and 2008 (N- =- 626) during the staggered implementation of an integrated EHR (2005â€“2010), including validated questions on team cohesion. Using multivariable regression, we examined the combined effect of EHR use and team cohesion on three dimensions of care coordination across delivery sites: access to timely and complete information, treatment agreement, and responsibility agreement. Principal Findings Among clinicians working in teams with higher cohesion, EHR use was associated with significant improvements in reported access to timely and complete information (53.5 percent with EHR vs. 37.6 percent without integrated-EHR), agreement on treatment goals (64.3 percent vs. 50.6 percent), and agreement on responsibilities (63.9 percent vs. 55.2 percent, all p- <- .05). We found no statistically significant association between use of the integrated-EHR and reported care coordination in less cohesive teams. Conclusion The association between EHR use and reported care coordination varied by level of team cohesion. EHRs may not improve care coordination in less cohesive teams

Green, L. V., et al. (2013). "Primary care physician shortages could be eliminated through use of teams, nonphysicians, and electronic communication." Health Aff.(Millwood.) **32**(1): 11-19.

Most existing estimates of the shortage of primary care physicians are based on simple ratios, such as one physician for every 2,500 patients. These estimates do not consider the impact of such ratios on patients' ability to get timely access to care. They also do not quantify the impact of changing patient demographics on the demand side and alternative methods of delivering care on the supply side. We used simulation methods to provide estimates of the number of primary care physicians needed, based on a comprehensive analysis considering access, demographics, and changing practice patterns. We show that the implementation of some increasingly popular operational changes in the ways clinicians deliver care-including the use of teams or "pods," better information technology and sharing of data, and the use of nonphysicians-have the potential to offset completely the increase in demand for physician services while improving access to care, thereby averting a primary care physician shortage

Grembowski, D., et al. (2012). "Does a large-scale organizational transformation toward patient-centered access change the utilization and costs of care for patients with diabetes?" Med Care Res Rev. **69**(5): 519-539.

The authors examined whether Group Health's Access Initiative changed the utilization and costs of care among enrollees with diabetes. Using a single (one-group) interrupted time series design, repeated-measures generalized estimating equation models were used to estimate changes in utilization and costs during the Initiative rollout (2002-2003) and to compare the slopes (annual rates of change) for utilization and costs during the Pre-Initiative period (1998-2002) to the slopes during Full-Implementation (2003-2006) among 9,871 members continuously enrolled from 1997 to 2006 with type 1 or 2 diabetes. Total costs increased in Full-Implementation, but the annual change in total costs did not change. Primary care visits declined, but primary care contacts grew, largely from the Initiative's introduction of secure messaging. Specialty visits did not change; however, the Initiative may have increased emergency visits. To reduce emergency visits, future access initiatives should include proactive and comprehensive outpatient care for patients with diabetes

Halma, L. et Russel, G. M. (2016). "Interprofessional teamwork innovations for primary health care practices and practitioners: evidence from a comparison of reform in three countries." Journal of Multidisciplinary Healthcare **9**: 35-46.

Interprofessional teamwork may be considered as “a dynamic process involving two or more health care professionals with complementary backgrounds and skills, sharing common health goals and exercising concerted, physical and mental effort in assessing, planning, or evaluating patient care.” This study aimed to describe how interventions and reform policies to enhance teamwork impacted on communication, relationships, role definition, and work satisfaction in primary health care.

Ham, C. et Alderwick, H. (2015). Place-based systems of care. Londres King's Fund**:** 48 , tab., graph., fig.

The NHS in England is facing growing financial and service pressures at a time of rising demand. This paper proposes a new approach to tackling these challenges. It argues that NHS organisations need to move away from a 'fortress mentality' whereby they act to secure their own individual interests and future, and instead establish place-based 'systems of care' in which they collaborate with other NHS organisations and services to address the challenges and improve the health of the populations they serve. The paper argues that this will require the backing and support of national bodies and policy-makers, and fundamental changes to the role of commissioning in the NHS.

Grol, S., Molleman, G., van Heumen, N., et al. (2021). "General practitioners' views on the influence of long-term care reforms on integrated elderly care in the Netherlands: a qualitative interview study." Health Policy **125**(7): 930-940.

This study explores the long-term care (LTC) reform in the Netherlands and its relation to the day-to-day integrated care for frail elderly people, from the perspective of general practitioners (GPs). We assessed GP perspectives regarding which elements of the LTC reform have promoted and hindered the provision of person-centred, integrated care for elderly people in the Netherlands. We performed case studies conducted by semi-structured interviews, using the Healthy Alliances (HALL) framework as a framework for thematic analysis. GPs reported that the ideals of the LTC reform (self-reliance) were largely achievable and listed a number of positive effects, including increased healthcare professional engagement and the improved integration of the medical and social domains through the close involvement of social support teams. The reported negative implications were a lack of co-ordination in the implementation of the reforms by the municipality, insufficient funding for multidisciplinary team meetings and the reinforced fragmentation of home care. In particular, the implementation of the system reforms took place with little regard for the local context. We suggest that the implementation of national care reforms should be aligned with factors operating at the micro level and make the following recommendations: use one central location for primary health and social services, integrate regional ICT structures to improve the exchange of patient information, and reduce fragmentation in home care.

Haj-Ali, W., Moineddin, R., Hutchison, B., et al. (2020). "Physician group, physician and patient characteristics associated with joining interprofessional team-based primary care in Ontario, Canada." Health Policy **124**(7): 743-750.
https://doi.org/10.1016/j.healthpol.2020.04.013

Purpose Countries throughout the world have been experimenting with new models to deliver primary care. We investigated physician group, physician and patient characteristics associated with voluntarily joining team-based primary care in Ontario. Methods This cross-sectional study linked provincial administrative datasets to form data extractions of interest over time with the earliest in 2005 and the latest in 2013. We generated mixed, generalized chi-square and multivariate models to compare the characteristics of teams and non-teams, both with blended capitation reimbursement, and to examine characteristics associated with joining a team. Results Having more physicians per group, being a female physician, having more years under the blended capitation model, having more patients in the lowest income quintile and more patients residing in rural areas were positively associated with joining a team. Being a female physician and having more patients who are males, recent immigrants and living in rural areas were positively associated with the outcome of joining teams in the late phase. Conclusions Our study findings indicate that there are differences in physician group, physician and patient characteristics when comparing teams to non-teams. Other jurisdictions aiming to expand physician participation in interprofessional care should note those factors. Researchers looking to understand the impact of team-based care should be aware of pre-existing differences and the need to address selection bias associated with participation in team-based care.

Hald, A. N., Bech, M. et Burau, V. (2021). "Conditions for successful interprofessional collaboration in integrated care – Lessons from a primary care setting in Denmark." Health Policy.
https://doi.org/10.1016/j.healthpol.2021.01.007

Introduction Increasing demand for interprofessional collaboration in health care settings has led to a greater focus on how conditions influence the success of interprofessional collaboration, but little is known about the magnitude of the interactions between different conditions. This paper aims to examine the relationships of intervention conditions and context conditions at the professional and organisational level and examine how they influence the staff's perceived success of the interprofessional collaboration. Methods The study was conducted as a multilevel cross-sectional survey in March of 2019 in the second largest municipality in Denmark, Aarhus. The study population was all frontline-staff members and managers in nursing homes, home care units and health care units. The final sample consisted of 498 staff members and 27 managers. Confirmatory path analysis was used to analyse the data. Results The results indicate that context conditions greatly influence intervention conditions at the professional and organisational level and that the professional and organisational levels moderately co-variate. Professional level context conditions have the biggest influence on staff's perceived success, partly because its influence is confounded by intervention conditions. Conclusion Practice and research in health care settings should re-focus their attention from a broad understanding of context as unchangeable and inconsequential, to understanding context as an important condition type for interprofessional collaboration that needs to be further understood and researched.

Hämel, K. et Vössing, C. (2017). "The collaboration of general practitioners and nurses in primary care: a comparative analysis of concepts and practices in Slovenia and Spain." Primary Health Care Research & Development **178**(5): 492-506.

Aim A comparative analysis of concepts and practices of GP-nurse collaborations in primary health centres in Slovenia and Spain. Background Cross-professional collaboration is considered a key element for providing high-quality comprehensive care by combining the expertise of various professions. In many countries, nurses are also being given new and more extensive responsibilities. Implemented concepts of collaborative care need to be analysed within the context of care concepts, organisational structures, and effective collaboration. Methods Background review of primary care concepts (literature analysis, expert interviews), and evaluation of collaboration in 'best practice' health centres in certain regions of Slovenia and Spain. Qualitative content analysis of expert interviews, presentations, observations, and group discussions with professionals and health centre managers. Findings In Slovenian health centres, the collaboration between GPs and nurses has been strongly shaped by their organisation in separate care units and predominantly case-oriented functions. Conventional power structures between professions hinder effective collaboration. The introduction of a new cross-professional primary care concept has integrated advanced practice nurses into general practice. Conventional hierarchies still exist, but a shared vision of preventive care is gradually strengthening attitudes towards team-oriented care. Formal regulations or incentives for teamwork have yet to be implemented. In Spain, health centres were established along with a team-based care concept that encompasses close physician–nurse collaboration and an autonomous role for nurses in the care process. Nurses collaborate with GPs on more equal terms with conflicts centring on professional disagreements. Team development structures and financial incentives for team achievements have been implemented, encouraging teams to generate their own strategies to improve teamwork. Conclusion Clearly defined structures, shared visions of care and team development are important for implementing and maintaining a good collaboration. Central prerequisites are advanced nursing education and greater acceptance of advanced nursing practice.

Han, K. T., et al. (2015). "Effective strategy for improving health care outcomes: Multidisciplinary care in cerebral infarction patients." Health Policy **119**(8): 1039-1045.

Multidisciplinary teams provide effective patient treatment strategies. South Korea expanded its health program recently to include multidisciplinary treatment. This study characterized the relationship between multidisciplinary care and mortality within 30 days after hospitalization in cerebral infarction patients. We used the National Health Insurance claim data (n=63,895) from 120 hospitals during 2010-2013 to analyze readmission within 30 days after hospitalization for cerebral infarction. We performed chi(2) tests, analysis of variance and multilevel modeling to investigate the

associations between multidisciplinary care and death within 30 days after hospitalization for stroke. Deaths within 30 days of hospitalization due to cerebral infarction was 3.0% (n=1898/63,895). Multidisciplinary care was associated with lower risk of death within 30 days in inpatients with cerebral infarction (odds ratio: 0.84, 95% confidence interval: 0.72-0.99). Patients treated by a greater number of specialists had lower risk of death within 30 days of hospitalization. Additional analyses showed that such associations varied by the combination of specialists (i.e., neurologist and neurosurgeon). In conclusion, death rates within 30 days of hospitalization for cerebral infarction were lower in hospitals with multidisciplinary care. Our findings certainly suggest that a high number of both neurosurgeon and neurologist is not always an effective alternative in managing stroke inpatients, and emphasize the importance of an optimal combination in the same number of hospital staffing.

Harbrecht, M. G. et Latts, L. M. (2012). "Colorado's Patient-Centered Medical Home Pilot Met Numerous Obstacles, Yet Saw Results Such As Reduced Hospital Admissions." Health Aff.(Millwood.) **31**(9): 2010-2017.

The Colorado Multipayer Patient-Centered Medical Home Pilot, which ran from May 2009 through April 2012, was one of the first voluntary multipayer medical home pilot projects in the country. Six health plans, the state's high-risk pool carrier, and sixteen family or internal medicine practices with approximately 100,000 patients participated. Although a full analysis is currently under way, preliminary results show that the pilot significantly reduced emergency department visits and also reduced hospital admissions, particularly for patients with multiple chronic conditions. One payer reported a return on its investment of 250-400 percent in the pilot. However, participants also ran into numerous obstacles. Among them: Many practices were left providing extra services to a large fraction of patients whose employer-sponsored insurance plans declined to pay the enhanced fees necessary to cover the cost of the patient-centered medical home expansion. The experience demonstrates that creating patient-centered medical homes and enabling them to be successful will take strong commitments and collaborative efforts on multiple fronts

Harris, M. (2016). "The interface between primary health care and population health: challenges and opportunities for prevention." Public Health Research and Practice **26**(1): e2611601.

Primary health care has the potential to contribute to population health at the individual and population levels. The '5As' (ask, assess, advise/agree, assist and arrange) provide a framework to realise this potential, especially for disadvantaged and vulnerable populations, not only by better organising multidisciplinary preventive interventions within primary health care, but also by linking these interventions with more intensive community and population programs and services, especially for patients with low health literacy. This requires changes to information systems to prompt and record preventive care, work with practices to engage a range of disciplines, including practice nurses, and development of effective linkages with other services in the local community. This has important implications for the newly established Primary Health Networks in supporting improvement within primary care, and creating linkages and partnerships with a range of organisations involved in delivering preventive interventions in the community. However, prevention in primary health care needs to be underpinned by funding systems that support multidisciplinary and preventive care for a population, rather than simply reactive, episode-based care.

Hebert, P. L., et al. (2014). "Patient-centered medical home initiative produced modest economic results for veterans health administration, 2010-12." Health Aff.(Millwood.) **33**(6): 980-987.

In 2010 the Veterans Health Administration (VHA) began a nationwide initiative called Patient Aligned Care Teams (PACT) that reorganized care at all VHA primary care clinics in accordance with the patient-centered medical home model. We analyzed data for fiscal years 2003-12 to assess how trends in health care use and costs changed after the implementation of PACT. We found that PACT was associated with modest increases in primary care visits and with modest decreases in both hospitalizations for ambulatory care-sensitive conditions and outpatient visits with mental health specialists. We estimated that these changes avoided $596 million in costs, compared to the investment in PACT of $774 million, for a potential net loss of $178 million in the study period.

Although PACT has not generated a positive return, it is still maturing, and trends in costs and use are favorable. Adopting patient-centered care does not appear to have been a major financial risk for the VHA

Hibbard, J. H., et al. (2015). "Does Compensating Primary Care Providers to Produce Higher Quality Make Them More or Less Patient Centric?" Med Care Res Rev **72**(4): 481-495.

Both payment reform and patient engagement are key elements of health care reform. Yet the question of how incentivizing primary care providers (PCPs) on quality outcomes affects the degree to which PCPs are supportive of patient activation and patient self-management has received little attention. In this mixed-methods study, we use in-depth interviews and survey data from PCPs working in a Pioneer Accountable Care Organization that implemented a compensation model in which a large percentage of PCP salary is based on quality performance. We assess how much PCPs report focusing their efforts on supporting patient activation and self-management, and whether or not they become frustrated with patients who do not change their behaviors. The findings suggest that most PCPs do not see the value in investing their own efforts in supporting patient self-management and activation. Most PCPs saw patient behavior as a major obstacle to improving quality and many were frustrated that patient behaviors affected their compensation.

Hoff, T., et al. (2012). "The Patient-Centered Medical Home: A Review of Recent Research." Medical Care Research and Review **69**(6): 619-644.

The patient-centered medical home is an important innovation in health care delivery. There is a need to assess the scope and substance of published research on medical homes. This article reviews published evaluations of medical home care for the period 2007 to 2010. Chief findings from these evaluations as a whole include associations between the provision of medical home care and improved quality, in addition to decreased utilization associated with medical home care in high-cost areas such as emergency department use. However, fewer associations were found across evaluations between medical home care and enhanced patient or family experiences. The early medical home research appears to reflect both the wide variation in how medical homes are being designed and implemented in practice and in how researchers are choosing to evaluate patient-centered medical home design and implementation. While some aspects of medical home care show promise, continued evolution of medical home evaluative research is needed

Hofmarcher, M. M., et al. (2007). Improved health system performance through better care coordination. OCDE Health Working Papers; 30. Paris OCDE**:** 85+74 , tabl.
http://www.oecd.org/dataoecd/22/29/39791721.pdf

L'objet de ce rapport est de tenter d'apprécier si - et, le cas échéant, dans quelle mesure - une meilleure coordination des soins est susceptible d'améliorer la performance des systèmes de santé en termes de qualité et d'efficience au regard du coût. Par coordination des soins on entend les mesures de nature à aider à instaurer une prise en charge centrée sur le patient qui soit plus cohérente aussi bien à l'intérieur d'un même cadre de soins qu'entre différents cadres de soins, et dans le temps. Plus généralement, il s'agit de faire en sorte que les systèmes de santé soient plus attentifs aux besoins individuels des patients et de faire en sorte que ceux-ci reçoivent les soins appropriés à l'occasion d'épisodes aigus, ainsi que des soins destinés à stabiliser leur état de santé, dans une perspective à long terme, dans un environnement moins coûteux. Ces questions revêtent une importance toute particulière pour les malades chroniques et pour les personnes âgées qui trouveront sans doute difficile de naviguer à l'intérieur de systèmes de santé fragmentés comme c'est souvent le cas dans les pays de l'OCDE.

Hujala, A., et al. (2016). How to support integration to promote care for people with multimorbidity in Europe? Copenhague OMS Bureau régional de l'Europe**:** 20, fig.
http://www.euro.who.int/en/about-us/partners/observatory/publications/policy-briefs-and-summaries/how-to-support-integration-to-promote-care-for-people-with-multimorbidity-in-europe

The complex care needs of people with multimorbidity heighten the demand for integrated care. This policy brief identifies the most promising service arrangements for integrated care and examines how to support coordination and promote collaboration between care professionals and, strengthen professional competencies. Key messages include that: Primary care is often the most appropriate base for initiatives but must be supported by specialized care. Effective connections between health and social care are key and should be an explicit policy objective, while links between formal and informal care must also be a part of any holistic approach. Policy-makers and providers trying to move care towards integration and achieve efficient care coordination should: Promote a culture of information sharing supported by technology that allows information to be shared easily across organizational, professional and status boundaries and at a distance; Tailor models of care to fit the specific national (regional or local) health and social care context; Make sure new initiatives are treated as part of regular care and, not separate from the everyday work of professionals; Encourage management commitment at all levels with training in the necessary skills to facilitate this.

Humphries, R. (2015). "Integrated health and social care in England--Progress and prospects." Health Policy **119**(7): 856-859.

This paper reviews recent policy initiatives in England to achieve the closer integration of health and social care. This has been a policy goal of successive UK governments for over 40 years but overall progress has been patchy and limited. The coalition government has a new national framework for integrated care and variety of new policy initiatives including the 'pioneer' programme, the introduction of a new pooled budget--the 'Better Care Fund'--and a new programme of personal commissioning. Further change is likely as the NHS begins to develop new models of care delivery. There are significant tensions between these very different policy levers and styles of implementation. It is too early to assess their combined impact. Expectations that integration will achieve substantial financial savings are not supported by evidence. Local effort alone will be insufficient to overcome the fundamental differences in entitlement, funding and delivery between the NHS and the social care system. With a national election set to take place in May 2015, all political parties are committed to the integration of health and social care but clear evidence about the best means to achieve it is likely to remain as elusive as ever.

Humphries, R. et Wenzel, L. (2015). Options for integrated Commissioning: beyond Barker. Londres King's Fund**:** 64, tabl., fig.
http://www.kingsfund.org.uk/sites/files/kf/field/field_publication_file/Options-integrated-commissioning-Kings-Fund-June-2015_0.pdf

With around 400 separate local organisations each responsible for commissioning different health and social care services, the current organisational landscape is fragmented and unsustainable. Support is growing for a new settlement based on a single ring-fenced budget and a single local commissioner – as recommended by the independent Commission on the Future of Health and Social Care in England, chaired by Kate Barker. This report explores the options for implementing that recommendation. It assesses evidence of past joint commissioning attempts, studies the current policy framework and local innovations in integrated budgets and commissioning, and considers which organisation is best place to take on the role of single local commissioner. The paper draws together findings from a body of work including a survey of existing joint arrangements, current evidence and examples, a seminar with pioneers of integration developments, and a national conference on integrated commissioning.

Hutchinson, B., et al. (2011). "Primary Health Care in Canada: Systems In Motion." Milbank Quarterly (the) **89**(2): 256-288.
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1913938

During the 1980s and 1990s, innovations in the organization, funding, and delivery of primary health care in Canada were at the periphery of the system rather than at its core. In the early 2000s, a new policy environment emerged. This policy analysis examines primary health care reform efforts in Canada during the last decade, drawing on descriptive information from published and gray literature and from a series of semistructured interviews with informed observers of primary health care in

Canada. Primary health care in Canada has entered a period of potentially transformative change. Key initiatives include support for interprofessional primary health care teams, group practices and networks, patient enrollment with a primary care provider, financial incentives and blended-payment schemes, development of primary health care governance mechanisms, expansion of the primary health care provider pool, implementation of electronic medical records, and quality improvement training and support. Canada?s experience suggests that primary health care transformation can be achieved voluntarily in a pluralistic system of private health care delivery, given strong government and professional leadership working in concert.

Hutchison, B. et Glazier, R. (2013). "Ontario's Primary Care Reforms Have Transformed The Local Care Landscape, But A Plan Is Needed For Ongoing Improvement." Health Aff.(Millwood.) **32**(4): 695-703.

Primary care in Ontario, Canada, has undergone a series of reforms designed to improve access to care, patient and provider satisfaction, care quality, and health system efficiency and sustainability. We highlight key features of the reforms, which included patient enrollment with a primary care provider; funding for interprofessional primary care organizations; and physician reimbursement based on varying blends of fee-for-service, capitation, and pay-for-performance. With nearly 75 percent of Ontario's population now enrolled in these new models, total payments to primary care physicians increased by 32 percent between 2006 and 2010, and the proportion of Ontario primary care physicians who reported overall satisfaction with the practice of medicine rose from 76 percent in 2009 to 84 percent in 2012. However, primary care in Ontario also faces challenges. There is no meaningful performance measurement system that tracks the impact of these innovations, for example. A better system of risk adjustment is also needed in capitated plans so that groups have the incentive to take on high-need patients. Ongoing investment in these models is required despite fiscal constraints. We recommend a clearly articulated policy road map to continue the transformation

Imbaud, C., et al. (2016). "Le développement de centres de santé pluridisciplinaires de proximité en Allemagne : les Medizinische Versorgungszentren." Sante Publique **28**(5): 555-568.
https://www.cairn.info/revue-sante-publique-2016-5.htm

[BDSP. Notice produite par EHESP qBR0xt89. Diffusion soumise à autorisation]. Les MVZ offrent une médecine de proximité, facilitent l'accès aux soins coordonnés de premier et second recours et permettent aux hôpitaux de développer des activités de spécialité en ambulatoire. Ils proposent également une médecine centrée patient en favorisant la coordination pluridisciplinaire et pluri-professionnelle en interne et en externe entre les différents acteurs de soins. L'exemple des MVZ ouvre une réflexion sur les évolutions envisageables de l'organisation des spécialistes libéraux et de la structuration de l'offre hospitalière en France alors que les MSP se tournent principalement vers la médecine de premier recours et que les centres de santé de spécialités sont peu développés.

Ishikawa, H., et al. (2013). "The evolving concept of "patient-centeredness" in patient-physician communication research." Soc Sci Med **96**: 147-153.

Over the past few decades, the concept of "patient-centeredness" has been intensively studied in health communication research on patient-physician interaction. Despite its popularity, this concept has often been criticized for lacking a unified definition and operationalized measurement. This article reviews how health communication research on patient-physician interaction has conceptualized and operationalized patient-centered communication based on four major theoretical perspectives in sociology (i.e., functionalism, conflict theory, utilitarianism, and social constructionism), and discusses the agenda for future research in this field. Each theory addresses different aspects of the patient-physician relationship and communication from different theoretical viewpoints. Patient-centeredness is a multifaceted construct with no single theory that can sufficiently define the whole concept. Different theoretical perspectives of patient-centered communication can be selectively adopted according to the context and nature of problems in the patient-physician relationship that a particular study aims to explore. The present study may provide a useful framework: it offers an overview of the differing models of patient-centered communication and the expected roles and goals in each model; it does so toward identifying a communication model that fits the patient and the context and toward

theoretically reconstructing existing measures of patient-centered communication. Furthermore, although patient-centered communication has been defined mainly from the viewpoint of physician's behaviors aimed at achieving patient-centered care, patient competence is also required for patient-centered communication. This needs to be examined in current medical practice

Janse, B., et al. (2016). "Do integrated care structures foster processes of integration? A quasi-experimental study in frail elderly care from the professional perspective." International Journal for Quality in Health Care **28**(3): 376-383.

Objective This study explores the processes of integration that are assumed to underlie integrated care delivery.Design A quasi-experimental design with a control group was used; a new instrument was developed to measure integration from the professional perspective.Setting and participants Professionals from primary care practices and home-care organizations delivering care to the frail elderly in the Walcheren region of the Netherlands.Intervention An integrated care intervention specifically targeting frail elderly patients was implemented.Main Outcome Measures Structural, cultural, social and strategic integration and satisfaction with integration.Results The intervention significantly improved structural, cultural and social integration, agreement on goals, interests, power and resources and satisfaction with integration.Conclusions This study confirms that integrated care structures foster processes of integration among professionals.Trial registration Current Controlled Trials ISRCTN05748494.

Janus, K. et Brown, L. D. (2014). "Physician integration revisited-An exploratory study of monetary and professional incentives in three countries." Health Policy **118**(1): 14-23

Discussions - and definitions - of "integration" in health services and systems are abundant, but little is known about the inducements that organizational leaders use to win the support of physicians within integrated systems. This paper, drawing on a qualitative exploratory survey of sources within 151 integrated care organizations in three nations (the U.S., England, and Germany), explores the mix of monetary and professional inducements these organizations employ to attract and retain physicians. The organizations we sampled do not rely exclusively, and seldom preponderantly, on selective monetary incentives, but rather employ a composite portfolio of the two types. These inducements appear with remarkable consistency at the "micro" level of organizations in our three nations, notwithstanding the marked differences in their "macro" health systemic contexts. Since public policy sets the framework for the design of inducements and individual organizations are in charge of their implementation, our findings call for closer attention to the big motivational picture, and especially to the importance of professional considerations within it, if healthcare organizations hope to deploy effectively the whole spectrum of available incentives for physician-organization integration in the future

Johnston, S., et al. (2011). "Performance feedback: An exploratory study to examine the acceptability and impact for interdisciplinary primary care teams." Bmc Family Practice **12**(14): 10 , tabl. http://www.biomedcentral.com/1471-2296/11/81

This mixed methods study was designed to explore the acceptability and impact of feedback of team performance data to primary care interdisciplinary teams. Seven interdisciplinary teams were offered a one-hour, facilitated performance feedback session presenting data from a comprehensive, previously-conducted evaluation, selecting highlights such as performance on chronic disease management, access, patient satisfaction and team function. Several recurrent themes emerged from participants? surveys and two rounds of interviews within three months of the feedback session. Team performance measurement and feedback was welcomed across teams and disciplines. This feedback could build the team, the culture, and the capacity for quality improvement. However, existing performance indicators do not equally reflect the role of different disciplines within an interdisciplinary team. Finally, the effect of team performance feedback on intentions to improve performance was hindered by a poor understanding of how the team could use the data. The findings further our understanding of how performance feedback may engage interdisciplinary team members in improving the quality of primary care and the unique challenges specific to these settings. There is a

need to develop a shared sense of responsibility and agenda for quality improvement. Therefore, more efforts to develop flexible and interactive performance-reporting structures (that better reflect contributions from all team members) in which teams could specify the information and audience may assist in promoting quality improvement

Kane, E. P., et al. (2016). "Improving diabetes care and outcomes with community health workers." Family Practice **33**(5): 523-528.

Background. Type II diabetes continues to be a major health problem in USA, particularly in minority populations. The Diabetes Equity Project (DEP), a clinic-based diabetes self-management and education program led by community health workers (CHWs), was designed to reduce observed disparities in diabetes care and outcomes in medically underserved, predominantly Hispanic communities. Objective. The purpose of this study was to evaluate the impact of the DEP on patients' clinical outcomes, diabetes knowledge, self-management skills, and quality of life. Methods. The DEP was implemented in five community clinics from 2009 to 2013 and 885 patients completed at least two visits with the CHW. Student's paired t-tests were used to compare baseline clinical indicators with indicators obtained from patients' last recorded visit with the CHW and to assess differences in diabetes knowledge, perceived competence in managing diabetes, and quality of life. A mixed-effects model for repeated measures was used to examine the effect of DEP visits on blood glucose (HbA1c), controlling for patient demographics, clinic and enrolment date. Results. DEP patients experienced significant ($P < 0.0001$) improvements in HbA1c control, blood pressure, diabetes knowledge, perceived competence in managing diabetes, and quality of life. Mean HbA1c for all DEP patients decreased from 8.3% to 7.4%. Conclusion. Given the increasing prevalence of diabetes in USA and documented disparities in diabetes care and outcomes for minorities, particularly Hispanic patients, new models of care such as the DEP are needed to expand access to and improve the delivery of diabetes care and help patients achieve improved outcomes.

Kanter, G. P., Polsky, D. et Werner, R. M. (2019). "Changes In Physician Consolidation With The Spread Of Accountable Care Organizations." Health Aff (Millwood) **38**(11): 1936-1943.

While early evidence suggests that accountable care organizations (ACOs) are associated with higher quality and lower costs, there have been simultaneous concerns that ACOs may incentivize consolidation of physician groups. This is particularly concerning as previous research has shown that consolidation is associated with lower quality and higher prices. Using a difference-in-differences strategy and data from the Medicare Shared Savings Program, which began in 2012, we examined whether physician practices consolidated after ACOs entered health care markets. We observed a 4.0-percentage-point increase in large practices (those with fifty or more physicians) in counties with the greatest ACO penetration, compared to counties with zero ACO penetration, and a 2.7-percentage-point decline in the percentage of small practices (ten or fewer physicians) from 2010 to 2015. The growth of large practices was concentrated in specialty and hospital-owned practices. These findings suggest that ACOs may contribute to the concentration of physician practices.

Karam, M., Macq, J., Duchesnes, C., et al. (2021). "Interprofessional collaboration between general practitioners and primary care nurses in Belgium: a participatory action research." J Interprof Care: 1-10.

Given the sociodemographic challenges facing the Belgian primary care system, it is essential to strengthen interprofessional collaboration (IPC) between healthcare providers. Therefore, our aims for this study were to assess IPC between general practitioners (GPs) and nurses; identify target priorities for improving IPC; and facilitate the planning and implementation of the proposed improvement strategies. Based on diversity criteria, six groups of GPs and nurses were chosen for a participatory action research. Participants performed a SWOT analysis of their IPC to identify strengths and weaknesses of their collaboration practice configurations. Main factors limiting IPC were related to the type of financing system which impeded or facilitated multidisciplinary team meetings, a weak functional integration, and a lack of interprofessional education. Overall, communication and task delegation were co-identified as common priorities. Actions prioritized by each group were related to these two priorities and accounted for local, specific needs. Communication could be supported

through improved tools and dedicating time for multidisciplinary team meetings. Task delegation was more challenging and raised questions related to nurses' training, legislation, and payment systems. IPC seems to be easier to achieve when healthcare professionals belong to the same organization and consider themselves a team.

Kates, N., et al. (2012). "Framework for Advancing Improvement in Primary Care." HealthcarePapers **12**(2): 8-21.

A consistent feature of effective healthcare delivery systems is a strong and well-integrated primary care sector. This paper presents a framework that describes the key elements of high-performing primary care and the supports required to attain it. The framework was developed by the Quality Improvement and Innovation Partnership in Ontario (now part of Health Quality Ontario) to guide the process of primary care transformation. The first section of this paper presents and describes the framework, the second proposes implementation strategies and the third identifies system-level structures and policies needed to support primary care transformation. The framework has three components: (1) the major constituencies that primary care serves – patients, families and their local communities; (2) the desired outcomes of primary care (better health, better care, better value); and (3) the attributes that will enable primary care organizations to attain these outcomes. These attributes are a population focus, patient engagement, partnerships with health and community services, innovation, performance measurement and quality improvement and team-based care. Proposed transformation strategies include building system capacity and capability, ensuring access to resources, providing support from coaches and employing effective spread and sustainability strategies. Broader system-level structures and policies necessary to support and sustain a high-performing and continually improving primary care sector include clear goals; a comprehensive approach to performance measurement; systematic evaluation of innovation; funding incentives aligned with quality outcomes; a system of local primary care organizations; support for inter-professional teams; funding for research to inform primary care policy, management and practice; patient enrolment with primary care providers; and mechanisms to support coordination and integration.

Keddy, A. C., Packer, T. L., Audulv, Å., et al. (2021). "The Team Assessment of Self-Management Support (TASMS): A new approach to uncovering how teams support people with chronic conditions." Healthc Manage Forum **34**(1): 43-48.

Canadian and other healthcare systems are adopting primary care models founded on multidisciplinary, team-based care. This paper describes the development and use of a new tool, the Team Assessment of Self-Management Support (TASMS), designed to understand and improve the self-management support teams provide to patients with chronic conditions. Team Assessment of Self-Management Support captures the time providers spend supporting seven different types of self-management support (process strategies, resources strategies, disease controlling strategies, activities strategies, internal strategies, social interactions strategies, and healthy behaviours strategies), their referral patterns and perceived gaps in care. Four unique features make TASMS user-friendly: it is patient-centred, it uses provider-level data to create a team profile, it has the ability to be tailored to needs (diagnosis and visit type), and visual presentation of results are quickly and intuitively understood by both providers and planners. Currently being used by providers and planners in Nova Scotia, scaling up will allow more widespread use.

Kendir, C., Breton, E., Le Bodo, Y., et al. (2020). "Collaboration of primary care and public health at the local level: observational descriptive study of French local health contracts." Prim Health Care Res Dev **21**: e61. https://doi.org/10.1017/s1463423620000559

AIM: In this paper, we report on a study investigating the involvement of primary care providers in French local health contracts. BACKGROUND: Worldwide actions are carried out to improve collaboration between primary care and public health to strengthen primary healthcare and consequently community health. In France, the local health contract is an instrument mobilising local stakeholders from different sectors to join in their actions to improve the health of the population.

METHODS: We developed an instrument to analyse the frequency and nature of involvement of primary care providers in 428 action plans extracted from a sample of 17 contracts (one per French region). The number of primary care actions were counted, and thematic analyses were conducted to identify the nature and level of involvement of the professionals. FINDINGS: Primary care providers were involved in 20.1% (n = 86) of the action plans and were mostly described as a target of the action rather than leaders or partners. Within those action plans, 76.7% (n = 66) of these action plans aimed to improve access to care for local communities; an issue that appears as the main driver of collaboration between public health and primary care actors.

Kern, L. M., et al. (2013). "Patient experience over time in patient-centered medical homes." Am J Manag Care **19**(5): 403-410.

Objectives: Although the Patient-Centered Medical Home (PCMH) model is being implemented across the country to transform primary care, it is not yet clear whether this model actually improves patients' experiences with healthcare. Our objective was to measure patients' experiences over time in practices that transformed into PCMHs. Study Design: We conducted a prospective study, using 2 serial cross-sectional samples, in a multipayer community. Methods: We surveyed 715 patients: 346 at baseline, when practices had just completed transformation, and 369 at follow-up, which was a median of 15 months later. These patients received care from 120 primary care providers at 10 ambulatory practices (20 sites) that achieved Level III PCMH, as defined by the National Committee for Quality Assurance. We measured patient experience, as defined by the 7 domains of the Clinician and Group-Consumer Assessment of Healthcare Providers and Systems (CG-CAHPS) Adult Primary Care Questionnaire. Results: Patients' self-reported experience with access to care improved significantly over time, with 61% of respondents giving access to care the highest rating at baseline versus 69% at follow-up (P = .02). There were no significant changes over time for the other domains. Conclusions: The PCMH was associated with improvements in patients' experience with access to care but not other domains of care. This study, which took place in a multi-payer community, is one of the first to find a positive effect of the PCMH on patient experience

Kralewski, J., et al. (2015). "The relationships of physician practice characteristics to quality of care and costs." Health Serv Res **50**(3): 710-729.

BACKGROUND: Medical group practices are central to many of the proposals for health care reform, but little is known about the relationship between practice-level characteristics and the quality and cost of care. METHODS: Practice characteristics from a 2009 national survey of 211 group practices were linked to Medicare claims data for beneficiaries attributed to the practices. Multivariate regression was used to examine the relationship between practice characteristics and claims-computable measures of screening and monitoring, avoidable utilization, risk-adjusted per-beneficiary per-year (PBPY) costs, and the practice's net revenue. RESULTS: Several characteristics of group practices are predictive of screening and monitoring measures. Those measures, in turn, are predictive of lower values of avoidable utilization measures that contribute to higher PBPY costs. The effects of group practice characteristics on avoidable utilization, cost, and practice net revenue appear to work primarily through improved screening and monitoring. CONCLUSIONS: Practice characteristics influence costs indirectly through a set of statistically significant relationships among screening and monitoring measures and avoidable utilization. However, these relationships are not the only pathways connecting practice characteristics to cost and those additional pathways contain substantial "noise" adding uncertainty to the estimated direct effects. Some of the attributes thought to be important characteristics of accountable care organizations and medical homes appear to be associated with lower quality and no improvement in cost.

Kreindler, S. A., et al. (2012). "Interpretations of integration in early accountable care organizations." Milbank Q. **90**(3): 457-483.
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3479380/pdf/milq0090-0457.pdf

Context: It is widely hoped that accountable care organizations (ACOs) will improve health care quality and reduce costs by fostering integration among diverse provider groups. But how do implementers

actually envision integration, and what will integration mean in terms of managing the many social identities that ACOs bring together? Methods: Using the lens of the social identity approach, this qualitative study examined how four nascent ACOs engaged with the concept of integration. During multiday site visits, we conducted interviews (114 managers and physicians), observations, and document reviews. Findings: In no case was the ACO interpreted as a new, overarching entity uniting disparate groups; rather, each site offered a unique interpretation that flowed from its existing strategies for social-identity management: An independent practice association preserved members' cherished value of autonomy by emphasizing coordination, not "integration"; a medical group promoted integration within its employed core, but not with affiliates; a hospital, engaging community physicians who mistrusted integrated systems, reimagined integration as an equal partnership; an integrated delivery system advanced its careful journey towards intergroup consensus by presenting the ACO as a cultural, not structural, change. Conclusions: The ACO appears to be a model flexible enough to work in synchrony with whatever social strategies are most context appropriate, with the potential to promote alignment and functional integration without demanding common identification with a superordinate group. "Soft integration" may be a promising alternative to the vertically integrated model that, though widely assumed to be ideal, has remained unattainable for most organizations

Kringos, D. S., et al. (2016). "How does an integrated primary care approach for patients in deprived neighbourhoods impact utilization patterns? An explorative study." BMC Public Health **16**: 545.

BACKGROUND: To explore changes in utilization patterns for general practice (GP) and hospital care of people living in deprived neighbourhoods when primary care providers work in a more coherent and coordinated manner by applying an integrated approach. METHODS: We compared expected (based on consumption patterns of a health insurers' total population) and actual utilization patterns in a deprived Dutch intervention district in the city of Utrecht (Overvecht) with control districts 1 (Noordwest) and 2 (Kanaleneiland) over the period 2006-2011, when an integrated care approach was increasingly provided in the intervention district. Standardized insurance claims data were used to indicate use of GP care and hospital care. RESULTS: Our findings revealed that the utilization of total GP care increased more in the intervention district than in the control districts. And that the intervention district showed a more pronounced decreasing trend in total hospital use as compared to what was expected, in particular from 2008 onwards. In addition, we observed a change in type of GP care use in the intervention district in particular: the number of regular consultations, long consultations, GP home visits and evening, night and weekend consultations were increasingly higher than expected. The intervention district also showed the largest decrease between actual and expected use of ambulatory care, clinical care and 1-day hospitalizations. CONCLUSIONS: Utilization patterns for general practice and hospital care of people living in deprived districts may change when primary care professionals work in a more coherent and coordinated manner by applying a more 'comprehensive' integrated care approach. Results support the expectation that a comprehensive integrated care approach might eventually contribute to the future sustainability of healthcare systems.

Kuluski, K., et al. (2017). "Community Care for People with Complex Care Needs: Bridging the Gap between Health and Social Care." International Journal for Integrated Care **17**(4): 11 , tab., graph., fig.

A growing number of people are living with complex care needs characterized by multimorbidity, mental health challenges and social deprivation. The integration of health and social care is required, beyond traditional health care services, to address social determinants. This study investigates key care components to support complex patients and their families in the community. Conclusions point out that meeting the needs of the population who require health and social care requires time to develop authentic relationships, broadening the membership of the care team, communicating across sectors, co-locating health and social care, and addressing the barriers that prevent providers from engaging in these required practices.

Kumpunen, S., et al. (2015). Collaboration in general practice: surveys of GPs and clinical commissioning groups. Londres Nuffiled Trust**:** 31, tab., graph.

Primary care is facing unprecedented demand to find new ways to deliver care – with an increased emphasis on managing population out-of-hospital through a focus on improved prevention, access and quality of care. All the while, spending on general practice has fallen or flat-lined for the past five years. Collaborative working – including the formation of federations and networks within general practice – is at the heart of overcoming these challenges. ". See also the PPT presentation on the study.

Kumpunen, S., et al. (2017). Primary care home: evaluating a new model of primary care. Londres Nuffield Trust**:** 96 , tab., graph., fig.
https://www.nuffieldtrust.org.uk/files/2017-08/pch-report-final.pdf?utm_source=The%20King%27s%20Fund%20newsletters&utm_medium=email&utm_campaign=8650369_NEWSL_ICB%202017-09-13&dm_i=21A8,55EO1,M5VJME,JS8SU,1

Established in 2016, the primary care home (PCH) model seeks to link staff from general practice, community-based services, hospitals, mental health services, social care and voluntary organisations to deliver joined-up care. This formative evaluation was based on reviews in 2016/17 of 13 rapid test sites' plans and priorities for building the PCH model, and an in-depth look at the progress and early successes in three case study areas. The report looks at how sites can make early progress with implementing and evaluating their local PCH models, examines what might stand in the way of change and offers a number of broader lessons for the NHS as a whole.

Kuipers, S. J., Nieboer, A. P. et Cramm, J. M. (2020). "Views of patients with multi-morbidity on what is important for patient-centered care in the primary care setting." BMC Fam Pract **21**(1): 71.

BACKGROUND: Patient-centered care (PCC) has been proposed as the way forward in improving primary care for patients with multi-morbidity. However, it is not clear what PCC exactly looks like in practice for patients with multi-morbidity. A better understanding of multi-morbid patients' views on what PCC should look like and which elements are most important may help to improve care delivery for this vulnerable population. The present study thus aimed to identify views of patients with multi-morbidity on the relative importance of PCC aspects in a Dutch primary care setting. METHODS: Interviews were conducted with 16 patients with multi-morbidity using Q-methodology, which combines quantitative and qualitative analyses. The participants ranked 28 statements about the eight dimensions of PCC (patients' preferences, information and education, access to care, emotional support, family and friends, continuity and transition, physical comfort, and coordination of care) by relative importance. By-person factor analysis using centroid factor extraction and varimax rotation were used to reveal factors that represent viewpoints. Qualitative interview data were used to interpret the viewpoints. RESULTS: The analyses revealed three factors representing three distinct viewpoints of patients with multi-morbidity on what is important for patient-centered care in the primary care setting. Patients with viewpoint 1 are prepared proactive patients who seem to be well-off and want to be in charge of their own care. To do so, they seek medical information and prefer to be supported by a strongly coordinated multidisciplinary team of healthcare professionals. Patients with viewpoint 2 are everyday patients who visit GPs and require well-coordinated, respectful, and supportive care. Patients with viewpoint 3 are vulnerable patients who are less resourceful in terms of communication skills and finances, and thus require accessible care and professionals taking the lead while treating them with dignity and respect. CONCLUSION: The findings of this study suggest that not all patients with multi-morbidity require the same type of care delivery, and that not all aspects of PCC delivery are equally important to all patients.

Lackie, K. et Tomblin Murphy, G. (2020). "The impact of interprofessional collaboration on productivity: Important considerations in health human resources planning." Journal of Interprofessional Education & Practice **21**: 100375.
https://www.sciencedirect.com/science/article/pii/S2405452620300550

Qualitative findings are presented from a mixed-methodological study exploring how healthcare providers (HCPs) define interprofessional collaboration (IPC), whether they practice collaboratively,

and perceptions of personal and team productivity. Interviews occurred before and after self-assessment for IPC competencies. IPC definition themes include understanding/valuing/using team expertise, communication, availability, and belongingness. IPC competency relevance, deeper understanding/heightened awareness, and differences between knowing and doing emerged as IPC definition themes after self-assessment. Contributing to/achieving patient outcomes were hallmarks of personal productivity, alongside completing 'to-do' lists and managing priorities. Personal productivity themes after self-assessment included status quo work environments not supporting collaboration and productivity defined differently. Team productivity was thematically depicted as the right person with the right skills required for IPC and IPC leads to productivity. After self-assessments, the importance of role modeling and considering leaving if unable to collaborate arose as team productivity themes. Similar barriers to productivity and IPC emerged: hierarchy, turf protection, inconsistent funding/remuneration, and scope of practice restrictions.

Lawless, A. (2014). "Developing a good practice model to evaluate the effectiveness of comprehensive primary health care in local communities." BMC Fam Pract **15**.
http://www.biomedcentral.com/content/pdf/1471-2296-15-99.pdf

Comprehensive primary health care (CPHC) holds promise as an effective model of health system organisation able to improve population health and increase health equity; yet there is little literature that describes and evaluates CPHC as a whole. This paper highlights the development of a model of CPHC applicable to the Australian context. The research was undertaken in partnership with 6 Australian PHC services. The resultant Southgate model of CPHC in Australia articulates the theory of change of how and why CPHC service components and activities, based on the theory, evidence and values which underpin a CPHC approach, are likely to lead to individual and population health outcomes and increased health equity. The model captures the importance of context, the mechanisms of CPHC, and the space for action services have to work with. The development of this theory-based program logic model provides a framework for evaluation that allows the tracking of progress towards desired outcomes and exploration of the particular aspects of context and mechanisms that produce outcomes.

Lewis, R. Q., et al. (2010). Where next for integrated care organisations in the English NHS? Londres Nuffield Trust**:** 35, fig., tabl.
http://www.nuffieldtrust.org.uk/publications/detail.aspx?id=145&PRid=693

Since the 1950s, the NHS has been looking at ways of improving care coordination. Lord Darzi's NHS Next Stage Review introduced a new concept, that of the integrated care organisation (ICO). Since then, the Government has begun piloting schemes that offer different models of integrated care. This report, published jointly by The Nuffield Trust and The King?s Fund, examines some of these new models. It focuses in particular on organisations that combine commissioner and provider roles. These, the authors suggest, offer the most promise for aligning incentives to produce efficient care across primary, community and acute services. This report forms part of work by both The Nuffield Trust and The King's Fund examining new forms of structuring and delivering care over the coming decade.

Leung, L. B., Benitez, C. T., Dorsey, C., et al. (2021). "Integrating Mental Health in Safety-net Primary Care: A Five-year Observational Study on Visits in a County Health System." Medical Care **59**(11).
https://journals.lww.com/lww-medicalcare/Fulltext/2021/11000/Integrating_Mental_Health_in_Safety_net_Primary.5.aspx

Background: Beginning in 2010, Los Angeles County Departments of Health Services and Mental Health collaborated to increase access to effective mental health care. The Mental Health Integration Program (MHIP) embedded behavioral health specialists in primary care clinics to deliver brief, problem-focused treatments, and psychiatric consultation support for primary care-prescribed psychotropic medications. Objective: The aim was to compare primary care visits associated with psychiatric diagnoses before and after MHIP implementation. Methods: This retrospective cohort study (2009–2014) examined 62,945 patients from 8 safety-net clinics that implemented MHIP in a

staggered manner in Los Angeles. Patients' primary care visits (n=695,354) were either associated or not with a previously identified or "new" (defined as having no diagnosis within the prior year) psychiatric diagnosis. Multilevel regression models used MHIP implementation to predict odds of visits being associated with psychiatric diagnoses, controlling for time, clinic, and patient characteristics. Results: 9.4% of visits were associated with psychiatric diagnoses (6.4% depression, 3.1% anxiety, <1% alcohol, and substance use disorders). Odds of visits being associated with psychiatric diagnoses were 9% higher [95% confidence interval (CI)=1.05–1.13; P<0.0001], and 10% higher for diagnoses that were new (CI=1.04–1.16; P=0.002), after MHIP implementation than before. This appeared to be fueled by increased visits for depression post-MHIP (odds ratio=1.11; CI=1.06–1.15; P<0.0001). Conclusions: MHIP implementation was associated with more psychiatric diagnoses coded in safety-net primary care visits. Scaling up this effort will require greater attention to the notable differences across patient populations and languages, as well as the markedly low coding of alcohol and substance use services in primary care.

Lim, L., Zimring, C. M., DuBose, J. R., et al. (2021). "Designing for Effective and Safe Multidisciplinary Primary Care Teamwork: Using the Time of COVID-19 as a Case Study." Int J Environ Res Public Health **18**(16).

Effective medical teamwork can improve the effectiveness and experience of care for staff and patients, including safety. Healthcare organizations, and especially primary care clinics, have sought to improve medical teamwork through improved layout and design, moving staff into shared multidisciplinary team rooms. While co-locating staff has been shown to increase communication, successful designs balance four teamwork needs: face-to-face communications; situational awareness; heads-down work; perception of teamness. However, precautions for COVID-19 make it more difficult to conduct face-to-face communications. In this paper we describe a model for understanding how layout affects these four teamwork needs and describe how the perception of teamwork by staff changed after COVID-19 precautions were put in place. Observations, interviews and two standard surveys were conducted in two primary care clinics before COVID-19 and again in 2021 after a year of precautions. In general, staff felt more isolated and found it more difficult to conduct brief consults, though these perceptions varied by role. RNs, who spent more time on the phone, found it convenient to work part time-from home, while medical assistants found it more difficult to find providers in the distanced clinics. These cases suggest some important considerations for future clinic designs, including greater physical transparency that also allow for physical separation and more spaces for informal communication that are distanced from workstations.

Looman, W. M., et al. (2016). "Cost-effectiveness of the 'Walcheren Integrated Care Model' intervention for community-dwelling frail elderly." Family Practice **33**(2): 154-160.

Background. An important aim of integrated care for frail elderly is to generate more cost-effective health care. However, empirical research on the cost-effectiveness of integrated care for community-dwelling frail elderly is limited.Objective. This study reports on the cost-effectiveness of the Walcheren Integrated Care Model (WICM) after 12 months from a societal perspective.Methods. The design of this study was quasi-experimental. In total, 184 frail elderly patients from 3 GP practices that implemented the WICM were compared with 193 frail elderly patients of 5 GP practices that provided care as usual. Effects were determined by health-related quality of life (EQ-5D questionnaire). Costs were assessed based on questionnaires, GP files, time registrations and reports from multidisciplinary meetings. Average costs and effects were compared using t-tests. The incremental cost-effectiveness ratio (ICER) was calculated, and bootstrap methods were used to determine its reliability.Results. Neither the WICM nor care as usual resulted in a change in health-related quality of life. The average total costs of the WICM were higher than care as usual (17089 euros versus 15189 euros). The incremental effects were 0.00, whereas the incremental costs were 1970 euros, indicating an ICER of 412450 euros.Conclusions. The WICM is not cost-effective, and the costs per quality-adjusted life year are high. The costs of the integrated care intervention do not outweigh the limited effects on health-related quality of life after 12 months. More analyses of the cost-effectiveness of integrated care for community-dwelling frail elderly are recommended as well as consideration of the specific costs and effects.

Lewis, V. A., Tierney, K. I., Fraze, T., et al. (2019). "Care Transformation Strategies and Approaches of Accountable Care Organizations." Med Care Res Rev **76**(3): 291-314.

Although accountable care organizations (ACOs) proliferate, little is known about the activities and strategies ACOs are pursuing to meet goals of reducing costs and improving quality. We use semistructured interviews with executives at 16 ACOs to understand ACO approaches. We identified two overarching ACO approaches to changing clinical care: a practice-based transformation approach, working to overhaul care processes and teams from the inside out; and an overlay approach, where ACO activities were centralized and delivered external to physician practices. We additionally identified four methods ACOs were using to achieve their aims: using patient support roles; targeted clinics, events, programs, and interventions; clinical process standardization; and tracking and identifying patients on which to focus resources. We expect that ACOs using either of the major approaches can succeed under current ACO programs, but that as value-based payment programs mature, ACOs will need to undertake practice-based approaches to be successful in the long term.

Martirosov, A. L., Smith, Z. R., Hencken, L., et al. (2020). "Improving transitions of care for critically ill adult patients on pulmonary arterial hypertension medications." Am J Health Syst Pharm **77**(12): 958-965.

PURPOSE: The purpose of this report is to describe the activities of critical care and ambulatory care pharmacists in a multidisciplinary transitions-of-care (TOC) service for critically ill patients with pulmonary arterial hypertension (PAH) receiving PAH medications. SUMMARY: Initiation of medications for treatment of PAH involves complex medication access steps. In the ambulatory care setting, multidisciplinary teams often have a process for completing these steps to ensure access to PAH medications. Patients with PAH are frequently admitted to an intensive care unit (ICU), and their home PAH medications are continued and/or new medications are initiated in the ICU setting. Inpatient multidisciplinary teams are often unfamiliar with the medication access steps unique to PAH medications. The coordination and completion of medication access steps in the inpatient setting is critical to ensure access to medications at discharge and prevent delays in care. A PAH-specific TOC bundle for patients prescribed a PAH medication who are admitted to the ICU was developed by a multidisciplinary team at an academic teaching hospital. The service involves a critical care pharmacist completing a PAH medication history, assessing for PAH medication access barriers, and referring patients to an ambulatory care pharmacist for postdischarge telephone follow-up. In collaboration with the PAH multidisciplinary team, a standardized workflow to be initiated by the critical care pharmacist was developed to streamline completion of PAH medication access steps. Within 3 days of hospital discharge, the ambulatory care pharmacist calls referred patients to ensure access to PAH medications, provide disease state and medication education, and request that the patient schedule a follow-up office visit to take place within 14 days of discharge. CONCLUSION: Collaboration by a PAH multidisciplinary team, critical care pharmacist, and ambulatory care pharmacist can improve TOC related to PAH medication access for patients with PAH. The PAH TOC bundle serves as a model that may be transferable to other health centers.

Mattessich, P. W. et Rausch, E. J. (2014). "Cross-sector collaboration to improve community health: a view of the current landscape." Health Aff.(Millwood.) **33**(11): 1968-1974.

Collaboration between the health and community development sectors has gained increased attention as a means of accelerating progress to improve community health. This article offers an empirical perspective on the general status of such collaboration based on results from a national survey of practitioners in the community development and health fields. Study results show that cross-sector efforts to improve health are widespread across the United States. Community development organizations, including community development financial institutions, support a wide spectrum of activities addressing both social determinants of health and the immediate needs of communities. However, the means of assessing the impacts of these joint community health improvement initiatives appear limited. We highlight opportunities for building on present momentum and for measuring results in a way that expands the evidence base on effective collaborative efforts between the two sectors

McCarthy, D., et al. (2015). "Models of Care for High-Need, High-Cost Patients: An Evidence Synthesis." Issue Brief: 19 , tabl., fig.
http://www.commonwealthfund.org/~/media/files/publications/issue-brief/2015/oct/1843_mccarthy_models_care_high_need_high_cost_patients_ib.pdf

This brief analyzes experts' reviews of evidence about care models designed to improve outcomes and reduce costs for patients with complex needs. It finds that successful models have several common attributes: targeting patients likely to benefit from the intervention; comprehensively assessing patients' risks and needs; relying on evidence-based care planning and patient monitoring; promoting patient and family engagement in self-care; coordinating care and communication among patients and providers; facilitating transitions from the hospital and referrals to community resources; and providing appropriate care in accordance with patients' preferences. Overall, the evidence of impact is modest and few of these models have been widely adopted in practice because of barriers, such as a lack of supportive financial incentives under fee-for-service reimbursement arrangements. Overcoming these challenges will be essential to achieving a higher-performing health care system for this patient population.

McCarthy, M. (2016). "Sustainable general practice: looking across Europe." Br J Gen Pract **66**(642): 36.

An overview of findings from an inquiry by the European Union of General Practitioners (UEMO) on GP workload including responses from 25 Member States. "A profession under stress is a profession at risk. Maybe the answer is simply to reduce patient access to EU levels; to restrict doctor–patient contacts — both telephone and face-to-face consultations — to fewer than 25 a day. It may be possible to divert some demands to pharmacists, nurses, or other health professionals. It may also be possible to educate the public to self-care, at least for minor illnesses. GPs are expensive and time-consuming to train. It would be sensible to use their skills carefully."

McHugh, M., et al. (2016). "Patient-Centered Medical Home Adoption: Results From Aligning Forces For Quality." Health Aff (Millwood) **35**(1): 141-149.

To improve health care quality within communities, increasing numbers of multistakeholder alliances-groups of payers, purchasers, providers, and consumers-have been created. We used data from two rounds (conducted in July 2007-March 2009 and January 2012-November 2013) of a large nationally representative survey of small and medium-size physician practices. We examined whether the adoption of patient-centered medical home processes spread more rapidly in fourteen Robert Wood Johnson Foundation Aligning Forces for Quality communities, where multistakeholder health care alliances promoted their use, than in other communities. We found no difference in the overall growth of adoption of the processes between the two types of communities. However, improvement on a care coordination subindex was 7.17 percentage points higher in Aligning Forces for Quality communities than in others. Despite the enthusiasm for quality improvement led by multistakeholder alliances, such alliances may not be a panacea for spreading patient-centered medical home processes across a community.

McInnes, S., et al. (2016). "The influence of funding models on collaboration in Australian general practice." Australian Journal of Primary Health **on line**: 6.

Despite more nurses working in Australian general practice, there has been limited investigation exploring ways that general practitioners and registered nurses work together to deliver clinical care. However, it has been postulated that the small business structure, common in Australian general practices, might influence collaboration between these two groups of health professionals. This paper presents one theme from a larger qualitative study. Eight general practitioners and fourteen registered nurses working in general practice participated in semistructured face-to-face interviews between February and May 2015. Naturalistic inquiry was adopted to elicit and explore the narrative accounts of participants about working together in general practice. An inductive process of thematic analysis was used to identify, analyse and report patterns and themes. Ancillary costs associated with the employment of registered nurses in general practice and the time registered nurses took to

undertake procedural services were a concern for general practitioners. Registered nurses did not always work to their full scope of practice and many felt that their expertise was not appropriately remunerated. Findings suggested that fee for service-funding models can negatively influence collaboration between general practitioners and registered nurses working in general practice.

McLeod, L. et Johnson, J. A. (2015). Changing the Schedule of Medical Benefits and the Effect on Primary Care Physician Billing: Quasi-Experimental Evidence from Alberta. C.H.E.S.G. Working Paper Series. Toronto Canadian Centre For Health Economics**:** 23 , tab., graph., fig.
http://www.canadiancentreforhealtheconomics.ca/wp-content/uploads/2015/07/McLeod-et-al.pdf

This study exploits a quasi-experiment in the province of Alberta, Canada, to identify how changes in the schedule of medical benefits affected the provision of primary care services to patients with multiple co-morbidities. Specifically, Alberta introduced a new fee code to compensate physicians for completing a comprehensive annual care plan (CACP) for qualifying patients. During the period of study, primary care physicians could practice in two settings: (i) solo practice; or (ii) primary care networks (i.e., team based care). This paper asks how the policy change affected physician-billing patterns and whether delivery structure affected physician-billing. Data come from Alberta's administrative physician claims data, covering the full population of Alberta and all services provided by primary care physicians, for one year before and two years after the policy change. This study employs a difference-in-differences methodology and implement a set of robustness checks to control for confounding from other contemporaneous changes that may have occurred in Alberta as well as unobserved physician heterogeneity. The results suggest the new fee code became the sixth most billed code in its first year (totaling $17.9 million), but was billed by only a small proportion of physicians (roughly 2% of physicians accounted for 20% of total billings). The fee code was disproportionately billed by physicians in team-based care (PCNs), and increased the billing of other complementary fee codes by 5%-10% (or roughly $80 million). The results suggest the unintended consequences of a well-intentioned policy can be costly.

McMillan, S., et al. (2013). "Patient-Centered Approaches to Health Care." Medical Care Research and Review **70**(6): 567-596.

There is growing interest in patient-centered care, but there is little guidance about the interventions required for its delivery and whether it leads to better health outcomes. This systematic review evaluates the efficacy of patient-centered care interventions for people with chronic conditions. Thirty randomized controlled trials were identified from health-related databases. The findings indicated that most interventions were based on the notion of empowering care and included attempts to educate consumers or prompt them about how to manage a health consultation. Other common interventions focused on training providers in delivering empowering care. Although it was difficult to draw firm conclusions because of the moderate to high risk of bias of the research designs, this review has shown some promising findings from implementing a patient-centered care approach. There appeared to be benefits associated with this model of care in terms of patient satisfaction and perceived quality of care

McWilliams, J. M., et al. (2015). "Performance Differences in Year 1 of Pioneer Accountable Care Organizations." N Engl J Med.

Background In 2012, a total of 32 organizations entered the Pioneer accountable care organization (ACO) program, in which providers can share savings with Medicare if spending falls below a financial benchmark. Performance differences associated with characteristics of Pioneer ACOs have not been well described. Methods In a difference-in-differences analysis of Medicare fee-for-service claims, we compared Medicare spending for beneficiaries attributed to Pioneer ACOs (ACO group) with other beneficiaries (control group) before (2009 through 2011) and after (2012) the start of Pioneer ACO contracts, with adjustment for geographic area and beneficiaries' sociodemographic and clinical characteristics. We estimated differential changes in spending for several subgroups of ACOs: those with and those without clear financial integration between hospitals and physician groups, those with higher and those with lower baseline spending, and the 13 ACOs that withdrew from the Pioneer

program after 2012 and the 19 that did not. Results Adjusted Medicare spending and spending trends were similar in the ACO group and the control group during the precontract period. In 2012, the total adjusted per-beneficiary spending differentially changed in the ACO group as compared with the control group (-$29.2 per quarter, P=0.007), consistent with a 1.2% savings. Savings were significantly greater for ACOs with baseline spending above the local average, as compared with those with baseline spending below the local average (P=0.05 for interaction), and for those serving high-spending areas, as compared with those serving low-spending areas (P=0.04). Savings were similar in ACOs with financial integration between hospitals and physician groups and those without, as well as in ACOs that withdrew from the program and those that did not. Conclusions Year 1 of the Pioneer ACO program was associated with modest reductions in Medicare spending. Savings were greater for ACOs with higher baseline spending than for those with lower baseline spending and were unrelated to withdrawal from the program. (Funded by the National Institute on Aging and others.).

Mead, H., et al. (2014). "Underserved patients' perspectives on patient-centered primary care: does the patient-centered medical home model meet their needs?" Med Care Res Rev **71**(1): 61-84.

The patient-centered medical home (PCMH) has gained significant interest as a delivery system model that can improve health care quality while reducing costs. This study uses focus groups to investigate underserved, chronically ill patients' preferences for care and develops a patient-centered framework of priorities. Seven major priorities were identified: (a) communication and partnership, (b) affordable care, (c) coordinated care, (d) personal responsibility, (e) accessible care, (f) education and support resources, and (g) the essential role of nonphysician providers in supporting their care. Using the framework, we analyzed the PCMH joint principals as developed by U.S. medical societies to identify where the PCMH model could be improved to better meet the needs of these patients. Four of the seven patient priorities were identified as not present in or supported by current PCMH joint principles. The study discusses how the PCMH model can better address the needs of low-income, disadvantaged patients

Moloughney, B. W. (2013). "Public Health Readiness and Role in Transformation to a Community-Based Primary Healthcare System." HealthcarePapers **13**(3): 64-70.

Millar et al. provide a high-level vision for transforming primary care into a community-based primary healthcare system, arguing that public health involvement is critical to the success of this transformation. The authors discuss a number of approaches to mitigate challenges to public health's readiness to participate. In this commentary, the author addresses selected points encouraging the avoidance of high-level conceptual language, a focus on specific value-added linkages and addressing the complex range of critical success factors needed to effect this transformation.

Mossialos, E. é., et al. (2017). International Profiles of Health Care Systems. New York The Commonwealth Fund**:** 181 , tabl., fig.

This publication presents overviews of the health care systems of Australia, Canada, China, Denmark, England, France, Germany, India, Israel, Italy, Japan, the Netherlands, New Zealand, Norway, Singapore, Sweden, Switzerland, and the United States. Each overview covers health insurance, public and private financing, health system organization and governance, health care quality and coordination, disparities, efficiency and integration, use of information technology and evidence-based practice, cost containment, and recent reforms and innovations. In addition, summary tables provide data on a number of key health system characteristics and performance indicators, including overall health care spending, hospital spending and utilization, health care access, patient safety, care coordination, chronic care management, disease prevention, capacity for quality improvement, and public views.

Moureaux, C., et al. (2015). "Impact of the medical home model on the quality of primary care: the belgian experience." Med Care **53**(5): 396-400.

BACKGROUND: The Belgium medical home (MH) model, which has been garnering support of late, resembles its US counterpart in that it aims at improving the quality of health care while containing costs. OBJECTIVES: To compare the quality of care offered by MHs with that offered by traditional individual practices (IPs) in Belgium in terms of the extent of their adherence to clinical practice guidelines in antibiotherapy, cervical-cancer screening, influenza vaccination, and the management of diabetes. RESEARCH DESIGN: This is a retrospective study using public insurance claims data. Data consisted of a random sample of patients using the services of MHs and IPs who were previously matched according to sex, age category, location, disability, and socioeconomic status. We applied the McNemar test, the t test, or the Wilcoxon test, depending on the type of variable being compared. SUBJECTS: The final sample comprised 43,678 patients in the year 2004. MEASURES: On the basis of a review of the literature, we selected 4 themes, corresponding to 25 indicators: antibiotherapy, cervical-cancer screening, influenza vaccination, and the management of diabetes. RESULTS: MHs were more likely than IPs to adhere to evidence-based clinical practice guidelines. They prescribed less and more appropriate antibiotherapy, provided wider influenza-vaccination coverage for target groups, and provided a better follow-up for diabetics than did IPs. In regard to cervical-cancer screening, no significant differences were found. CONCLUSIONS: MHs, as they combine a greater adherence to guidelines and savings in secondary care, are a cost-effective alternative to traditional IPs and therefore should be encouraged.

Muhlestein, D. B. et Smith, N. J. (2016). "Physician Consolidation: Rapid Movement From Small To Large Group Practices, 2013–15." Health Affairs **35**(9): 1638-1642.

In the past few decades there has been a trend of physicians moving from smaller to larger group practices. We found that this trend continued in the period 2013–15. Primary care physicians have made this change at a much faster pace than specialists have.

Mullins, C., et al. (2008). Leadership and teambuilding in primary care, Oxford : Radcliffe Publishing

Health care professionals increasingly work in teams where leadership can make all the difference. This concise, jargon-free guide examines and explains the skills and attitudes needed to develop leadership abilities, as well as practical and clear direction for applying leadership to teambuilding. Case studies bring situations to life and make it easier to identify with leadership and teambuilding issues. Included is information on the following : leadership styles and techniques ; fundamentals of teams ; a five-step process to become a better leader ; effective presentation and communication skills.

National Committee for QualityAssurance (2008). Standards and Guidelines for Physician Practice Connections? Patient-Centered Medical Home (PPC-PCMH). Washington DC National Committee for Quality Assurance**:** 68 +annexes, tabl.
http://www.ncqa.org/tabid/631/Default.aspx

NCQA's Physician Practice Connections- Patient-Centered Medical Home (PPC-PCMH) program assesses whether physician practices are functioning as medical homes. Building on the joint principles developed by the primary care specialty societies, the PPC-PCMH standards emphasize the use of systematic, patient-centered, coordinated care management processes. The Patient Centered Medical Home is a health care setting that facilitates partnerships between individual patients, and their personal physicians, and when appropriate, the patient?s family. Care is facilitated by registries, information technology, health information exchange and other means to assure that patients get the indicated care when and where they need and want it in a culturally and linguistically appropriate manner. There are nine PPC standards, including 10 must pass elements, which can result in one of three levels of recognition.

NAPC (2017). Does the primary care home make a difference? understanding its impact. Lonres : NAPC? 44.

The primary care home (PCH) model was developed by the National Association of Primary Care (NAPC) to help improve the delivery of care, health and wellbeing and the sustainability of NHS

finances. Fifteen sites are currently trialling the PCH model and this report summarises progress so far in three of the rapid test sites. The evaluation finds that PCH could support the delivery of STPs and highlights improved staff retention, productivity and satisfaction.

Naylor, C., et al. (2016). Bringing together physical and mental health. A new frontier for integrated care. Londres King's Fund Institute**:** 119.
http://www.kingsfund.org.uk/publications/physical-and-mental-health

People's physical and mental health needs have traditionally been treated as two separate issues. Services are typically provided by different organisations and staff groups, in different locations, with different financial and contracting arrangements, and different forms of performance monitoring and system oversight. Efforts to promote integrated care have so far focused on bridging the gaps between health and social care, or between primary and secondary care. But the NHS five year forward view has emphasised the importance of a third dimension for integration. This report presents a compelling case for that third dimension. Based on focus groups and interviews with service users, clinicians and managers, it explores what a 'whole- person' approach towards physical and mental health would look like from a service user's perspective. Reviewing existing service innovations, it explores 10 areas where most progress could be made. The report highlights four major challenges: high rates of mental health conditions among people with long-term physical health problems; poor management of medically unexplained symptoms; reduced life expectancy among people with the most severe forms of mental illness, largely attributable to poor physical health; limited support for the wider psychological aspects of physical health and illness. Together, these issues increase the cost of providing services, perpetuate inequalities in health outcomes and mean that care is less effective than it could be. There is much that commissioners, providers and health professionals can do within existing structures to ensure that integrated care for physical and mental health becomes a reality. The report argues that parity of esteem should mean more than mental health care being 'as good as' physical health care – it should also involve delivering services 'as part of' an integrated approach to health (résumé d'auteur).

Neuhausen, K., et al. (2012). "Integrating community health centers into organized delivery systems can improve access to subspecialty care." Health Aff.(Millwood.) **31**(8): 1708-1716.

The Affordable Care Act is funding the expansion of community health centers to increase access to primary care, but this approach will not ensure effective access to subspecialty services. To address this issue, we interviewed directors of twenty community health centers. Our analysis of their responses led us to identify six unique models of how community health centers access subspecialty care, which we called Tin Cup, Hospital Partnership, Buy Your Own Subspecialists, Telehealth, Teaching Community, and Integrated System. We determined that the Integrated System model appears to provide the most comprehensive and cohesive access to subspecialty care. Because Medicaid accountable care organizations encourage integrated delivery of care, they offer a promising policy solution to improve the integration of community health centers into "medical neighborhoods."

Nielsen, M., et al. (2016). The Patient-Centered Medical Home's Impact on Cost and Quality. Annual Review of Evidence 2014-2015. Washington DC Patient-Centered Primary Care Collaborative**:** 40.
https://www.pcpcc.org/resource/patient-centered-medical-homes-impact-cost-and-quality-2014-2015

Le Patient-Centred Primary Care Collaborative (PCPCC) est une initiative américaine de prestation des soins de santé primaires qui met l'accent sur une approche « maison médicale » pour améliorer les soins centrés sur le patient tout en réduisant les coûts des soins. Cette revue des évidences présente un résumé des coûts et de l'utilisation des « maisons médicales » estimés dans des études, des rapports de l'industrie et des évaluations du gouvernement.

Nolte, E., et al. (2016). "Implementing integrated care: A synthesis of experiences in three European countries." International Journal of Care Coordination.

Many countries are experimenting with new models to better integrate care; yet, innovative care models are often implemented as time-limited, localised projects with limited impact on service delivery more broadly. This paper seeks to understand the processes behind successful projects that achieved some form of 'routinisation' and informed system-wide integrated care strategies. It draws on detailed case studies of three integrated care experiments: the 'Integrated effort for people living with chronic diseases' project in Denmark; the Gesundes Kinzigtal network in Germany; and Zio, a care group in the Maastricht region in the Netherlands. It explores how they were developed, implemented and sustained, and how they impacted the wider system context. All three models implicitly or explicitly adopted processes shown to be conducive to the dissemination of innovations, including dedicated time and resources, support and advocacy, leadership and management, stakeholder involvement, communication and networks, adaptation to local context and feedback. Each showed robust evidence of improvements on a number of service and patient outcomes and these findings were central to their wider impacts, shaping country-wide integrated care polices. However, the wider dissemination of projects occurred in an incremental and somewhat haphazard way. To further redesign health and social care a more formal strategy, alongside resources, may thus be needed to provide funders and providers with genuine incentives to invest in new business models of care. There remains a crucial need for better understanding of specific local conditions that influence implementation and sustainability to enable translation to other contexts and settings.

Nolte, E. et Pitchforth, E. (2014). What is the evidence on the economic impacts of integrated care? Copenhague OMS Bureau régional de l'Europe**:** ix+44 , tabl., fig.
http://www.euro.who.int/__data/assets/pdf_file/0019/251434/What-is-the-evidence-on-the-economic-impacts-of-integrated-care.pdf

This new policy summary reviews the existing evidence on the economic impact of integrated care approaches. Whereas it is generally accepted that integrated care models have a positive effect on the quality of care, health outcomes and patient satisfaction, it is less clear how cost effective they are. As the evidence-base in this field is rather weak, the authors suggest that we may have to revisit our understanding of the concept and our expectations in terms of its assessment. Integrated care should rather be seen as a complex strategy to innovate and implement long-lasting change in the way services in the health and social-care sectors are delivered.

Nolte, E. (éd.) et Knai, C. (éd.) (2015). Assessing chronic disease management in European health systems: country reports, Copenhague : OMS Bureau régional de l'Europe
http://www.euro.who.int/en/about-us/partners/observatory/publications/studies/assessing-chronic-disease-management-in-european-health-systems-country-reports

Many countries are exploring innovative approaches to redesign delivery systems to provide appropriate support to people with long-standing health problems. Central to these efforts to enhance chronic care are approaches that seek to better bridge the boundaries between professions, providers and institutions, but, as this study clearly demonstrates, countries have adopted differing strategies to design and implement such approaches. This book systematically examines experiences of 12 countries in Europe, using an explicit comparative approach and a unified framework for assessment to better understand the diverse range of contexts in which new approaches to chronic care are being implemented, and to evaluate the outcomes of these initiatives. The study focuses in on the content of these new models, which are frequently applied from different disciplinary and professional perspectives and associated with different goals and does so through analyzing approaches to self-management support, service delivery design and decision-support strategies, financing, availability and access. Significantly, it also illustrates the challenges faced by individual patients as they pass through the system.(résumé des éditeurs).

Nolte, E. (éd.,) et al. (2014). Assessing chronic disease management in European health systems : concepts and approaches, Copenhague : OMS Bureau régional de l'Europe
http://www.euro.who.int/en/about-us/partners/observatory/publications/studies/assessing-chronic-disease-management-in-european-health-systems-concepts-and-approaches

The rising burden of chronic illness, in particular the rapid increase in the number of people with multiple health problems, is a challenge to health systems globally. Associated premature mortality and reduced physical functioning, along with higher use of health services and related costs, are among the key concerns faced by policy-makers and practitioners. There is a clear need to redesign delivery systems in order to better meet the needs created by chronic conditions, moving from the traditional, acute and episodic model of care to one that better coordinates professionals and institutions and actively engages service users and their carers. Many countries have begun this process but it has been difficult to reach conclusions about the best approach to take: care models are highly context-dependent and scientifically rigorous evaluations have been lacking. Assessing chronic disease management in European health systems explores some of the key issues, ranging from interpreting the evidence base to assessing the policy context for, and approaches to, chronic disease management across Europe. Drawing on 12 detailed country reports (available in a second, online volume), the study provides insights into the range of care models and the people involved in delivering these; payment mechanisms and service user access; and challenges faced by countries in the implementation and evaluation of these novel approaches. This book builds on the findings of the DISMEVAL project (Developing and validating DISease Management EVALuation methods for European health care systems), led by RAND Europe and funded under the European Union's (EU) Seventh Framework Programme (FP7) (Agreement no. 223277).

Nutting, P. A., et al. (2012). "Small primary care practices face four hurdles--including a physician-centric mind-set--in becoming medical homes." Health Aff.(Millwood.) **31**(11): 2417-2422.

Transforming small independent practices to patient-centered medical homes is widely believed to be a critical step in reforming the US health care system. Our team has conducted research on improving primary care practices for more than fifteen years. We have found four characteristics of small primary care practices that seriously inhibit their ability to make the transformation to this new care model. We found that small practices were extremely physician-centric, lacked meaningful communication among physicians, were dominated by authoritarian leadership behavior, and were underserved by midlevel clinicians who had been cast into unimaginative roles. Our analysis suggests that in addition to payment reform, a shift in the mind-set of primary care physicians is needed. Unless primary care physicians can adopt new mental models and think in new ways about themselves and their practices, it will be very difficult for them and their practices to create innovative care teams, become learning organizations, and act as good citizens within the health care neighborhood

OCDE (2017). Caring for quality in health: lessons learnt from 15 reviews of Health Care Quality. Paris OCDE**:** 62 , tab., graph., fig.
http://www.oecd.org/els/health-systems/Caring-for-Quality-in-Health-Final-report.pdf

Over the past four years, the OECD has conducted a series of in-depth reviews of the policies and institutions that underpin the measurement and improvement of health care quality in 15 different health systems. Caring for Quality in Health: Lessons learnt from 15 reviews of health care quality seeks to answer the question of what caring for quality means for a modern health care system by identifying what policies and approaches work best in improving quality of care. Despite differences in health care system priorities, and in how quality-improvement tools are designed and applied, a number of common approaches and shared challenges emerged across the 15 OECD Reviews of Health Care Quality analysed. The most important of these concerns transparency. Governments should encourage, and where appropriate require, health systems and health care providers to be open about the effectiveness, safety and patient-centredness of care they provide. More measures of patient outcomes are also needed - especially those reported by patients themselves. These should underpin standards, guidelines, incentives and innovations in service delivery. Greater transparency can lead to optimisation of both quality and efficiency – twin objectives which reinforce, rather than subvert, each other. In practical terms, greater transparency and better performance can be supported by changes in where and how care is delivered; changes in the roles of patients and professionals; and employing tools such as data and incentives more effectively. Key actions in these three areas are set out in the 12 lessons presented in this synthesis report.

Ouayogode, M. H., Mainor, A. J., Meara, E., et al. (2019). "Association Between Care Management and Outcomes Among Patients With Complex Needs in Medicare Accountable Care Organizations." JAMA Netw Open **2**(7): e196939.

Importance: People with complex needs account for a disproportionate amount of Medicare spending, partially because of fragmented care delivered across multiple practitioners and settings. Accountable care organization (ACO) contracts give practitioners incentives to improve care coordination to the extent that coordination initiatives reduce total spending or improve quality. Objective: To assess the association between ACO-reported care management and coordination activities and quality, utilization, spending, and health care system interactions in older adults with complex needs. Design, Setting, and Participants: In this cross-sectional study, survey information on care management and coordination processes from 244 Medicare Shared Savings Program ACOs in the 2017-2018 National Survey of ACOs (of 351 Medicare ACO respondents; response rate, 69%) conducted from July 20, 2017, to February 15, 2018, was linked to 2016 Medicare administrative claims data. Medicare beneficiaries 66 years or older who were defined as having complex needs because of frailty or 2 or more chronic conditions associated with high costs and clinical need were included. Exposures: Beneficiary attribution to ACO reporting comprehensive (top tertile) care management and coordination activities. Main Outcomes and Measures: All-cause prevention quality indicator admissions, 30-day all-cause readmissions, acute care and critical access hospital admissions, evaluation and management visits in ambulatory settings, inpatient days, emergency department visits, total spending, post-acute care spending, health care contact days, and continuity of care (from Medicare claims). Results: Among 1 402 582 Medicare beneficiaries with complex conditions, the mean (SD) age was 78 (8.0) years and 55.1% were female. Compared with beneficiaries assigned to ACOs in the bottom tertile of care management and coordination activities, those assigned to ACOs in the top tertile had identical median prevention quality indicator admissions and 30-day all-cause readmissions (0 per beneficiary across all tertiles), hospitalization and emergency department visits (1.0 per beneficiary in bottom and top tertiles), evaluation and management visits in ambulatory settings (14.0 per beneficiary [interquartile range (IQR), 8.0-21.0] in both tertiles), longer median inpatient days (11.0 [IQR, 4.0-33.0] vs 10.0 [IQR, 4.0-32.0]), higher median annual spending ($14 350 [IQR, $4876-$36 119] vs $14 229 [IQR, $4805-$36 268]), lower median health care contact days (28.0 [IQR, 17.0-44.0] vs 29.0 [IQR, 18.0-45.0]), and lower continuity-of-care index (0.12 [IQR, 0.08-0.20] vs 0.13 [IQR, 0.08-0.21]). Accounting for within-patient correlation, quality, utilization, and spending outcomes among patients with complex needs attributed to ACOs were not statistically different comparing the top vs bottom tertile of care management and coordination activities. Conclusions and Relevance: The ACO self-reports of care management and coordination capacity were not associated with differences in spending or measured outcomes for patients with complex needs. Future efforts to care for patients with complex needs should assess whether strategies found to be effective in other settings are being used, and if so, why they fail to meet expectations.

OMS (2008). Integrating mental health into primary care. A global perspective, Genève : OMS Singapour : WONCA
http://www.who.int/mental_health/policy/Integrating%20MH%20into%20primary%20care-%20final%20low-res%20140908.pdf

This report on integrating mental health into primary care, which was developed jointly by the World Health Organization (WHO) and the World Organization of Family Doctors (Wonca), presents the justification and advantages of providing mental health services in primary care. At the same time, it provides advice on how to implement and scale-up primary care for mental health, and describes how a range of health systems have successfully undertaken this transformation. Mental disorders affect hundreds of millions of people and, if left untreated, create an enormous toll of suffering, disability and economic loss. Yet despite the potential to successfully treat mental disorders, only a small minority of those in need receive even the most basic treatment. Integrating mental health services into primary care is the most viable way of closing the treatment gap and ensuring that people get the mental health care they need. Primary care for mental health is affordable, and investments can bring important benefits. This report is divided into distinct parts, with different needs in mind. Part 1 provides the context for understanding primary care for mental health within the broader health care

system. Part 2 explains how to successfully integrate mental health into primary care and highlights 10 common principles which are central to this effort. It also presents 12 detailed case examples to illustrate how a range of health systems have undertaken this transformation. Finally, Annex 1 provides information about the skills and competencies that are required to effectively assess, diagnose, treat, support and refer people with mental disorders. As this report will show, treating mental disorders as early as possible, holistically and close to the person's home and community lead to the best health outcomes. In addition, primary care offers unparalled opportunities for the prevention of mental disorders and mental health promotion, for family and community education, and for collaboration with other sectors.

Ouayogode, M. H., Mainor, A. J., Meara, E., et al. (2019). "Association Between Care Management and Outcomes Among Patients With Complex Needs in Medicare Accountable Care Organizations." JAMA Netw Open **2**(7): e196939.

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Oxman, A. D., et al. (2008). Integrated Health Care for People with Chronic Conditions. Oslo Norwegian Knowledge Centre for the Health Services**:** 152.
http://www.kunnskapssenteret.no/Publikasjoner/5114.cms

Health services research. in the same way that clinical research is essential for informing how best to care for patients clinically, health services research is essential to inform decisions about how best to organise, finance and govern our healthcare system. This policy brief is a good example of both the

potential for health services research to inform healthcare policies and management, and an example of the limitations of health services research to inform decisions. There is a lot of evidence about strategies that are effective or promising, including many of the elements of the Chronic Care Model. There is also lots of uncertainty about the effects of many strategies. Where there is evidence of effects they are mostly small or moderate effects, but important. Where there is lack of evidence, this means that more research is needed. We must, however, also remember that lack of evidence does not mean evidence for the lack of effects. As part of the development of the Integrated Health Care Reform, this report was prepared to inform deliberations among policymakers and stakeholders regarding how best to reform the Norwegian healthcare system to improve the coordination or integration of health care for people with chronic conditions.

Paustian, M. L., et al. (2013). "Partial and Incremental PCMH Practice Transformation: Implications for Quality and Costs." Health Services Research: n/a-n/a.

Objective To examine the associations between partial and incremental implementation of the Patient Centered Medical Home (PCMH) model and measures of cost and quality of care. Data Source We combined validated, self-reported PCMH capabilities data with administrative claims data for a diverse statewide population of 2,432 primary care practices in Michigan. These data were supplemented with contextual data from the Area Resource File. Study Design We measured medical home capabilities in place as of June 2009 and change in medical home capabilities implemented between July 2009 and June 2010. Generalized estimating equations were used to estimate the mean effect of these PCMH measures on total medical costs and quality of care delivered in physician practices between July 2009 and June 2010, while controlling for potential practice, patient cohort, physician organization, and practice environment confounders. Principal Findings Based on the observed relationships for partial implementation, full implementation of the PCMH model is associated with a 3.5 percent higher quality composite score, a 5.1 percent higher preventive composite score, and $26.37 lower per member per month medical costs for adults. Full PCMH implementation is also associated with a 12.2 percent higher preventive composite score, but no reductions in costs for pediatric populations. Incremental improvements in PCMH model implementation yielded similar positive effects on quality of care for both adult and pediatric populations but were not associated with cost savings for either population. Conclusions Estimated effects of the PCMH model on quality and cost of care appear to improve with the degree of PCMH implementation achieved and with incremental improvements in implementation

Pearce, C., et al. (2011). "Following the funding trail: Financing, nurses and teamwork in Australian general practice." Bmc Health Services Research **12**(38): 9.
http://www.biomedcentral.com/content/pdf/1472-6963-11-38.pdf

Background: Across the globe the emphasis on roles and responsibilities of primary care teams is under scrutiny. This paper begins with a review of general practice financing in Australia, and how nurses are currently funded. We then examine the influence on funding structures on the role of the nurse. We set out three dilemmas for policymakers in this area: lack of an evidence base for incentives, possible untoward impacts on interdisciplinary functioning, and the substitution/enhancement debate. Methods: This three year, multimethod study undertook rapid appraisal of 25 general practices and year-long studies in seven practices where a change was introduced to the role of the nurse. Data collected included interviews with nurses (n = 36), doctors (n = 24), and managers (n = 22), structured observation of the practice nurse (51 hours of observation), and detailed case studies of the change process in the seven year-long studies. Results: Despite specific fee-for-service funding being available, only 6% of nurse activities generated such a fee. Yet the influence of the funding was to focus nurse activity on areas that they perceived were peripheral to their roles within the practice. Conclusions: Interprofessional relationships and organisational climate in general practices are highly influential in terms of nursing role and the ability of practices to respond to and utilise funding mechanisms. These factors need to be considered, and the development of optimal teamwork supported in the design and implementation of further initiatives that financially support nursing in general practice.

Peikes, D. N., et al. (2014). "Staffing Patterns of Primary Care Practices in the Comprehensive Primary Care Initiative." Annals of Family Medicine **12**(2): 142-149.
http://annfammed.org/content/12/2/142.full.pdf

PURPOSE : Despite growing calls for team-based care, the current staff composition of primary care practices is unknown. We describe staffing patterns for primary care practices in the Centers for Medicare and Medicaid Services (CMS) Comprehensive Primary Care (CPC) initiative. METHODS We undertook a descriptive analysis of CPC initiative practices' baseline staffing using data from initial applications and a practice survey. CMS selected 502 primary care practices (from 987 applicants) in 7 regions based on their health information technology, number of patients covered by participating payers, and other factors; 496 practices were included in this analysis. RESULTS Consistent with the national distribution, most of the CPC initiative practices included in this study were small: 44% reported 2 or fewer full-time equivalent (FTE) physicians; 27% reported more than 4. Nearly all reported administrative staff (98%) and medical assistants (89%). Fifty-three percent reported having nurse practitioners or physician assistants; 47%, licensed practical or vocational nurses; 36%, registered nurses; and 24%, care managers/coordinators—all of these positions are more common in larger practices. Other clinical staff were reported infrequently regardless of practice size. Compared with other CPC initiative practices, designated patient-centered medical homes were more likely to have care managers/coordinators but otherwise had similar staff types. Larger practices had fewer FTE staff per physician. CONCLUSIONS At baseline, most CPC initiative practices used traditional staffing models and did not report having dedicated staff who may be integral to new primary care models, such as care coordinators, health educators, behavioral health specialists, and pharmacists. Without such staff and payment for their services, practices are unlikely to deliver comprehensive, coordinated, and accessible care to patients at a sustainable cost.

Pelone, F., et al. (2013). "How to achieve optimal organization of primary care service delivery at system level: lessons from Europe." International Journal for Quality in Health Care **25**(4): 381-393.

Objective To measure the relative efficiency of primary care (PC) in turning their structures into services delivery and turning their services delivery into quality outcomes.Design Cross-sectional study based on the dataset of the Primary Healthcare Activity Monitor for Europe project. Two Data Envelopment Analysis models were run to compare the relative technical efficiency. A sensitivity analysis of the resulting efficiency scores was performed.Setting PC systems in 22 European countries in 2009/2010.Main Outcome Measures Model 1 included data on PC governance, workforce development and economic conditions as inputs and access, coordination, continuity and comprehensiveness of care as outputs. Model 2 included the previous process dimensions as inputs and quality indicators as outputs.Results There is relatively reasonable efficiency in all countries at delivering as many as possible PC processes at a given level of PC structure. It is particularly important to invest in economic conditions to achieve an efficient structuref_"process balance. Only five countries have fully efficient PC systems in turning their services delivery into high quality outcomes, using a similar combination of access, continuity and comprehensiveness, although they differ on the adoption of coordination of services. There is a large variation in efficiency levels obtained by countries with inefficient PC in turning their services delivery into quality outcomes.Conclusions Maximizing the individual functions of PC without taking into account the coherence within the health-care system is not sufficient from a policymaker's point of view when aiming to achieve efficiency

Penm, J., et al. (2017). "Minding the Gap: Factors Associated With Primary Care Coordination of Adults in 11 Countries." Ann Fam Med **15**(2): 113-119.

PURPOSE: Care coordination has been identified as a key strategy in improving the effectiveness, safety, and efficiency of the US health care system. Our objective was to determine whether population or health care system issues are associated with primary care coordination gaps in the United States and other high-income countries. METHODS: We analyzed data from the 2013 Commonwealth Fund International Health Policy (IHP) survey with multivariate logistic regression analysis. Respondents were adult primary care patients from 11 countries: Australia, Canada, France,

Germany, the Netherlands, New Zealand, Norway, Sweden, Switzerland, United Kingdom, and the United States. Poor primary care coordination was defined as participants reporting at least 3 gaps in the coordination of care out of a maximum of 5. RESULTS: Analyses were based on 13,958 respondents. The rate of poor primary care coordination was 5.2% (724/13,958 respondents) overall and highest in the United States, at 9.8% (137/1,395 respondents). Multivariate regression analysis among all respondents found that they were less likely to experience poor primary care coordination if their primary care physician often or always knew their medical history, spent sufficient time, involved them, and explained things well (odds ratio = 0.6 for each). Poor primary care coordination was more likely to occur among patients with chronic conditions (odds ratios = 1.4-2.1 depending on number) and patients younger than 65 years (odds ratios = 1.6-2.3 depending on age-group). Among US respondents, insurance status, health status, household income, and sex were not associated with poor primary care coordination. CONCLUSIONS: The United States had the highest rate of poor primary care coordination among the 11 high-income countries evaluated. An established relationship with a primary care physician was significantly associated with better care coordination, whereas being chronically ill or younger was associated with poorer care coordination.

Perelman, J., et al. (2013). "Medical homes versus individual practice in primary care: impact on health care expenditures." Med Care **51**(8): 682-688.

BACKGROUND: The medical home (MH) model has prompted increasing attention given its potential to improve quality of care while reducing health expenditures. OBJECTIVES: We compare overall and specific health care expenditures in Belgium, from the third-party payer perspective (compulsory social insurance), between patients treated at individual practices (IP) and at MHs. We compare the sociodemographic profile of MH and IP users. RESEARCH DESIGN: This is a retrospective study using public insurance claims data. Generalized linear models estimate the impact on health expenditures of being treated at a MH versus IP, controlling for individual, and area-based sociodemographic characteristics. The choice of primary care setting is modeled using logistic regressions. SUBJECTS: A random sample of 43,678 persons followed during the year 2004. MEASURES: Third-party payer expenditures for primary care, secondary care consultations, pharmaceuticals, laboratory tests, acute and long-term inpatient care. RESULTS: Overall third-party payer expenditures do not differ significantly between MH and IP users (&OV0556;+27). Third-party payer primary care expenditures are higher for MH than for IP users (&OV0556;+129), but this difference is offset by lower expenditures for secondary care consultations (&OV0556;-11), drugs (&OV0556;-40), laboratory tests (&OV0556;-5) and acute and long-term inpatient care (&OV0556;-53). MHs attract younger and more underprivileged populations. CONCLUSIONS: MHs induce a shift in expenditures from secondary care, drugs, and laboratory tests to primary care, while treating a less economically favored population. Combined with positive results regarding quality, MH structures are a promising way to tackle the challenges of primary care

Perone, N., et al. (2015). "Concrétiser la prise en charge interdisciplinaire ambulatoire de la complexité." Sante Publique **27**: 77-86, fig.
https://www.cairn.info/revue-sante-publique-2015-HS-page-77.html

[BDSP. Notice produite par EHESP 979R0xGp. Diffusion soumise à autorisation]. La gestion des malades se complexifie, notamment en raison de l'augmentation de la prévalence des maladies chroniques et d'une population vieillissante. Le système de santé suisse est fragmenté et peine à coordonner les soins entre des intervenants issus de multiples disciplines ou actifs dans différentes institutions. L'amélioration de la prise en charge de ces situations complexes fait l'objet de modélisations qui préconisent notamment une prise en charge en équipe et coordonnée. Cet article reflète une recherche-action dont le but est de soutenir les professionnels de la santé dans la mise en oeuvre ambulatoire de ce type de prise en charge.

Pineault, R., et al. (2015). "Les nouvelles formes d'organisations de soins de santé primaires (OSSP) sont-elles associées à une meilleure expérience de soins chez les patients atteints de maladies chroniques au Québec ?" Sante Publique **27**: 119-128, fig., tabl.

[BDSP. Notice produite par EHESP R0xGrGo9. Diffusion soumise à autorisation]. L'objectif de cette étude était d'apprécier dans quelle mesure les nouvelles formes d'organisation de soins de santé primaires (OSSP) - les groupes de médecine de famille (GMF) et les cliniques-réseau (CR) - établies au Québec depuis 2003 sont associées à une meilleure expérience de soins que les autres formes d'OSSP pour les individus atteints de maladies chroniques. Deux enquêtes ont été réalisées dans deux régions du Québec en 2010. Les résultats permettent de conclure que l'expérience de soins associée aux services fournis par les GMF et les CR n'est pas supérieure à celle associée aux cabinets médicaux de groupe.

Pineault, R., et al. (2008). L'accessibilité et la continuité des services de santé : une étude sur la première ligne au Québec. Rapport de recherche. Québec INSPQ**:** ix+83 , tabl., fig., ann.

Cette étude, menée dans deux régions socio-sanitaires du Québec, Montréal et la Montérégie, porte sur les modèles d'organisation des services médicaux de première ligne et leur influence sur l'accessibilité et l'utilisation des services de santé par la population ainsi que sur l'expérience de soins des utilisateurs des services. Le principal but de l'étude est d'identifier les modèles d'organisation des services de première ligne les mieux adaptés et les plus prometteurs pour répondre aux besoins et aux attentes de la population.

Pineault, R., et al. (2016). "Why Is Bigger Not Always Better in Primary Health Care Practices? The Role of Mediating Organizational Factors." INQUIRY: The Journal of Health Care Organization, Provision, and Financing **53**.

Size of primary health care (PHC) practices is often used as a proxy for various organizational characteristics related to provision of care. The objective of this article is to identify some of these organizational characteristics and to determine the extent to which they mediate the relationship between size of PHC practice and patients' experience of care, preventive services, and unmet needs. In 2010, we conducted population and organization surveys in 2 regions of the province of Quebec. We carried out multilevel linear and logistic regression analyses, adjusting for respondents' individual characteristics. Size of PHC practice was associated with organizational characteristics and resources, patients' experience of care, unmet needs, and preventive services. Overall, the larger the size of a practice, the higher the accessibility, but the lower the continuity. However, these associations faded away when organizational variables were introduced in the analysis model. This result supports the hypothesized mediating effect of organizational characteristics on relationships between practice size and patients' experience of care, preventive services, and unmet needs. Our results indicate that size does not add much information to organizational characteristics. Using size as a proxy for organizational characteristics can even be misleading because its relationships with different outcomes are highly variable.

Pinto, A.D. (2013). "Improving Collaboration between Public Health and Primary Healthcare." HealthcarePapers **13**(3): 41-48.

This paper responds to the ideas set forth by Millar et al. in their exploration of whether public health is ready to participate in the transformation of the healthcare system. In this commentary, the author proposes a number of novel solutions to address these challenges, categorized into four areas: experimenting with joint planning, using innovative ways to share and analyze data, employing joint training and networks and facilitating how primary healthcare engages in health promotion in the local community. The author asserts that, ultimately, no single solution will address the multiple barriers to collaboration, but the implementation of some of these ideas can move Canada forward in this area.

Poirier, L. R., et al. (2014). Synthèse des connaissances sur les conditions de mise en œuvre des réseaux de services intégrés aux personnes âgées. Québec INSPQ**:** 39 , tabl.

L'objectif de cette synthèse accélérée des connaissances est d'examiner les stratégies d'optimisation de la mise en œuvre des modes d'intervention et de prestation de services reconnus efficaces pour adapter l'organisation des services à la réalité du vieillissement de la population. Compte tenu du fait

qu'à la fois la synthèse et les activités de partage de connaissances qui s'y rattachent devaient être complétées dans un court laps de temps, nous avons restreint l'objet de la synthèse à la question de recherche suivante : Quels sont les facteurs associés à l'intégration des services offerts aux personnes âgées en perte d'autonomie ?

Porter, M. E., et al. (2013). "Redesigning primary care: a strategic vision to improve value by organizing around patients' needs." Health Aff.(Millwood.) **32**(3): 516-525.

Primary care in the United States currently struggles to attract new physicians and to garner investments in infrastructure required to meet patients' needs. We believe that the absence of a robust overall strategy for the entire spectrum of primary care is a fundamental cause of these struggles. To address the absence of an overall strategy and vision for primary care, we offer a framework based on value for patients to sustain and improve primary care practice. First, primary care should be organized around subgroups of patients with similar needs. Second, team-based services should be provided to each patient subgroup over its full care cycle. Third, each patient's outcomes and true costs should be measured by subgroup as a routine part of care. Fourth, payment should be modified to bundle reimbursement for each subgroup and reward value improvement. Finally, primary care patient subgroup teams should be integrated with relevant specialty providers. We believe that redesigning primary care using this framework can improve the ability of primary care to play its essential role in the health care system

Pourat, N., et al. (2015). "In California, Primary Care Continuity Was Associated With Reduced Emergency Department Use And Fewer Hospitalizations." Health Affairs **34**(7): 1113-1120.

The expansion of health insurance to millions of Americans through the Affordable Care Act has given rise to concerns about increased use of emergency department (ED) and hospital services by previously uninsured populations. Prior research has demonstrated that continuity with a regular source of primary care is associated with lower use of these services and with greater patient satisfaction. We assessed the impact of a policy to increase patients' adherence to an individual primary care provider or clinic on subsequent use of ED and hospital services in a California coverage program for previously uninsured adults called the Health Care Coverage Initiative. We found that the policy was associated with a 42 percent greater probability of adhering to primary care providers. Furthermore, patients who were always adherent had a higher probability of having no ED visits (change in probability: 2.1 percent) and no hospitalizations (change in probability: 1.7 percent), compared to those who were never adherent. Adherence to a primary care provider can reduce the use of costly care because it allows patients' care needs to be managed within the less costly primary care setting.

Raleigh, V., et al. (2014). Integrated care and support Pioneers: Indicators for measuring the quality of integrated care. Final report**:** 34, tabl.

Improved care coordination and integration of services within the health care sector, and across health, social care and other public services, is a priority for the government. The expectation is that integrated care will lead to more person-centered, coordinated care, improve outcomes for individuals, deliver more effective care and support and provide better value from public spending. This report relates to the identification of indicators for measuring integrated care and it outlines the background to our work, the aims of and audiences for the indicators, how the proposed indicators were selected, some general issues relating to the measurement of integrated care, guidance on using the indicators, and some steers on how to use routine quantitative data to measure trends in integrated care.

Raskas, R. S., et al. (2012). "Early Results Show WellPoint's Patient-Centered Medical Home Pilots Have Met Some Goals For Costs, Utilization, And Quality." Health Aff.(Millwood.) **31**(9): 2002-2009.

Primary care must be reengineered to improve outcomes and affordability. To achieve those goals, WellPoint invested in ten patient-centered medical home pilots that encourage care coordination,

preventive care, and shared decision making. Two of the three pilots described in this article-in Colorado and New Hampshire-layer incentive payments for care coordination and quality improvement on top of a traditional fee-for-service payment. The third-in New York-pays doctors an enhanced fee that is tied to achievement of quality levels. Preliminary evaluations show encouraging signs that the Colorado and New Hampshire pilots are meeting some cost, utilization, and quality objectives. A full evaluation in all three states is ongoing. To help enable systemwide transformation, WellPoint is now applying similar payment strategies to primary care practices that may not have the resources to become full-fledged medical homes

Rathert, C., et al. (2013). "Patient-Centered Care and Outcomes." Medical Care Research and Review **70**(4): 351-379.

Patient-centered care (PCC) has been studied for several decades. Yet a clear definition of PCC is lacking, as is an understanding of how specific PCC processes relate to patient outcomes. We conducted a systematic review of the PCC literature to examine the evidence for PCC and outcomes. Three databases were searched for all years through September 2012. We retained 40 articles for the analysis. Results found mixed relationships between PCC and clinical outcomes, that is, some studies found significant relationships between specific elements of PCC and outcomes but others found no relationship. There was stronger evidence for positive influences of PCC on satisfaction and self-management. Future research should examine specific dimensions of PCC and how they relate to technical care quality, particularly some dimensions that have not been studied extensively. Future research also should identify moderating and mediating variables in the PPC-outcomes relationship

Reibling, N. et Rosenthal, M. B. (2016). "The (Missed) Potential of the Patient-centered Medical Home for Disparities." Medical Care **54**(1): 9-16.

Background: Disparities in health care and health outcomes are a significant problem in the United States. Delivery system reforms such as the patient-centered medical home (PCMH) could have important implications for disparities. Objectives: To investigate what role disparities play in current PCMH initiatives and how their set-up might impact on disparities. Research Design: We selected 4 state-based PCMH initiatives (Colorado, Massachusetts, Pennsylvania, and Rhode Island), 1 regional initiative in New Orleans, and 1 multistate initiative. We interviewed 30 key actors in these initiatives and 3 health policy experts on disparities in the context of PCMH. Interview data were coded using the constant comparative method. Results: We find that disparities are not an explicit priority in PCMH initiatives. Nevertheless, many policymakers, providers, and initiative leaders believe that the model has the potential to reduce disparities. However, because of the funding structure of initiatives and the lack of adjustment of quality metrics, health policy experts do not share this optimism and safety-net providers report concerns and frustration. Conclusion: Even though disparities are currently not a priority in the PCMH community, the design of initiatives has important implications for disparities.

Reising, V., Diegel-Vacek, L., Dadabo Msw, L., et al. (2021). "Collaborative Care: Integrating Behavioral Health Into the Primary Care Setting." J Am Psychiatr Nurses Assoc: 10783903211041653.

INTRODUCTION: Integrated behavioral health is a model of health care that aims to meet the complex health care needs of patients in primary care settings. Collaborative Care (CC) is an evidence-based model incorporating an interdisciplinary team to improve outcomes for behavioral health disorders commonly seen by primary care providers. OBJECTIVE: CC was implemented in a nurse-managed health center in a medically underserved community of Chicago with a team of family nurse practitioners, psychiatric mental health nurse practitioners, and a licensed clinical social worker. METHOD: Integration of the CC model required restructuring of the patient visit, the care team, and financial operations. Weekly team meetings were held for interdisciplinary case consultation and training for the primary care team by the psychiatric nurse practitioner. The model includes suggested goals of reducing patient scores of validated depression (Patient Health Questionnaire-9) and anxiety (Generalized Anxiety Disorder-7) screening tools to a score less than 5 points or to less than 50% of original score. RESULTS: During the initial year of implementation, 166 patients received care under the CC model, with 64 patients currently receiving active care. In this cohort, 22% reached suggested

goals for depression and 47% for anxiety. CONCLUSIONS: CC has benefits for both patients and providers. Patients receive holistic treatment of both mental and physical health needs and access to psychiatric services for medication initiation and behavioral health modalities when necessary. We observed that the CC model improved collaboration with behavioral health specialists and the competence and confidence of family nurse practitioners.

Richards, M. R. et Polsky, D. (2016). "Influence of provider mix and regulation on primary care services supplied to US patients." Health Econ Policy Law **11**(2): 193-213.

Access to medical care and how it differs for various patients remain key policy issues. While existing work has examined clinic structure's influence on productivity, less research has explored the link between provider mix and access for different patient types - which also correspond to different service prices. We exploit experimental data from a large field study spanning 10 US states where trained audit callers were randomly assigned an insurance status and then contacted primary care physician practices seeking new patient appointments. We find clinics with more non-physician clinicians are associated with better access for Medicaid patients and lower prices for office visits; however, these relationships are only found in states granting full practice autonomy to these providers. Substituting more non-physician labor in primary care settings may facilitate greater appointment availability for Medicaid patients, but this likely rests on a favorable policy environment. Relaxing regulations for non-physicians may be an important initiative as US health reforms continue and also relevant to other countries coping with greater demands for medical care and related financial strain.

Rijken, M., Hujala, A., van Ginneken, E., et al. (2017). "Managing multimorbidity: Profiles of integrated care approaches targeting people with multiple chronic conditions in Europe." Health Policy **122**(1): 44-52.

In response to the growing populations of people with multiple chronic diseases, new models of care are currently being developed in European countries to better meet the needs of these people. This paper aims to describe the occurrence and characteristics of various types of integrated care practices in European countries that target people with multimorbidity. Data were analysed from multimorbidity care practices participating in the Innovating care for people with multiple chronic conditions (ICARE4EU) project, covering all 28EU Member States, Iceland, Norway and Switzerland. A total of 112 practices in 24 countries were included: 65 focus on patients with any combination of chronic diseases, 30 on patients with a specific chronic disease with all kinds of comorbidities and 17 on patients with a combination of specific chronic diseases. Practices that focus on a specific index disease or a combination of specific diseases are less extensive regarding the type, breadth and degree of integration than practices that focus on any combination of diseases. The latter type is more often seen in countries where more disciplines, e.g. community nurses, physiotherapists, social workers, work in the same primary care practice as the general practitioners. Non-disease specific practices put more emphasis on patient involvement and provide more comprehensive care, which are important preconditions for person-centered multimorbidity care.

Rijken, M., et al. (2016). How to improve care for people with multimorbidity in Europe? Copenhague OMS Bureau régional de l'Europe **:** 27 , fig.
http://www.euro.who.int/en/about-us/partners/observatory/publications/policy-briefs-and-summaries/how-to-improve-care-for-people-with-multimorbidity-in-europe

Where do policy makers start if they want to prepare their health systems for the growing challenge of multimorbidity? This overarching policy brief examines how to support patient-centred integrated care provision by changing clinical practice and reforming the health and social care system. Key messages include that: Patients with multimorbidity are not having their needs met because Europe’s health systems are “disease oriented” and organized around single medical specialties, which fragments care. This “fragmentation” is associated with contradictory medical advice, inappropriate use of health services and poor patient satisfaction but it can be tackled by making care both more integrated and more patient-centred. Policy-makers can foster better integration and a patient centred approach (and so improve care and patient satisfaction) if they Align policy, regulatory and

financial environments; Address professional roles, multidisciplinary work, and coordination; Support a range of tools to enable individualized and patient centred care, and encourage active patient and carer participation.

Rischatsch, M. et Zweifel, P. (2013). "What do physicians dislike about managed care? Evidence from a choice experiment." Eur J Health Econ **14**(4): 601-613.

Managed care (MC) imposes restrictions on physician behavior, but also holds promises, especially in terms of cost savings and improvements in treatment quality. This contribution reports on private-practice physicians' willingness to accept (WTA, compensation asked, respectively) for several MC features. In 2011, 1,088 Swiss ambulatory care physicians participated in a discrete choice experiment, which permits putting WTA values on MC attributes. With the exception of shared decision making and up to six quality circle meetings per year, all attributes are associated with non-zero WTA values. Thus, health insurers must be able to achieve substantial savings in order to create sufficient incentives for Swiss physicians to participate voluntarily in MC plans

Rodriguez, H. P. et Poon, B. Y. (2019). "Linking Practice Adoption of Patient Engagement Strategies and Relational Coordination to Patient-Reported Outcomes in Accountable Care Organizations." Milbank Quarterly (the) **97**(3): 692-735.

Policy Points Accountable care organizations (ACOs) have incentives to promote the adoption of patient engagement strategies such as shared decision making and self-management support programs to improve patient outcomes and contain health care costs. High adoption of patient engagement strategies among ACO-affiliated practices did not improve patient-reported outcomes (PROs) of physical, emotional, and social function among adult patients with diabetes and/or cardiovascular disease over a one-year time frame, likely because implementing these strategies requires extensive clinician and staff training, workflow redesign, and patient participation over time. A dominant focus on improving clinical measures to meet external requirements may crowd out time needed for care team members to address other outcomes that matter to patients, including PROs. Payers and policy-makers should explicitly incentivize the collection and use of PROs when contracting with ACOs. CONTEXT: Adult primary care practices of accountable care organizations (ACOs) are adopting a range of patient engagement strategies, but little is known about how these strategies are related to patient-reported outcomes (PROs) and how relational coordination among team members aids implementation. METHODS: We used a mixed-methods cohort study design integrating administrative and clinical data with two data collection waves (2014-2015 and 2016-2017) of clinician and staff surveys (n = 764), surveys of adult patients with diabetes and/or cardiovascular disease (CVD) (n = 1,276), and key informant interviews of clinicians, staff, and administrators (n = 103). Multivariable linear regression estimated the relationship of practice adoption of patient engagement strategies, relational coordination, and PROs of physical, social, and emotional function. The mediating role of patient activation was examined using cross-lagged panel models. Key informant interviews assessed how relational coordination influences the implementation of patient engagement strategies. FINDINGS: There were no differential improvements in PROs among patients of practices with high vs. low adoption of patient engagement strategies or among patients of practices with high vs. low relational coordination. The Patient Activation Measure (PAM) is strongly related to better physical, emotional, and social PROs over time. Relational coordination facilitated the implementation of patient engagement strategies, but key informants indicated that resources and systems to systematically track treatment preferences and goals beyond clinical indicators were needed to support effective implementation. CONCLUSIONS: Adult patients with diabetes and/or CVD of ACO-affiliated practices with high adoption of patient engagement strategies do not have improved PROs of physical, emotional, and social function over a one-year time frame. Implementing patient engagement strategies increases task interdependence among primary care team members, which needs to be carefully managed. ACOs may need to make greater investment in collecting, monitoring, and analyzing PRO data to ensure that practice adoption and implementation of patient engagement strategies leads to improved physical, emotional, and social function among patients.

Roland, M. (éd.) (2017). Designing a High-Performing Health Care System for Patients with Complex Needs: Ten Recommendations for Policymakers. New York Commonwealth Fund**:** 18 , tab., graph., fig. http://www.commonwealthfund.org/~/media/files/publications/fund-report/2017/aug/roland_10_recommendations_for_complex_patients_revisedexpanded.pdf

Health care costs are heavily concentrated among people with multiple health problems. Often, these are older adults living with frailty, advanced illness, or other complex conditions. In 2014, the New York–based Commonwealth Fund established the International Experts Working Group on Patients with Complex Needs through a grant to the London School of Economics and Political Science. The group's purpose was to outline the prerequisites of a high-performing health care system for "high-need, high-cost" patients and to identify promising international innovations in health care delivery for meeting needs of these patients. Drawing on international experience, quantitative and qualitative evidence, and its members' collective expertise in policy and program design, implementation, and evaluation, the international working group sought to articulate the principles that underpin high performance for this complex population in health systems around the world. What follows are the group's top recommendations based on these principles. All 10 present challenges, with some requiring profound paradigm shifts — for instance, away from disease-specific care delivery and toward more patient-centered approaches, or away from the single-provider model and toward cooperation and teamwork. Their implementation, however, has the potential to transform care and quality of life for millions. The selected international models that follow the recommendations represent some of the promising frontline care innovations that illustrate the principles laid out here.

Romaire, M. A., et al. (2014). "Primary care and specialty providers: an assessment of continuity of care, utilization, and expenditures." Med Care **52**(12): 1042-1049.

BACKGROUND: Little is known as to whether medical home principles, such as continuity of care (COC), would have the same effect on health service use for individuals whose primary (or predominant) provider is a specialist instead of a primary care provider (PCP). OBJECTIVE: To test associations between health service use and expenditures and (1) beneficiaries' predominant provider type (PCP or specialist) and (2) COC among beneficiaries who primarily see a PCP and those who primarily see a specialist. RESEARCH DESIGN: This is a cross-sectional analysis of Medicare fee-for-service claims data from July 2007 to June 2009. Negative binomial and generalized linear models were used in multivariate regression modeling. SUBJECTS: The study cohort comprised 613,471 community-residing Medicare fee-for-service beneficiaries. MEASURES: Beneficiaries' predominant provider type and COC index during a baseline period (July 2007-June 2008) were studied. All-cause and ambulatory care sensitive condition (ACSC) hospitalizations and emergency department (ED) visits and related expenditures and total expenditures in a 1-year follow-up period (July 2008-June 2009) were also reported. RESULTS: Twenty-five percent of beneficiaries primarily saw a specialist. Having a specialist predominant provider was associated with 9% fewer ED visits, 14% fewer ACSC ED visits, and 8% fewer ACSC hospitalizations (all P<0.001). Regardless of whether the beneficiary's predominant provider was a specialist or a PCP, higher continuity was associated with fewer all-cause hospitalizations and ED visits and lower expenditures for these services. Higher continuity was also associated with lower total expenditures. CONCLUSIONS: Regardless of the predominant provider's specialty, greater continuity was associated with less use of high-cost services and lower expenditures for these services

Rose, S., et al. (2016). "Variation In Accountable Care Organization Spending And Sensitivity To Risk Adjustment: Implications For Benchmarking." Health Aff (Millwood) **35**(3): 440-448.

Spending targets (or benchmarks) for accountable care organizations (ACOs) participating in the Medicare Shared Savings Program must be set carefully to encourage program participation while achieving fiscal goals and minimizing unintended consequences, such as penalizing ACOs for serving sicker patients. Recently proposed regulatory changes include measures to make benchmarks more similar for ACOs in the same area with different historical spending levels. We found that ACOs vary widely in how their spending levels compare with those of other local providers after standard case-mix adjustments. Additionally adjusting for survey measures of patient health meaningfully reduced

the variation in differences between ACO spending and local average fee-for-service spending, but substantial variation remained, which suggests that differences in care efficiency between ACOs and local non-ACO providers vary widely. Accordingly, measures to equilibrate benchmarks between high- and low-spending ACOs-such as setting benchmarks to risk-adjusted average fee-for-service spending in an area-should be implemented gradually to maintain participation by ACOs with high spending. Use of survey information also could help mitigate perverse incentives for risk selection and upcoding and limit unintended consequences of new benchmarking methodologies for ACOs serving sicker patients.

Rosen, R., et al. (2016). Is bigger better? Lessons for large-scale general practice. Londres Health Foundation, Londres The Nuffield Trust**:** 106, tabl., fig.
http://www.nuffieldtrust.org.uk/publications/bigger-better-lessons-large-scale-general-practice

Traditional general practice is changing. Three quarters of practices are now working collaboratively in larger-scale organisations – albeit with varying degrees of ambition. Policy-makers and practitioners have high hopes for these organisations, and their potential to transform services both within primary care and beyond. But can we be confident that they can live up to these expectations? This research report is drawn from a 15-month study of large-scale general practice organisations in England. The study examined the factors affecting their evolution and their impact on quality, staff and patient experience. It was informed by an extensive literature review, which will be published separately, and combined national surveys with in-depth case studies of contrasting, large-scale general practice organisations and analysis of 15 quality indicators.

Rosenthal, M. B., et al. (2015). "Impact of the Rochester Medical Home Initiative on Primary Care Practices, Quality, Utilization, and Costs." Medical Care **53**(11): 967-973.

Background: Patient-centered medical homes (PCMH) may improve the quality of primary care while reducing costs and utilization. Early evidence on the effectiveness of PCMH has been mixed. Objectives: We analyze the impact of a PCMH intervention in Rochester NY on costs, utilization, and quality of care. Research Design: A propensity score–matched difference-in-differences analysis of the effect of the PCMH intervention relative to a comparison group of practices. Qualitative interviews with PCMH practice managers on their experiences and challenges with PCMH practice transformation. Subjects: Seven pilot practices and 61 comparison practices (average of 36,531 and 30,192 attributed member months per practice, respectively). Interviews with practice leaders at all pilot sites. Measures: Individual HEDIS quality measures of preventive care, diabetes care, and care for coronary artery disease. Utilization measures of hospital use, office visits, imaging and laboratory tests, and prescription drug use. Cost measures are inpatient, prescription drug, and total spending. Results: After 3 years, PCMH practices reported decreased ambulatory care sensitive emergency room visits and use of imaging tests, and increased primary care visits and laboratory tests. Utilization of prescription drugs increased but drug spending decreased. PCMH practices reported increased rates of breast cancer screening and low-density lipid screening for diabetes patients, and decreased rates of any prevention quality indicator. Conclusions: The PCMH model leads to significant changes in patient care, with reductions in some services and increases in others. This study joins a growing body of work that finds no effect of PCMH transformation on total health care spending.

Rosland, A. M., Wong, E., Maciejewski, M., et al. (2017). "Patient-Centered Medical Home Implementation and Improved Chronic Disease Quality: A Longitudinal Observational Study." Health Serv Res **53**(4): 2503-2522.

OBJECTIVE: To examine associations between clinics' extent of patient-centered medical home (PCMH) implementation and improvements in chronic illness care quality. DATA SOURCE: Data from 808 Veterans Health Administration (VHA) primary care clinics nationwide implementing the Patient Aligned Care Teams (PACT) PCMH initiative, begun in 2010. DESIGN: Clinic-level longitudinal observational study of clinics that received training and resources to implement PACT. Clinics varied in the extent they had PACT components in place by 2012. DATA COLLECTION: Clinical care quality measures reflecting intermediate outcomes and care processes related to coronary artery disease (CAD), diabetes, and hypertension care were collected by manual chart review at each VHA facility

from 2009 to 2013. FINDINGS: In adjusted models containing 808 clinics, the 77 clinics with the most PACT components in place had significantly larger improvements in five of seven chronic disease intermediate outcome measures (e.g., BP < 160/100 in diabetes), ranging from 1.3 percent to 5.2 percent of the patient population meeting measures, and two of eight process measures (HbA1c measurement, LDL measurement in CAD) than the 69 clinics with the least PACT components. Clinics with moderate levels of PACT components showed few significantly larger improvements than the lowest PACT clinics. CONCLUSIONS: Veterans Health Administration primary care clinics with the most PCMH components in place in 2012 had greater improvements in several chronic disease quality measures in 2009-2013 than the lowest PCMH clinics.

Salmon, R. B., et al. (2012). "A collaborative accountable care model in three practices showed promising early results on costs and quality of care." Health Aff.(Millwood.) **31**(11): 2379-2387.

Cigna's Collaborative Accountable Care initiative provides financial incentives to physician groups and integrated delivery systems to improve the quality and efficiency of care for patients in commercial open-access benefit plans. Registered nurses who serve as care coordinators employed by participating practices are a central feature of the initiative. They use patient-specific reports and practice performance reports provided by Cigna to improve care coordination, identify and close care gaps, and address other opportunities for quality improvement. We report interim quality and cost results for three geographically and structurally diverse provider practices in Arizona, New Hampshire, and Texas. Although not statistically significant, these early results revealed favorable trends in total medical costs and quality of care, suggesting that a shared-savings accountable care model and collaborative support from the payer can enable practices to take meaningful steps toward full accountability for care quality and efficiency

Santana, S., et al. (2014). "Integration of care systems in Portugal: anatomy of recent reforms." International Journal of Integrated Care **14**: 9 , tabl., graph., fig.

Background: Integrated care is increasingly present in the agenda of policy-makers, health professionals and researchers as a way to improve care services in relation to access, quality, user satisfaction and efficiency. These are overarching objectives of most sectoral reforms. However, health care and social care services and systems are more and more dependent on the performance of each other, imposing the logic of network. Demographic, epidemiologic and cultural changes result in pressure to increase efficiency and efficacy of services and organisations in both sectors and that is why integrated care has become so relevant in the last years. Methods: We first used concept maps to organise and systematise information that we had gathered through deep literature review in order to set a framework where to base the subsequent work. Then, we interviewed informants at several levels of the health and social care systems and we built a list of major recent reforms addressing integrated care in Portugal. In a third step, we conducted two independent focus groups where those reforms were discussed and evaluated within the context of the concepts and frameworks identified from the literature. Results were confronted and reconciled, giving place to a list of requisites and guidelines that oriented further search for documentation on those reforms. Results: Several important health reforms are in course in primary and hospital care in Portugal, while a so-called third level of care has been introduced with the launch of the National Network of Long-Term Integrated Care (RNCCI - Rede Nacional de Cuidados Continuados Integrados). The social care sector has itself been a subject of alternative models springing from opposite political orientations. All these changes are having repercussions on the way the systems work with each other as they are leading to ongoing and ill-evaluated reformulations on the way they are governed, financed, structured and operated. Conclusions: Care integration is not absent from policy-making and implementation endeavour in Portugal. However, recurrent issues seem to be consistently hampering the efforts regarding the integration of care in the country. It is urgent to assess current situation as experienced by those closely involved and directly affected.

Scharlach, A. E., et al. (2015). "An Integrated Model of Co-ordinated Community-Based Care." The Gerontologist **55**(4): 677-687.

Purpose of the Study: Co-ordinated approaches to community-based care are a central component of current and proposed efforts to help vulnerable older adults obtain needed services and supports and reduce unnecessary use of health care resources.Design and Methods: This study examines ElderHelp Concierge Club, an integrated community-based care model that includes comprehensive personal and environmental assessment, multilevel care co-ordination, a mix of professional and volunteer service providers, and a capitated, income-adjusted fee model. Evaluation includes a retrospective study (n = 96) of service use and perceived program impact, and a prospective study (n = 21) of changes in participant physical and social well-being and health services utilization.Results: Over the period of this study, participants showed greater mobility, greater ability to meet household needs, greater access to health care, reduced social isolation, reduced home hazards, fewer falls, and greater perceived ability to obtain assistance needed to age in place.Implications: This study provides preliminary evidence that an integrated multilevel care co-ordination approach may be an effective and efficient model for serving vulnerable community-based elders, especially low and moderate-income elders who otherwise could not afford the cost of care. The findings suggest the need for multisite controlled studies to more rigorously evaluate program impacts and the optimal mix of various program components.

Savitz, L. A. et Bayliss, E. A. (2021). "Emerging models of care for individuals with multiple chronic conditions." Health Services Research **n/a**(n/a). https://onlinelibrary.wiley.com/doi/abs/10.1111/1475-6773.13774

Abstract Objective To characterize emerging and current practice models to more effectively treat and support patients with multiple chronic conditions (MCC). Data Sources/Study Setting We conducted a rapid literature scoping augmented by key informant interviews with clinicians knowledgeable about MCC care from a broad spectrum of US delivery systems and feedback from multidisciplinary experts at two virtual meetings. Study Design Literature findings were triangulated with data from semi-structured interviews with clinical experts. Reflections on early results were obtained from policy, research, clinical, advocacy, and patient representatives at two virtual meetings sponsored by the Agency for Healthcare Research and Quality. Emergent themes addressed were as follows: (1) more timely strategies for MCC care; and (2) trends not previously represented in the peer-reviewed literature. Data Collection/Extraction Methods The rapid literature scoping relied on Ovid MEDLINE(R) and Epub Ahead of Print databases for the most recent 5-year period. Qualitative interviews were conducted by telephone. Virtual meetings provided oral and written (chat) captured inputs. Principal Findings Although the literature scoping did not identify a specific set of evidence-based care models, key informant discussions identified eight themes reflecting emerging approaches to population-based MCC care. For example, addressing the needs of individuals with MCC through a complexity lens by assessing and addressing social risk factors; extending the care continuum with home-based care; understanding how to address ongoing patient and caregiver supports outside of clinical encounters; and engaging available community resources. Conclusions Integrating care for MCC patient populations requires processes for determining different subpopulation needs in various settings and lived experiences. Innovation should be anchored at the nexus of payment systems, social risks, medical needs, and community-based resources. Our learnings suggest a need for an ongoing MCC care research agenda to inform new approaches to care delivery incorporating innovations in technology and home-based supports for patients and caregivers.

Schütz, M., Senn, N. et Cohidon, C. (2020). "Le projet pilote MOCCA : une nouvelle organisation des cabinets de médecine de famille dans le canton de Vaud, Suisse." Revue Francaise Des Affaires Sociales(1): 337-350. https://www.cairn.info/revue-francaise-des-affaires-sociales-2020-1-page-337.htm

La continuité des soins est un défi majeur pour de nombreux systèmes de santé occidentaux, en particulier pour les patient·e·s avec des besoins complexes (multimorbidité, prise en charge psychosociale, par exemple). Pour ces patient·e·s, une bonne coordination est un facteur qui contribue fortement à augmenter la continuité des soins (Osborn et al., 2014 ; Penm et al., 2017). Les médecins de famille, du fait de leur connaissance globale du·de·la patient·e et de sa communauté, sont bien positionné·e·s pour relever ces défis (Stille et al., 2005). En parallèle, afin de faire face aux contraintes démographiques et sanitaires (vieillissement de la population, multimorbidité), de nouveaux modèles

d'organisation et de fonctionnement de la médecine de famille ont émergé au niveau international. Ils touchent à la fois aux relations entre personnel soignant, aux dispositifs de coordination des activités cliniques ainsi qu'aux systèmes d'aide à la coordination (Powell Davies et al., 2006). Ils intègrent généralement d'autres professionnel·le·s, comme des infirmier·ère·s, des travailleur·euse·s social·e·s, des pharmacien·ne·s et des éléments organisationnels comme un dossier patient informatisé, du case management et un plan de soins (Edwards et al., 2017 ; Van Dongen et al., 2016). La mise en place de ces nouvelles organisations dépend souvent du contexte local ou du pays dans lequel elles sont mises en œuvre et leur financement nécessite également le développement de mécanismes novateurs.

Shetty, V. A., Balzer, L. B., Geissler, K. H., et al. (2019). "Association Between Specialist Office Visits and Health Expenditures in Accountable Care Organizations." JAMA Netw Open **2**(7): e196796.

Importance: Accountable care organizations (ACOs) aim to control health expenditures while improving quality of care. Primary care has been emphasized as a means to reduce spending, but little is known about the implications of using specialists for achieving this ACO objective. Objective: To examine the association between ACO-beneficiary office visits conducted by specialists and the cost and utilization outcomes of those visits. Design, Setting, and Participants: This cross-sectional study obtained data on 620 distinct ACOs from the Centers for Medicare & Medicaid Services Shared Savings Program Accountable Care Organizations Public-Use Files from April 1, 2012, to September 30, 2017. Generalized estimating equation models were used for analysis of ACOs, adjusting for ACO-beneficiary health status, Medicare enrollment groups, ACO size, and proportion of participating specialists. Exposures: Specialist encounter proportion, the percentage of office visits provided by a specialist, was categorized into 7 discrete groups: less than 35%, 35% to less than 40%, 40% to less than 45% (reference group), 45% to less than 50%, 50% to less than 55%, 55% to less than 60%, and 60% or greater. Main Outcomes and Measures: The primary outcome was total expenditures (given in US dollars) per assigned beneficiary person-year. The secondary outcomes were total numbers of emergency department visits, hospital discharges, skilled nursing facility discharges, and magnetic resonance imaging orders. Results: In total, the data set included 1836 ACO-year (number of participation years per ACO) observations for 620 distinct ACOs. Those ACOs with a specialist encounter proportion of 40% to less than 45% had $1129 (95% CI, $445-$1814) lower per-beneficiary person-year spending than did ACOs in the lowest specialist encounter proportion group and had $752 (95% CI, $115-$1389) lower per-beneficiary person-year spending compared with ACOs in the highest specialist encounter proportion group. Monotonic decreases in emergency department visits, hospital discharges, and skilled nursing facility discharges were observed with increasing specialist encounter proportion. Conversely, monotonic increases in magnetic resonance imaging volume discharges were observed with increasing specialist encounter proportion. Conclusions and Relevance: These findings suggest that an ACO's ability to reduce spending may require sufficient involvement in care processes from specialists, who seem to complement the intrinsic primary care approach in ACOs.*

Shi, L., et al. (2013). "Reducing disparities in access to primary care and patient satisfaction with care: the role of health centers." J Health Care Poor Underserved **24**(1): 56-66.

This paper examined disparities in access to and satisfaction with primary care among patients of different racial/ethnic groups and insurance coverage, in health centers and the nation overall. Data came from the 2009 Health Center Patient Survey and 2009 Medical Expenditure Panel Survey. Study outcomes included usual source of care, type of usual source of care, satisfaction with provider office hours, and satisfaction with overall care. Health center patients were more racially and ethnically diverse than national patients, and health center patients were more likely than national patients to be uninsured or publicly insured. No significant health care disparities in access to care existed among patients from different racial/ethnic and insurance groups among health centers, unlike low-income patients nationwide or the U.S. population in general. Additional focus on the uninsured, in health centers and other health care settings nationwide, is needed to enhance satisfaction with care among these patients

Shi, L., et al. (2015). "Patient-centered Medical Home Capability and Clinical Performance in HRSA-supported Health Centers." Med Care **53**(5): 389-395.

OBJECTIVES: To evaluate the relationship between Patient-centered Medical Home (PCMH) model adoption in health centers (HCs) and clinical performance measures and to determine if adoption of PCMH characteristics is associated with better clinical performance. RESEARCH DESIGN: Data came from the Health Resources and Services Administration's 2009 Uniform Data System and the 2009 Commonwealth Fund National Survey of Federally Qualified Health Centers. Clinical performance measures included 2 process measures (childhood immunization and cervical cancer screening) and 2 outcome measures (hypertension control and diabetes control). Total and subscale PCMH scores were regressed on the clinical performance measures, adjusting for patient, provider, financial, and institutional characteristics. RESULTS: The findings showed different directional relationships, with some PCMH domains (care management, test/referral tracking, quality improvement, and external coordination) showing little or no effect on outcome measures of interest, 1 domain (access/communication) associated with improved outcomes, and 1 domain (patient tracking/registry) associated with worse outcomes. CONCLUSIONS: This study is among the first to examine the association between PCMH transformation and clinical performance in HCs, providing an understanding of the impact of PCMH adoption within safety-net settings. The mixed results highlight the importance of examining relationships between specific PCMH domains and specific clinical quality measures, in addition to analyzing overall PCMH scores which could yield distorted findings.

Shippee, N. D., et al. (2012). "Cumulative complexity: a functional, patient-centered model of patient complexity can improve research and practice." J Clin Epidemiol **65**(10): 1041-1051.

OBJECTIVE: To design a functional, patient-centered model of patient complexity with practical applicability to analytic design and clinical practice. Existing literature on patient complexity has mainly identified its components descriptively and in isolation, lacking clarity as to their combined functions in disrupting care or to how complexity changes over time. STUDY DESIGN AND SETTING: The authors developed a cumulative complexity model, which integrates existing literature and emphasizes how clinical and social factors accumulate and interact to complicate patient care. A narrative literature review is used to explicate the model. RESULTS: The model emphasizes a core, patient-level mechanism whereby complicating factors impact care and outcomes: the balance between patient workload of demands and patient capacity to address demands. Workload encompasses the demands on the patient's time and energy, including demands of treatment, self-care, and life in general. Capacity concerns ability to handle work (e.g., functional morbidity, financial/social resources, literacy). Workload-capacity imbalances comprise the mechanism driving patient complexity. Treatment and illness burdens serve as feedback loops, linking negative outcomes to further imbalances, such that complexity may accumulate over time. CONCLUSION: With its components largely supported by existing literature, the model has implications for analytic design, clinical epidemiology, and clinical practice.

Shortell, S. M., et al. (2014). "Accountable care organisations in the United States and England. Testing, evaluating and learning what works." The King's Fund Briefing **en ligne**: 35-47.

The health system in England is facing a number of challenges including an ageing population, an increasing number of people with multiple, long-term conditions and a difficult financial climate. To meet these challenges, more integrated approaches to care delivery are needed to improve both the quality of care and patients' experience. More people now need care across a number of different settings – hospitals, primary care, clinics, nursing homes and home care agencies – which are not co-ordinated, resulting in duplication of cost and effort and gaps in information and communication. In the United States, accountable care organisations (ACOs) – a group of providers that take responsibility for providing all the care for a given population for a specified period of time – have been developed to provide a more integrated approach to care. This article describes the different types of ACOs emerging in the United States; presents some early evidence on their performance; assesses the future for ACOs; and discusses the implication of these developments for integrated care initiatives in England.

Skillman, M., et al. (2017). "Physician Engagement Strategies in Care Coordination: Findings from the Centers for Medicare & Medicaid Services' Health Care Innovation Awards Program." Health Serv Res **52**(1): 291-312.

OBJECTIVE: To identify roles physicians assumed as part of new health care delivery models and related strategies that facilitated physician engagement across 21 Health Care Innovation Award (HCIA) programs. DATA SOURCES: Site-level in-depth interviews, conducted from 2014 to 2015 (N = 672) with program staff, leadership, and partners (including 95 physicians) and direct observations. STUDY DESIGN: NORC conducted a mixed-method evaluation, including two rounds of qualitative data collected via site visits and telephone interviews. DATA COLLECTION/EXTRACTION METHODS: We used qualitative thematic coding for data from 21 programs actively engaging physicians as part of HCIA interventions. PRINCIPAL FINDINGS: Establishing physician champions and ensuring an innovation-values fit between physicians and programs, including the strategies programs employed, facilitated engagement. Among engagement practices identified in this study, tailoring team working styles to meet physician preferences and conducting physician outreach and education were the most common successful approaches. CONCLUSIONS: We describe engagement strategies derived from a diverse range of programs. Successful programs considered physicians' values and engagement as components of process and policy, rather than viewing them as exogenous factors affecting innovation adoption. These types of approaches enabled programs to accelerate acceptance of innovations within organizations.

Somé, N. H., Devlin, R. A., Mehta, N., et al. (2020). "Team-based primary care practice and physician's services: Evidence from Family Health Teams in Ontario, Canada." Social Science & Medicine **264**: 113310. https://doi.org/10.1016/j.socscimed.2020.113310

Team-based primary care offers a wide range of health services to patients by using interdisciplinary health care providers committed to delivering comprehensive, coordinated and high-quality care through team collaboration. Ontario's Family Health Team (FHT), the largest team-based practice model in Canada, was introduced to improve access to and effectiveness of primary health care services, and was available primarily for physicians paid under blended capitation models (Family Health Organizations and Family Health Networks). Using health administrative data on physicians practicing under blended capitation models in Ontario between 2006 and 2015, we study the impact of switching from non-FHT to FHTs on the production of capitated comprehensive care services, after-hours services, non-incentivized services, and services provided to non-enrolled patients by family physicians. We find that when in FHTs, physicians increase the production of total services and non-incentivized services by 26% and 5% per annum and reduce capitated comprehensive care services by 3.2% per annum. When in FHTs, physicians also see and enroll more patients relative to those practicing in non-FHTs. We find evidence of improved access to physician's services under team-based primary care, but switching to FHTs has no effect on the production of after-hours services and services provided to non-enrolled patients.

Stock, S., et al. (2014). "Chronic care model strategies in the United States and Germany deliver patient-centered, high-quality diabetes care." Health Aff.(Millwood.) **33**(9): 1540-1548.

Improving the quality of care for chronic diseases is an important issue for most health care systems in industrialized nations. One widely adopted approach is the Chronic Care Model (CCM), which was first developed in the late 1990s. In this article we present the results from two large surveys in the United States and Germany that report patients' experiences in different models of patient-centered diabetes care, compared to the experiences of patients who received routine diabetes care in the same systems. The study populations were enrolled in either Geisinger Health System in Pennsylvania or Barmer, a German sickness fund that provides medical insurance nationwide. Our findings suggest that patients with type 2 diabetes who were enrolled in the care models that exhibited key features of the CCM were more likely to receive care that was patient-centered, high quality, and collaborative, compared to patients who received routine care. This study demonstrates that quality improvement can be realized through the application of the Chronic Care Model, regardless of the setting or distinct characteristics of the program

Struckmann, V., et al. (2016). How to strengthen financing mechanisms to promote care for people with multimorbidity in Europe? Copenhague OMS Bureau régional de l'Europe**:** 26 , fig.
http://www.euro.who.int/en/about-us/partners/observatory/publications/policy-briefs-and-summaries/how-to-strengthen-financing-mechanisms-to-promote-care-for-people-with-multimorbidity-in-europe

Payment mechanisms that take multiple chronic conditions into account and actually promote better integration of care are sadly lacking. This policy brief examines the steps policy makers must take if they are to adapt financing systems to support people with multimorbidity better. It looks at securing sustainable funding; options for upgrading payment mechanisms; and how financing mechanisms can stimulate good quality integrated care for people with multimorbidity. Key messages include that: Payment mechanisms can provide key incentives for providers to collaborate, enable better care and create efficiency savings (while paying individual providers separately tends to block integration). Innovative payment mechanisms (shared savings models, bundled payments, pay for performance) can be combined with more traditional models (budget, capitation, fee for service) but are inevitably complex. They need to adequately account for the complexity of cases treated which means drawing on very extensive data on cost and quality and considerable technical expertise. Policy makers, who are working to make financing support integrated care, need to give a strong leadership signal and create supportive national and programme structures. They must: Put in place information and support systems to deal with the complexity; Give proper thought to local conditions (and local capacity to cope); Consider funding guarantees and other strategies for mainstreaming new approaches so that providers are encouraged to innovate, and take an incremental and long-term approach to change (including ongoing evaluation).

Strumpf, E., et al. (2016). The Impact of Team-Based Primary Care on Health Care Services Utilization and Costs: Quebec's Family Medicine Groups. Rochester Social Science Electronic Publishing**:** 48 , tabl., fig., annexes.
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2838439

We investigate the effects on health care costs and utilization of team-based primary care delivery: Quebec's Family Medicine Groups (FMGs). FMGs include extended hours, patient enrollment and multidisciplinary teams, but they maintain the same remuneration scheme (fee-for-service) as outside FMGs. In contrast to previous studies, we examine the impacts of organizational changes in primary care settings in the absence of changes to provider payment and outside integrated care systems. We built a panel of administrative data of the population of elderly and chronically ill patients, characterizing all individuals as FMG enrollees or not. Participation in FMGs is voluntary and we address potential selection bias by matching on GP propensity scores, using inverse probability of treatment weights at the patient level, and then estimating difference-in-differences models. We also use appropriate modelling strategies to account for the distributions of health care cost and utilization data. We find that FMGs significantly decrease patients' health care services utilization and costs in outpatient settings relative to patients not in FMGs. The number of primary care visits decreased by nearly 8% per patient per year among FMG enrollees and specialist visits declined by 5%. The declines in costs were of roughly equal magnitude. We found no evidence of an effect on ED visits, hospitalizations, or their associated costs. These results provide support for the idea that primary care organizational reforms can have impacts on the health care system in the absence of changes to physician payment mechanisms. The extent to which the decline in GP visits represents substitution with other primary care providers warrants further investigation.

Stukel, T. A., et al. (2013). "Multispecialty physician networks in Ontario." Open Medicine **7**(2): e40-e55, tabl., fig.
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3863751/

Background: Large multispecialty physician group practices, with a central role for primary care practitioners, have been shown to achieve high-quality, low-cost care for patients with chronic disease. We assessed the extent to which informal multispecialty physician networks in Ontario could be identified by using health administrative data to exploit natural linkages among patients, physicians, and hospitals based on existing patient flow. Methods: We linked each Ontario resident to his or her usual provider of primary care over the period from fiscal year 2008/2009 to fiscal year

2010/2011. We linked each specialist to the hospital where he or she performed the most inpatient services. We linked each primary care physician to the hospital where most of his or her ambulatory patients were admitted for non-maternal medical care. Each resident was then linked to the same hospital as his or her usual provider of primary care. We computed “loyalty” as the proportion of care to network residents provided by physicians and hospitals within their network. Smaller clusters were aggregated to create networks based on a minimum population size, distance, and loyalty. Networks were not constrained geographically. Results: We identified 78 multispecialty physician networks, comprising 12 410 primary care physicians, 14 687 specialists, and 175 acute care hospitals serving a total of 12 917 178 people. Median network size was 134 723 residents, 125 primary care physicians, and 143 specialists. Virtually all eligible residents were linked to a usual provider of primary care and to a network. Most specialists (93.5%) and primary care physicians (98.2%) were linked to a hospital. Median network physician loyalty was 68.4% for all physician visits and 81.1% for primary care visits. Median non-maternal admission loyalty was 67.4%. Urban networks had lower loyalties and were less self contained but had more health care resources. Interpretation: We demonstrated the feasibility of identifying informal multispecialty physician networks in Ontario on the basis of patterns of health care–seeking behaviour. Networks were reasonably self-contained, in that individual residents received most of their care from providers within their respective networks. Formal constitution of networks could foster accountability for efficient, integrated care through care management tools and quality improvement, the ideas behind “accountable care organizations.

Swietek, K. E., Domino, M. E., Grove, L. R., et al. (2021). "Duration of medical home participation and quality of care for patients with chronic conditions." Health Services Research **n/a**(n/a). https://onlinelibrary.wiley.com/doi/abs/10.1111/1475-6773.13710

Abstract Objective To examine whether the length of participation in a patient-centered medical home (PCMH), an evidence-based practice, leads to higher quality care for Medicaid enrollees with multiple co-morbid chronic conditions and major depressive disorder (MDD). Data Sources This analysis uses a unique data source that links North Carolina Medicaid claims and enrollment data with other administrative data including electronic records of state-funded mental health services, a state psychiatric hospital utilization database, and electronic records from a five-county behavioral health carve-out program. Study Design This retrospective cohort study uses generalized estimating equations (GEEs) on person-year-level observations to examine the association between the duration of PCMH participation and measures of guideline-concordant care, including the receipt of minimally adequate care for MDD, defined as 6 months of antidepressant use or eight psychotherapy visits each year. Data Collection/Extraction Methods Adults with two or more chronic conditions reflected in administrative data, including MDD. Principal Findings We found a 1.7 percentage point increase in the likelihood of receiving guideline-concordant care at 4 months of PCMH participation, as compared to newly enrolled individuals with a single month of participation ($p < 0.05$). This effect increased with each additional month of PCMH participation; 12 months of participation was associated with a 19.1 percentage point increase in the likelihood of receiving guideline-concordant care over a single month of participation ($p < 0.01$). Conclusions The PCMH model is associated with higher quality of care for patients with multiple chronic conditions and MDD over time, and these benefits increase the longer a patient is enrolled. Providers and policy makers should consider the positive effect of increased contact with PCMHs when designing and evaluating initiatives to improve care for this population.

Sylling, P. W., et al. (2014). "Patient-centered medical home implementation and primary care provider turnover." Med Care **52**(12): 1017-1022.

BACKGROUND: The Veterans Health Administration (VHA) began implementing a patient-centered medical home (PCMH) model of care delivery in April 2010 through its Patient Aligned Care Team (PACT) initiative. PACT represents a substantial system reengineering of VHA primary care and its potential effect on primary care provider (PCP) turnover is an important but unexplored relationship. This study examined the association between a system-wide PCMH implementation and PCP turnover. METHODS: This was a retrospective, longitudinal study of VHA-employed PCPs spanning 29 calendar quarters before PACT and eight quarters of PACT implementation. PCP employment periods were identified from administrative data and turnover was defined by an indicator on the last quarter of

each uncensored period. An interrupted time series model was used to estimate the association between PACT and turnover, adjusting for secular trend and seasonality, provider and job characteristics, and local unemployment. We calculated average marginal effects (AME), which reflected the change in turnover probability associated with PACT implementation. RESULTS: The quarterly rate of PCP turnover was 3.06% before PACT and 3.38% after initiation of PACT. In adjusted analysis, PACT was associated with a modest increase in turnover (AME=4.0 additional PCPs per 1000 PCPs per quarter, P=0.004). Models with interaction terms suggested that the PACT-related change in turnover was increasing in provider age and experience. CONCLUSIONS: PACT was associated with a modest increase in PCP turnover, concentrated among older and more experienced providers, during initial implementation. Our findings suggest that policymakers should evaluate potential workforce effects when implementing PCMH

Tan, H. Q. M., Chin, Y. H., Ng, C. H., et al. (2020). "Multidisciplinary team approach to diabetes. An outlook on providers' and patients' perspectives." Prim Care Diabetes **14**(5): 545-551.

OBJECTIVE/BACKGROUND: This study sought to uncover the perspectives of various stakeholders towards multidisciplinary team (MDT) care, discover new understandings and help inform current practice on MDT care for diabetic patients. METHODS: 5 electronic databases were searched for articles that evaluated patients' and providers' perspectives on type 2 Diabetes Mellitus (T2DM) MDT management. Articles retrieved were sieved, coded and findings were analytically themed together in accordance to Thomas and Harden methodology. RESULTS: 15 articles were identified with three common themes: interactions between healthcare providers, benefits to patients and constraints and facilitators of the healthcare system. Trust and synergistic teamwork are important factors in promoting effective care. Patients commended MDT's improved accessibility and convenience and felt more welcomed. Often plagued by poor support, lack of manpower and resources, MDTs are less efficient and incapable of realizing their full potential. CONCLUSION: This review illustrates that the MDT model does improve diabetes treatment outcome, help prevent or reduce complications. Nevertheless, the MDT model can be a double-edged sword as poor interactions between HCPs can hamper quality patient care. The current MDT model is also based on available resources of the health system. More effort is needed to modify the MDT model to meet the changing needs of patients.

Tanaka, H., Medeiros, G. et Giglio, A. (2020). "Multidisciplinary teams: perceptions of professionals and oncological patients." Rev Assoc Med Bras (1992) **66**(4): 419-423.

Multidisciplinary teams are increasingly employed to treat cancer patients. This study aimed to evaluate the perception of physicians, other health care professionals, and hospitalized oncological patients regarding the multidisciplinary teams of the public and private sector. In total, 18 doctors were interviewed; 63 health professionals and 120 cancer patients. Satisfaction with the work of the multidisciplinary team was positive among patients and physicians (averages of 89.4% and 66.82% respectively), but higher among patients ($p < 0.0001$), among women rather than men (averages of 77.5% and 85.21% respectively, $p < 0.0001$), elderly individuals in comparison with adults (averages of 91.98% and 76.01% respectively, $p < 0.0001$), and in the public sector in comparison with the private sector (averages of 83.12 and 70.74 respectively, $p < 0.0001$). The results demonstrate that despite the difference between groups, patients and members of multidisciplinary groups were satisfied with multidisciplinary care, and some groups, such as elderly women from public services, may especially benefit from multi-professional groups.

Traynor, M., et al. (2015). "Occupational closure in nursing work reconsidered: UK health care support workers and assistant practitioners: A focus group study." Social Science & Medicine **136–137**(0): 81-88.

In healthcare, occupational groups have adopted tactics to maintain autonomy and control over their areas of work. Witz described a credentialist approach to occupational closure adopted by nursing in the United Kingdom during the 19th and early 20th centuries. However, the recent advancement of assistant, 'non-qualified' workers by governments and managers forms part of a reconfiguration of traditional professional work. This research used focus groups with three cohorts of healthcare support workers undertaking assistant practitioner training at a London university from 2011 to 13 (6

groups, n = 59). The aim was to examine how these workers positioned themselves as professionals and accounted for professional boundaries. A thematic analysis revealed a complex situation in which participants were divided between articulating an acceptance of a subordinate role within traditional occupational boundaries and a usurpatory stance towards these boundaries. Participants had usually been handpicked by managers and some were ambitious and confident in their abilities. Many aspired to train to be nurses claiming that they will gain recognition that they do not currently get but which they deserve. Their scope of practice is based upon their managers' or supervisors' perception of their individual aptitude rather than on a credentialist claim. They 'usurp' nurses claim to be the healthcare worker with privileged access to patients, saying they have taken over what nursing has considered its core work, while nurses abandon it for largely administrative roles. We conclude that the participants are the not unwilling agents of a managerially led project to reshape the workforce that cuts across existing occupational boundaries.

Tsiachristas, A., et al. (2013). "Exploring payment schemes used to promote integrated chronic care in Europe." Health policy (Amsterdam, Netherlands).

The rising burden of chronic conditions has led several European countries to reform healthcare payment schemes. This paper aimed to explore the adoption and success of payment schemes that promote integration of chronic care in European countries. A literature review was used to identify European countries that employed pay-for-coordination (PFC), pay-for-performance (PFP), and bundled payment schemes. Existing evidence from the literature was supplemented with fifteen interviews with chronic care experts in these countries to obtain detailed information regarding the payment schemes, facilitators and barriers to their implementation, and their perceived success. Austria, France, England, the Netherlands, and Germany have implemented payment schemes that were specifically designed to promote the integration of chronic care. Prominent factors facilitating implementation included stakeholder cooperation, adequate financial incentives for stakeholders, and flexible task allocation among different care provider disciplines. Common barriers to implementation included misaligned incentives across stakeholders and gaming. The implemented payment schemes targeted different stakeholders (e.g. individual caregivers, multidisciplinary organizations of caregivers, regions, insurers) in different countries depending on the structure and financing of each health care system. All payment reforms appeared to have changed the structure of chronic care delivery. PFC, as it was implemented in Austria, France and Germany, was perceived to be the most successful in increasing collaboration within and across healthcare sectors, whereas PFP, as it was implemented in England and France, was perceived most successful in improving other indicators of the quality of the care process. Interviewees stated that the impact of the payment reforms on healthcare expenditures remained questionable. The success of a payment scheme depends on the details of the specific implementation in a particular country, but a combination of the schemes may overcome the barriers of each individual scheme

Tsutsui, T. (2014). "Implementation process and challenges for the community-based integrated care system in Japan." International Journal of Integrated Care **14**.

Background: Since 10 years ago, Japan has been creating a long-term vision to face its peak in the number of older people that will be reached in 2025 when baby boomers will turn 75 years of age. In 2003, the government set up a study group called "Caring for older people in 2015" which led to a first reform of the Long-Term Care Insurance System in 2006. This study group was the first to suggest the creation of a community-based integrated care system. Reforms: Three measures were taken in 2006: 'Building an active ageing society: implementation of preventive care services', 'Improve sustainability: revision of the remuneration of facilities providing care' and 'Integration: establishment of a new service system'. These reforms are at the core of the community-based integrated care system. Discussion: The socialization of long-term care that came along with the ageing of the population, and the second shift in Japan towards an increased reliance on the community can provide useful information for other ageing societies. As a super ageing society, the attempts from Japan to develop a rather unique system based on the widely spread concept of integrated care should also become an increasing focus of attention

van den Berg, M. J., et al. (2016). "Accessible and continuous primary care may help reduce rates of emergency department use. An international survey in 34 countries." Family Practice **33**(1): 42-50.

Background. Part of the visits to emergency departments (EDs) is related to complaints that may well be treated in primary care.Objectives. (i) To investigate how the likelihood of attending an ED is related to accessibility and continuity of primary care. (ii) To investigate the reasons for patients to visit EDs in different countries.Methods. Data were collected within the EU Seventh Framework project Quality and Costs in Primary Care (QUALICOPC) in 31 European countries, Australia, New Zealand and Canada. The data were collected between 2011 and 2013 and contain survey data from 60991 patients and 7005 GPs, within 7005 general practices. Outcome measure: whether the patient visited the ED in the previous year (yes/no). Multilevel logistic regression analyses were carried out to analyse the data.Results. Some 29.4% had visited the ED in the past year. Between countries, the percentages varied between 18% and 40%. ED visits show a significant and negative relation with better accessibility of primary care. Patients with a regular doctor who knows them personally were less likely to attend EDs. Only one-third of all patients who visited an ED indicated that the main reason for this was that their complaint could not be treated by a GP.Conclusions. Good accessibility and continuity of primary care may well reduce ED use. In some countries, it may be worthwhile to invest in more continuous relationships between patients and GPs or to eliminate factors that hamper people to use primary care (e.g. for costs or travelling).

Tan, H. Q. M., Chin, Y. H., Ng, C. H., et al. (2020). "Multidisciplinary team approach to diabetes. An outlook on providers' and patients' perspectives." Prim Care Diabetes **14**(5): 545-551.

OBJECTIVE/BACKGROUND: This study sought to uncover the perspectives of various stakeholders towards multidisciplinary team (MDT) care, discover new understandings and help inform current practice on MDT care for diabetic patients. METHODS: 5 electronic databases were searched for articles that evaluated patients' and providers' perspectives on type 2 Diabetes Mellitus (T2DM) MDT management. Articles retrieved were sieved, coded and findings were analytically themed together in accordance to Thomas and Harden methodology. RESULTS: 15 articles were identified with three common themes: interactions between healthcare providers, benefits to patients and constraints and facilitators of the healthcare system. Trust and synergistic teamwork are important factors in promoting effective care. Patients commended MDT's improved accessibility and convenience and felt more welcomed. Often plagued by poor support, lack of manpower and resources, MDTs are less efficient and incapable of realizing their full potential. CONCLUSION: This review illustrates that the MDT model does improve diabetes treatment outcome, help prevent or reduce complications. Nevertheless, the MDT model can be a double-edged sword as poor interactions between HCPs can hamper quality patient care. The current MDT model is also based on available resources of the health system. More effort is needed to modify the MDT model to meet the changing needs of patients.

Tanaka, H., Medeiros, G. et Giglio, A. (2020). "Multidisciplinary teams: perceptions of professionals and oncological patients." Rev Assoc Med Bras (1992) **66**(4): 419-423.

Multidisciplinary teams are increasingly employed to treat cancer patients. This study aimed to evaluate the perception of physicians, other health care professionals, and hospitalized oncological patients regarding the multidisciplinary teams of the public and private sector. In total, 18 doctors were interviewed; 63 health professionals and 120 cancer patients. Satisfaction with the work of the multidisciplinary team was positive among patients and physicians (averages of 89.4% and 66.82% respectively), but higher among patients ($p < 0.0001$), among women rather than men (averages of 77.5% and 85.21% respectively, $p < 0.0001$), elderly individuals in comparison with adults (averages of 91.98% and 76.01% respectively, $p < 0.0001$), and in the public sector in comparison with the private sector (averages of 83.12 and 70.74 respectively, $p < 0.0001$). The results demonstrate that despite the difference between groups, patients and members of multidisciplinary groups were satisfied with multidisciplinary care, and some groups, such as elderly women from public services, may especially benefit from multi-professional groups.

van der Heide, I., et al. (2017). "Patient-centeredness of integrated care programs for people with multimorbidity. Results from the European ICARE4EU project." Health Policy.

INTRODUCTION: This paper aims to support the implementation of patient-centered care for people with multimorbidity in Europe, by providing insight into ways in which patient-centeredness is currently shaped in integrated care programs for people with multimorbidity in European countries. METHODS: In 2014, expert organizations in 31 European countries identified 200 integrated care practices ('programs') in 25 countries of which 123 were included in our study. Managers of 112 programs from 24 countries completed a questionnaire about characteristics and results of the program, including questions on elements of patient-centeredness. Eight programs that were considered especially innovative or promising were analyzed in depth. RESULTS: Programs used various methodologies to involve people with multimorbidity in decision-making, such as motivational interviewing and narrative counseling techniques. In 79 programs individual care plans were developed together with patients. Few programs had already been systematically evaluated, but in one program it was shown that working with individual care plans based on patients' goals and resources resulted in increased patient satisfaction with care. Various barriers to deliver patient-centered care were reported, including inadequate knowledge and skills of both patients and professionals. CONCLUSION: In many European countries innovative approaches are applied to increase patient-centeredness of care for people with multimorbidity. To assess their potential benefits and conditions for implementation, thorough process and outcome evaluations of programs are urgently needed.

van Der Heide, I., et al. (2016). How to strengthen patient centredness in caring for people with multimorbidity in Europe? Copenhague OMS Bureau régional de l'Europe**:** 28 , fig.
http://www.euro.who.int/en/about-us/partners/observatory/publications/policy-briefs-and-summaries/how-to-strengthen-patient-centredness-in-caring-for-people-with-multimorbidity-in-europe

Too often health systems are centred around the disease rather than the patient. This policy brief identifies the key elements and potential benefits of patient-centred care for people with multimorbidity and flags up the strategies, which can help to strengthen patient-centred care. Key messages include that: Patient-centredness requires a coordinated approach to the organization and delivery of care that delivers real benefits, increasing patient satisfaction and countering problems of fragmented care, such as inappropriate use of health services and unresponsiveness. Innovation often stems from grassroots initiatives and patient-centred programmes that develop despite, and not because of, national regulations. Policy makers need to do more to foster innovation and effective collaboration by creating a supportive environment including Developing a shared vision and engaging with patients, carers and social care; Paying real attention to coordination between levels of care; Providing training, and supporting tools that share information and foster monitoring and evaluation.

van Hasselt, M., et al. (2015). "Total Cost of Care Lower among Medicare Fee-for-Service Beneficiaries Receiving Care from Patient-Centered Medical Homes." Health Serv Res **50**(1): 253-272.

OBJECTIVE: To compare health care utilization and payments between NCQA-recognized patient-centered medical home (PCMH) practices and practices without such recognition. DATA SOURCES: Medicare Part A and B claims files from July 1, 2007 to June 30, 2010, 2009 Census, 2007 Health Resources and Services Administration and CMS Utilization file, Medicare's Enrollment Data Base, and the 2005 American Medical Association Physician Workforce file. STUDY DESIGN: This study used a longitudinal, nonexperimental design. Three annual observations (July 1, 2008-June 30, 2010) were available for each practice. We compared selected outcomes between practices with and those without NCQA PCMH recognition. DATA COLLECTION METHODS: Individual Medicare fee-for-service (FFS) beneficiaries and their claims and utilization data were assigned to PCMH or comparison practices based on where they received the plurality of evaluation and management services between July 1, 2007 and June 30, 2008. PRINCIPAL FINDINGS: Relative to the comparison group, total Medicare payments, acute care payments, and the number of emergency room visits declined after practices received NCQA PCMH recognition. The decline was larger for practices with sicker than average patients, primary care practices, and solo practices. CONCLUSIONS: This study provides

additional evidence about the potential of the PCMH model for reducing health care utilization and the cost of care.

Vest, J. R., Blackburn, J., Yeager, V. A., et al. (2021). "Primary Care-Based Case Conferences and Reductions in Health Care Utilization." J Health Care Poor Underserved **32**(3): 1288-1300.

Case conferences are collaborative, interdisciplinary team meetings that facilitate consensus on individual patients' health management plans, coordinate services, and initiate referrals. This approach is well-suited to address the social needs and risks of complex patients. Evidence of this approach in primary care settings to change patient outcomes is limited. A panel of 976 patients from an urban, federally qualified health center were included in case conferences. Fixed-effects regression models estimated the effect of case conferences on admissions, emergency department (ED) visits, and missed outpatient appointments. Case conferencing was associated with a 6% reduction in the probability that the patient would have an ED visit in a given month and a 5% lower probability of an inpatient admission. The probability of missed primary care appointments increased. Case conferences are a potential strategy to address the multiple issues facing complex patients.

Visca, M., et al. (2013). "Group versus single handed primary care: A performance evaluation of the care delivered to chronic patients by Italian GPs." Health policy (Amsterdam, Netherlands) **113**(1-2): 188-198.

OBJECTIVES: In family medicine contrasting evidence exists on the effectiveness of team practice compared with solo practice on chronic disease management. In Italy, several experiences of team practice have been introduced since the late 1990s but few studies detail their impact on the quality of care. The aim of this paper is to evaluate the impact of team practice in family medicine in six Italian regions using chronic disease management process indicators as a measure of outcome. METHODS: Cross-sectional studies were performed to assess impact on quality of care for diabetes, congestive heart failure and ischaemic heart disease. The impact of team vs. solo practice was approximated through performance comparison of general practitioners (GPs) adhering to a team with respect to GPs working in a solo practice. Among the 2082 practitioners working in the 6 regions those assisting 300+ patients were selected. Quality of care towards 164,267 patients having at least one of three chronic conditions was estimated for the year 2008 using administrative databases. Quality indicators (% of patients receiving appropriate care) were selected (4 for diabetes, 4 for congestive heart failure, 3 for ischaemic heart disease) and a total score was computed for each patient. For each disease the response variable associated to each physician was the average score of the patients on his/her list. A multilevel model was estimated assessing the impact of team vs. solo practice. RESULTS: No impact was found for diabetes and heart failure. For ischaemic heart disease a slightly significant impact was observed (0.040; 95% CI: 0.015, 0.065). CONCLUSIONS: No significant difference was found between team practice and solo practice on chronic disease management in six Italian regions

Wang, E., Shortell, S. M., Huber, T. P., et al. (2019). "The influence of leadership facilitation on relational coordination among primary care team members of accountable care organizations." Milbank Q.

BACKGROUND: Teamwork is a central aspect of integrated care delivery and increasingly critical to primary care practices of accountable care organizations. Although the importance of leadership facilitation in implementing organizational change is well documented, less is known about the extent to which strong leadership facilitation can positively influence relational coordination among primary care team members. PURPOSE: The aim of this study was to examine the association of leadership facilitation of change and relational coordination among primary care teams of accountable care organization-affiliated practices and explore the role of team participation and solidarity culture as mediators of the relationship between leadership facilitation and relational coordination among team members. METHODOLOGY/APPROACH: Survey responses of primary care clinicians and staff (n = 764) were analyzed. Multilevel linear regression estimated the relationships among leadership facilitation, team participation, group solidarity, and relational coordination controlling for age, time, occupation, gender, team tenure, and team size. Models included practice site random effects to account for the clustering of respondents within practices. RESULTS: Leadership facilitation (beta = 0.19, $p < .001$) and team participation (beta = 0.18, $p < .001$) were positively associated with relational coordination, but

solidarity culture was not associated. The association of leadership facilitation and relational coordination was only partially mediated (9%) by team participation. CONCLUSIONS: Leadership facilitation of change is positively associated with relational coordination of primary care team members. The relationship is only partially explained by better team participation, indicating that leadership facilitation has a strong direct effect on relational coordination. Greater solidarity was not associated with better relational coordination and may not contribute to better team task coordination. PRACTICE IMPLICATIONS: Leadership facilitation of change may have a positive and direct impact on high relational coordination among primary care team members.

Ward, K. et Farooq, H. (2017/07). "Focused multidisciplinary team (MDT) based board rounds can significantly reduce length of stays (LOS) and increase ward productivity." Age & Ageing **46**(2 - Suppl. 2): ii1–ii6.

Ward 26, Blackpool Victoria Hospital, is a female Care of the Older Person (CoOP) ward. Data collected on current length of stay suggested that there was a problem with performance on the ward. To address the perceived problem it was agreed that the ward team would look at how they could improve the internal processes and improve care for the patients. Four teams of consultants had patients on the ward (as well as patients on a second ward), leading to multiple, overlapping ward rounds. There was a brief board round each day involving the nurses, therapists and discharge team. The board round function was primarily to agree when referrals should be done, rather than goal setting.

Welch, W. P., et al. (2013). "Proportion of physicians in large group practices continued to grow in 2009-11." Health Aff.(Millwood.) **32**(9): 1659-1666.

Payers and advocates for improved health care quality are raising expectations for greater care coordination and accountability for care delivery, and physician groups may be responding by becoming larger. We used Medicare claims from the period 2009-11, merged with information from the Medicare provider enrollment database, to measure whether physician group sizes have been increasing over time and in association with physician characteristics. All US physicians serving Medicare fee-for-service patients in any practice setting were included. The percentage of physicians in groups of more than fifty increased from 30.9 percent in 2009 to 35.6 percent in 2011. This shift occurred across all specialty categories, both sexes, and all age groups, although it was more prominent among physicians under age forty than those age sixty or older. The movement of physicians into groups is not a new phenomenon, but our data suggest that the groups are larger than surveys have previously indicated. Questions for future studies include whether there are significant cost savings or quality improvements associated with increased practice size

Wilk, A. S. et Platt, J. E. (2016). "Measuring physicians' trust: A scoping review with implications for public policy." Social Science & Medicine **165**: 75-81.

Increasingly, physicians are expected to work in productive, trusting relationships with other health system stakeholders to improve patient and system outcomes. A better understanding of physicians' trust is greatly needed. This study assesses the state of the literature on physicians' trust in patients, other health care providers, institutions, and data systems or technology, and identifies key themes, dimensions of trust considered, quantitative measures used, and opportunities for further development via a scoping review. Peer-reviewed, English-language research articles were identified for inclusion in this study based on systematic searches of the Ovid/Medline, Pubmed, Proquest, Scopus, Elsevier, and Web of Science databases. Search terms included “trust” along with “physician,” “doctor,” “primary care provider,” “family practitioner,” “family practice,” “generalist,” “general practitioner,” “general practice,” “internist,” “internal medicine,” or “health professional,” and plausible variants. Among the relevant articles identified (n = 446), the vast majority focused on patient trust in physicians (81.2%). Among articles examining physicians' trust, rigorous investigations of trust are rare, narrowly focused, and imprecise in their discussion of trust. Robust investigations of the effects of trust or distrust—as opposed to trust's determinants—and studies using validated quantitative trust measures are particularly rare. Studies typically measured trust using the language of confidence, effective communication, or cooperation, rarely or never capturing other important

dimensions of trust, such as fidelity, the trustee's reputation, social capital, vulnerability, and acceptance. Research employing new, validated measures of physicians' trust, especially trust in institutions, may be highly informative to health system leaders and policymakers seeking to hone and enhance tools for improving the effectiveness and efficiency of the health care system.

Willcox, S., et al. (2011). "Strengthening Primary Care: Recent Reforms and Achievements in Australia, England, and the Netherlands." Issues in International Health Policy: 18 , tabl.
http://www.commonwealthfund.org/~/media/Files/Publications/Issue%20Brief/2011/Nov/1564_Willcox_strengthening_primary_care_Aus_Engl_Neth_intl_brief.pdf

Recent reforms in Australia, England, and the Netherlands have sought to enhance the quality and accessibility of primary care. Quality improvement strategies include postgraduate training programs for family physicians, accreditation of general practitioner (GP) practices, and efforts to modify professional behaviors' for example, through clinical guideline development. Strategies for improving access include national performance targets, greater use of practice nurses, assured after-hours care, and medical advice telephone lines. All three countries have established midlevel primary care organizations both to coordinate primary care health services and to serve other functions, such as purchasing and population health planning. Better coordination of primary health care services is also the objective driving the use of patient enrollment in a single general practice. Payment reform is also a key element of English and Australian reforms, with both countries having introduced payment-for-quality initiatives. Dutch payment reform has stressed financial incentives for better management of chronic disease

Wodchis, W. P., et al. (2015). "Integrating Care to Older People and those with Complex Needs : Special Issue." International Journal for Integrated Care **15**.

Ce numéro spécial de l'International Journal of Integrated Care discute de l'intégration des soins aux personnes âgées et aux personnes ayant des besoins complexes en Nouvelle-Zélande, en Australie, en Suède, au Québec et au Massachusetts. Les articles traitent des modèles novateurs de soins, de l'intégration des systèmes, des lacunes en matière de soins des maladies chroniques, de la gestion des patients à haut risque et des soins aux personnes démentes.

Wolk, C. B., Alter, C. L., Kishton, R., et al. (2021). "Improving Payment for Collaborative Mental Health Care in Primary Care." Medical Care **59**(4): 324-326.
https://journals.lww.com/lww-medicalcare/Fulltext/2021/04000/Improving_Payment_for_Collaborative_Mental_Health.8.aspx

Background: There is strong evidence supporting implementation of the Collaborative Care Model within primary care. Fee-for-service payment codes, published by Current Procedural Terminology in 2018, have made collaborative care separately reimbursable for the first time. These codes (ie, 99492–99494) reimburse for time spent per month by any member of the care team engaged in Collaborative Care, including behavioral care managers, primary care providers, and consulting psychiatrists. Time-based billing for these codes presents challenges for providers delivering Collaborative Care services. Objectives: Based on experience from multiple health care organizations, we reflect on these challenges and provide suggestions for implementation and future refinement of the codes. Conclusions: Further refinements to the codes are encouraged, including moving from a calendar month to a 30-day reimbursement cycle. In addition, we recommend payers adopt the new code proposed by the Centers for Medicare and Medicaid Services to account for smaller increments of time.

Wong, S. T., et al. (2015). "Incorporating Group Medical Visits into Primary Healthcare: Are There Benefits?" Health Policy **11**(2): 27-42.

OBJECTIVE: Group medical visits (GMVs) have been touted as an innovation to effectively and efficiently provide primary healthcare (PHC) services. The purpose of this paper is to report whether GMVs have tangible benefits for providers and patients. METHODS: This descriptive study included in-

depth interviews with patients attending and providers facilitating GMVs and direct observation. Five primary care practices in rural towns and four First Nations communities participated. This paper reports on an analysis of interviews and observations. RESULTS: Thirty-four providers and 29 patients were interviewed. Patient participants were an average of 62 years old, mostly female and married. The three most common chronic conditions reported by patients were diabetes (n = 9), high blood pressure (n = 8) and arthritis (n = 7). Three themes illustrated how GMVs: (1) can foster access to needed health services; (2) expand opportunities for collaboration and team-based care; and (3) improve patient and provider experiences. A fourth theme captured structural challenges in delivering GMVs. DISCUSSION: There are tangible benefits in delivering GMVs in PHC. While whole patient panels can benefit from the integration of GMVs into practice, those who could gain the most are patients with complex medical and social needs. GMVs provide an opportunity to enhance PHC, strengthening the system particularly for patients with chronic conditions.

Wu, F. M., et al. (2016). "Assessing Differences between Early and Later Adopters of Accountable Care Organizations Using Taxonomic Analysis." Health Services Research.

Objective To compare early and later adopters of the accountable care organization (ACO) model, using the taxonomy of larger, integrated system; smaller, physician-led; and hybrid ACOs. Data sources The National Survey of ACOs, Waves 1 and 2. Study design Cluster analysis using the two-step clustering approach, validated using discriminant analysis. Wave 2 data analyzed separately to assess differences from Wave 1 and then data pooled across waves. Findings Compared to early ACOs, later adopter ACOs included a greater breadth of provider group types and a greater proportion self-reported as integrated delivery systems. When data from the two time periods were combined, a three-cluster solution similar to the original cluster solution emerged. Of the 251 ACOs, 31.1 percent were larger, integrated system ACOs; 45.0 percent were smaller physician-led ACOs; and 23.9 percent were hybrid ACOs—compared to 40.1 percent, 34.0 percent, and 25.9 percent from Wave 1 clusters, respectively. Conclusions While there are some differences between ACOs formed prior to August 2012 and those formed in the following year, the three-cluster taxonomy appears to best describe the types of ACOs in existence as of July 2013. The updated taxonomy can be used by researchers, policy makers, and health care organizations to support evaluation and continued development of ACOs.

Voir aussi :

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