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Group Practice Dynamics Among Private General Practitioners from 1998 to 2009

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Based on the INPES 1998, 2003 and 2009 General Practitioners' Health Barometer surveys conducted on representative national samples, this joint INPES/IRDES study analyses group practice trends, its characteristics and evolution among private general practitioners.

Today, group practices are in the majority. The percentage of private GPs declaring to work in a group practice has risen from 43% in 1998 to 54% in 2009. This increase is particularly apparent among GPs aged below 40 with eight out of ten working in a group practice.

Three quarters of group practice GPs share premises exclusively with other GPs and/or specialists. These office-based practices are in the majority made up of two or three practitioners.

The group practice structure appears to alter GPs' weekly work patterns without for as much altering their weekly volume of activity: group practice GPs more frequently declare working less than five days a week but carry out more medical acts per day than GPs working alone. Group practice is equally associated with more available time for training, supervising students and the greater use of computerised patient files.

Pivate group practice is defined as an office-based practice composed of at least two general practitioners sharing the same premises. The realisation of group practice can take several forms: a GP surgery, *centre de santé* or *pôle de santé* either composed exclusively of medical practitioners, referred to as a medical group practice, or one or several medical practitioners combined with other health professionals (nurses, physiotherapist, etc.), referred to as a multi-disciplinary group practice.

In France, group practice in general medicine is encouraged by financial incentives

for group practices setting up in an eligible zone defined by the Demographic Plan for Health Professionals in 2007 [Journal Officiel, 2007a] and by the definition and creation of multidisciplinary primary care group practices and *pôle de santé* [Journal Officiel, 2007b]. These multidisciplinary group practices have been positioned as the future of ambulatory medical practice [Baudier and Thomas, 2009; Juilhard *et al.*, 2010]. They would ensure the maintenance of ambulatory care supply and services in regions that are currently underprivileged by improving conditions of practice and working environment [Délégation inter-

ministérielle à l'aménagement du territoire et à l'attractivité régionale, 2010].

In France, knowledge of group practice organisation remains fragmentary. The percentage of group practice doctors (all disciplines combined) has been rising constantly over the last twenty years. It has risen from a little under 30% at the

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beginning of the 1980's to a little over 44% in 2002 [Audric, 2004]. Even if the term 'group practice' covers a variety of configurations, those in existence are essentially mono-disciplinary, small, more widespread in the West of France and above all concern the more technical medical disciplines [Audric, 2004]. Among the medical professions, general medicine is situated slightly below average with around 40% of group practice GPs, placing France behind the majority of European countries [Bourgueil, Mousquès, Marek, 2009]. These results have been confirmed by regional studies [Beauté, Bourgueil, Mousquès, 2007;

Aulagnier *et al.* 2007; Bourgueil *et al.* 2009].

Until now, the relationship between group practice and GPs' activity had not been studied using representative national samples; the General Practitioners' Health Barometer survey carried out by the National Institute for Health Prevention and Education (INPES) in 2009 made this possible. After having analysed group practice rates from the last three waves of the survey carried out in 1998, 2003 and 2009, we will examine the rate of private group practices in sector 1 and study its characteristics.

Between 1998 and 2009, a significant increase in group practices especially among young GPs

The percentage of group practice GPs increased regularly between 1998 and 2009, rising from 43% to 54% (graph 1). This rate of progression, however, slowed down during the second period: +1.6 points per year between 1998 and 2003 then +0.8 points per year between 2003 and 2009.

This slowdown in the total rate of group practice GPs can be explained by two phenomena. Firstly, a demographic shift between 1998 and 2009 meant a progressive rise in the percentage of GPs aged over 50 (over half the GPs interrogated in 2009 against 20% in 1998), an age group with a low general preference for group practice that remains stable through time (+0.6 point). The almost 11 point rise in the number of general medicine group practice in ten years thus essentially reflects the significant progression of younger GPs setting up in group practices. Almost 80% of GPs aged below 40 declared working in a group practice in 2009; a 28 point rise in ten years. A second explanation is based on the hypothesis that this rate of progression will inevitably stabilise due to a threshold effect.

INPES General Practitioners' Health Barometer survey

Since 1992, INPES has been conducting the General Practitioners' Health Barometer survey at regular intervals; a declarative survey describing private general practitioners' opinions on medical prevention and professional practices.

Survey base. survey samples are constituted by simple random sampling from the Cegedim® professional directory.

Rate of participation. In 2009, the rate of participation reached 57% (59% in 2003 and 71% in 1998). During the last survey, carried out from November 2008 to January 2009, 2,083 general practitioners responded: approximately one self-employed GP out of thirty in France. The sample characteristics are close to administrative data available from the Cnamts (Snir) and Drees (Adeli) data bases.

Questionnaire. It explores the opinions and attitudes of general practitioners concerning prevention and patient education, vaccination, HIV, viral hepatitis, cancer, the treatment and care of addictions and the long-term accompaniment of Alzheimer patients. Telephone interviews lasted twenty-five minutes on average.

The complete results of the survey will be available in the General Practitioners' Health Barometer survey (Baromètre santé médecins généralistes) to be published at the end of 2010.

Comparison of GP Health Barometer results with administrative data

| | Barometer 2009 ^a Inpes | Adeli 2008 Drees | Snir 2008 Cnamts |
|--|--------------------------------------|---------------------|---------------------|
| GP characteristics | | | |
| Gender | % | % | % |
| Male | 69.8 | 69.4 | 72.0 |
| Female | 30.2 | 30.6 | 28.0 |
| Age | | | |
| Below 40 years old | 12.6 | 14.8 | 10.5 |
| 40-49 years old | 29.1 | 30.3 | 28.5 |
| 50-59 years old | 44.2 | 42.7 | 45.0 |
| Over 59 years old | 14.0 | 12.2 | 15.9 |
| Don't know | - | - | 0.1 |
| Practice region (division by telephone directory regions) | | | |
| Ile-de-France | 14.1 | 17.7 | 16.4 |
| North West | 17.2 | 18.3 | 18.6 |
| North East | 23.9 | 22.1 | 22.5 |
| South East | 30.0 | 26.7 | 27.2 |
| South West | 14.8 | 15.2 | 15.3 |
| Sector of activity | | | |
| Sector 1 | 89.2 | - | 87.3 |
| Sector 2 | 10.0 | - | 11.4 |
| Non government regulated | 0.8 | - | 1.2 |
| Numbers | 2,083 | 68,313 | 61,359 |

^a Total number of respondents in the GPs' Health Barometer survey.

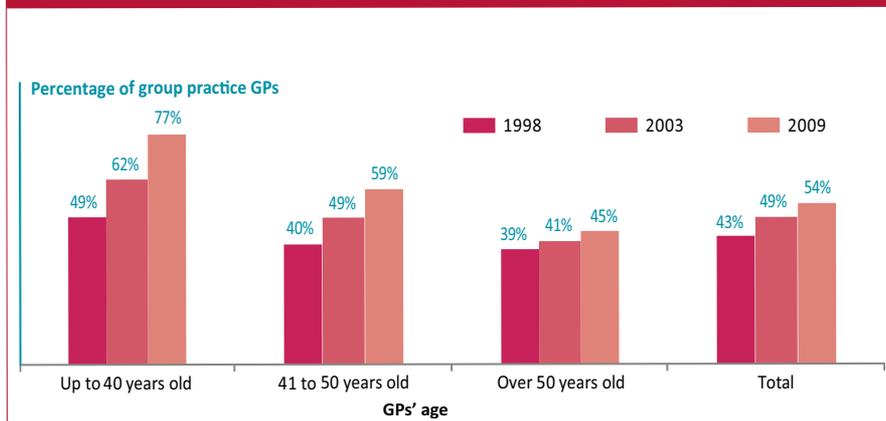
Source: 2009 GPs' Health Barometer survey, Inpes. Exploitation: Irdes.

In 2009, three quarters of group practice GPs worked in practices comprised of 2 or 3 medical practitioners

Three quarters of group practice GPs declare working in a physician group practice composed exclusively of either GPs or specialists. These group practices are small: almost half count only two medical practitioners and barely 10% over 4 (graph 2). Younger doctors, however, show a greater preference than their older colleagues for working in larger group practices.

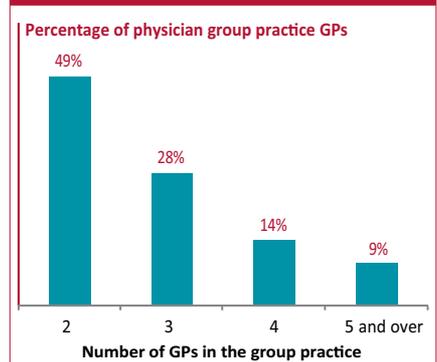
The remaining quarter of group practice GPs work in a multi-disciplinary group practice (at least one paramedical professional) of extremely variable sizes: with the exception of the few practices comprising two health professionals, no discernable trend in the number of health

G1 Evolution of group practice rates among sector 1 private general practitioners between 1998 and 2009



Source: General Practitioners' Health Barometer, 2009, INPES. Exploitation: IRDES.

G2 Distribution of sector 1 private general practitioners working in a physician group practice in 2009 according to group practice size



Source: General Practitioners' Health Barometer, 2009, INPES. Exploitation: IRDES.

professionals can be distinguished (graph 3). The distribution between doctors and paramedical professionals equally fluctuates. Respondent GPs described 59 different combinations of which only three represented over 5% of current multidisciplinary group practices: two doctors

and a paramedical professional (11%), two doctors and two paramedical professionals (9%) and three doctors and two paramedical professionals (6%). Contrary to observations concerning physician group practices, the size of multidisciplinary practice preferred by younger doc-

tors is equivalent to that of their older colleagues¹.

¹ This observation based on a limited sample base should be interpreted with caution.

METHOD

A group practice is defined by the presence of at least two health professionals on the same, shared premises, whatever its legal status. A 'physician group practice' will refer to a group of medical practitioners and a 'multidisciplinary group practice' will refer to a group practice combining medical practitioners and paramedical professionals.

The results presented concern private general practitioners in sector 1 whether or not they practice alternative medicine such as homeopathy or acupuncture. Group practice among general practitioners in sector 2 was not studied due to their low numbers in France. For simplification purposes, the term 'general practitioner' is used throughout the text without reference to a specific sector of activity.

To study the evolution of group practices, the percentage of group practice GPs was calculated after weighting adjustment. It involved eliminating bias eventually introduced through the survey process. This adjustment process was carried out each year and based on Snir (Cnamts) data on the distribution of GPs by gender, age, region of practice and sector of activity. The group

practice rates obtained before and after weighting adjustments were extremely close. Weighting adjustments were not used for analyses based exclusively on 2009 survey data.

The relationships between GP characteristics and the preference for group practice were analysed for the 2009 survey by creating a logistic regression model in which the variable to be explained was working in a group practice as opposed to a solo-practice (table 1). Explanatory factors introduced into this model are GP characteristics that may have influenced the choice of working in a group practice (or not) but that are not a priori modified by the fact of working in a group practice: GP's gender and age, region of practice, agglomeration size and mode of practice (practice of alternative medicine at different degrees). The study of the relationships between factors relating to work organisation obtained in the questionnaire and group practice was effectuated by constructing several logistic regression models in which group practice is one of the explanatory factors (table 2). This time, it involved studying the factors on which group practice could have an 'influence'.

General characteristics of the sector 1 private GP sample

| | Number | Percentage |
|---|--------------|------------|
| Sexe | | |
| Male | 1,282 | 69.1 |
| Female | 573 | 30.9 |
| Age | | |
| Up to 40 years old | 292 | 15.7 |
| 41 to 50 years old | 622 | 33.5 |
| Over 50 years old | 941 | 50.7 |
| Agglomeration | | |
| Less than 2,000 inhabitants | 398 | 21.5 |
| From 2,000 to 20,000 inhabitants | 411 | 22.2 |
| From 20,000 to 100,000 inhabitants | 245 | 13.2 |
| Over 100,000 inhabitants | 616 | 33.2 |
| Paris urban agglomeration | 185 | 10.0 |
| Practice of alternative medicine | | |
| Systematically or regularly | 54 | 2.9 |
| Regularly | 311 | 16.8 |
| Occasionally | 862 | 46.5 |
| Never | 627 | 33.8 |
| No response | 1 | 0.1 |
| Region of practice (division by telephone directory regions) | | |
| Ile-de-France | 216 | 11.6 |
| North West | 335 | 18.1 |
| North East | 461 | 24.9 |
| South East | 554 | 29.9 |
| South West | 289 | 15.6 |
| Type of practice | | |
| Solo | 844 | 45.5 |
| Group, of which | 1,007 | 54.3 |
| 'Physicians only' group | 742 | 40.0 |
| Multidisciplinary group | 265 | 14.3 |
| No response | 4 | 0.2 |
| Sample size | 1,855 | |

Source: General Practitioners' Health Barometer, 2009, INPES. Exploitation: Irdes.

Group practice GPs proportionally younger in 2009

The study of group practice GP characteristics in 2009 reveals a marked, progressive generational component: new generations of GPs work increasingly in group practices (table 1). Moreover, GPs established in the west of France and in agglomerations of over 2,000 inhabitants have a higher probability of working in a group practice, all other factors being equal. The higher proportion of female group practice GPs can be explained by the higher percentage of women among younger generation GPs. After adjustment, there is no apparent relationship between gender or the practice of alternative medicine and the probability of working in a group practice.

Using the same characteristics variables, a comparison between ‘physicians only’ and multidisciplinary group practice GPs reveals few differences; notably that, like their older colleagues, GPs aged below 40 continue to prefer working in physician group practices. Women GPs, however, show a marked preference for physician group practices. In effect, almost eight out of ten women GPs work in a physician group practice against seven in ten men. This effect persists after adjusting for

T1 Characteristics of sector 1 private GPs working in a group practice in 2009

| | Number of observations | Raw percentages (chi- test 2) ^a | Adjusted Odds ratios |
|--|------------------------|--|----------------------|
| Sexe | | | |
| Male | 1,277 | 51.2 | Ref. |
| Female | 573 | 61.6 *** | 1.2 |
| Age | | | |
| Over 50 years old | 936 | 44.5 | Ref. |
| From 41 to 50 years old | 622 | 58.5 *** | 1.7 *** |
| Up to 40 years old | 292 | 77.4 *** | 4.2 *** |
| Region of practice | | | |
| Ile-de-France and East | 1,229 | 50.7 | Ref. |
| West | 621 | 61.7 *** | 1.7 *** |
| Agglomeration | | | |
| Less than 2,000 inhabitants | 397 | 48.4 | Ref. |
| Over 2,000 inhabitants | 1,453 | 56.1 ** | 1.4 ** |
| Practice of an alternative medicine | | | |
| Never | 625 | 52.3 | Ref. |
| Occasionally | 862 | 54.2 | 0.9 |
| Systematically or regularly | 363 | 55.8 | 0.8 |
| Sample size | 1,850 ^b | | |

^a Significance threshold: * p<0,05 ; ** p<0,01 ; *** p<0,001.

^b of which 1,006 GPs working in group practices and 844 in individual surgeries.

Reading guide: for the adjusted odds ratios column, an odds ratio expresses the effect of a variable on the probability of working in a group practice, for example the fact of being young in relation to a factor of reference (being aged over 50). The meaning of the relationship is measured by comparing the value of the odds ratio to 1. As it is superior to 1, the fact of being aged 40 or below increases the probability of working in a group practice in relation to being aged over 50; this increase is significant. The odds ratio is adjusted as the measure of the effect of age on the probability of working in a group practice is corrected from the effects of the other characteristics.

Source: General Practitioners’ Health Barometer 2009, INPES. **Exploitation:** IRDES.

the effect of age, region of practice, size of agglomeration and the practice of alternative medicine.

Weekly activity is identical but distributed differently, except for GPs working in multidisciplinary group practices

G3

Distribution of sector 1 private general practitioners working in a multidisciplinary group practice in 2009 according to group practice size



Source: General Practitioners’ Health Barometer, 2009, INPES. **Exploitation:** IRDES.

Group practice GPs organise their activity differently on several points (table 2). They declare working fewer days per week but carry out a higher average of procedures per day. The relationship between type of practice and volume of activity is, however, negated when calculated on a weekly rather than a daily basis. Group practice GPs thus distinguish themselves from solo-practitioners by a different work time organisation.

Furthermore, 52% of multidisciplinary group practice GPs declare an average of over 25 procedures per working day against 38% of doctors in ‘physician only’ group practices for an equivalent number of days worked. Their weekly volume of activity is thus

T2

Relationship between volume of activity, training and group practice among private sector 1 GPs in 2009

| | Number | Raw percentage (chi-test-2) ^a | Adjusted odds ratios ^{a, b} |
|--|--------|--|--------------------------------------|
| Volume of activity | | | |
| <i>Less than 5 days/week in the surgery</i> | | | |
| <i>Solo practice</i> | 1,802 | 27.5 | <i>Ref.</i> |
| Group practice | | 53.9 *** | 2.6 *** |
| <i>Over 25 acts per day on average</i> | | | |
| <i>Solo practice</i> | 1,802 | 32.0 | <i>Ref.</i> |
| Group practice | | 42.0 *** | 1.7 *** |
| <i>Over 135 acts per week on average</i> | | | |
| <i>Cabinet individuel</i> | 1,795 | 34.6 | <i>Ref.</i> |
| Cabinet de groupe | | 30.9 | 1.0 |
| <i>Other medical activity practiced outside the surgery</i> | | | |
| <i>Solo practice</i> | 1,802 | 36.4 | <i>Ref.</i> |
| Group practice | | 33.1 | 1.0 |
| Informatisation du cabinet | | | |
| <i>Use of computerised patient files</i> | | | |
| <i>Solo practice</i> | 1,802 | 74.0 | <i>Ref.</i> |
| Group practice | | 84.3 *** | 1.6 ** |
| Training | | | |
| <i>Trainer or vocational training course professor</i> | | | |
| <i>Solo practice</i> | 1,802 | 16.8 | <i>Ref.</i> |
| Group practice | | 21.7 ** | 1.5 ** |
| <i>Having obtained an evaluation of professional practices (EPP) over the last twelve months</i> | | | |
| <i>Solo practice</i> | 1,789 | 35.9 | <i>Ref.</i> |
| Group practice | | 41.6 * | 1.3 * |
| <i>At least ½ a days continuing medical education (FMC) outside EPP over the last 12 months</i> | | | |
| <i>Solo practice</i> | 1,750 | 80.6 | <i>Ref.</i> |
| Group practice | | 87.9 *** | 1.7 *** |
| <i>Participation in a health education training course</i> | | | |
| <i>Solo practice</i> | 1,793 | 46.2 | <i>Ref.</i> |
| Group practice | | 54.4 ** | 1.4 ** |

^a Significance threshold: * p<0,05 ; ** p<0,01 ; *** p<0,001.

^b Adjustment by gender, age, practice of alternative medical practice, average number of medical acts per day (except if factor explained), number of days worked (except if factor explained), region of practice and agglomeration size.

Reading guide: each line of the table corresponds to a logistic regression. The odds ratios indicate the effect of working in a group practice in comparison with solo practice on one variable, for example the probability of working less than 5 days per week in a private practice. The meaning of the relationship is measured by comparing the odds ratio value to 1. As it is superior to 1, the fact of working in a group practice increases the probability of working less than 5 days per week; this increase is significant. The odds ratio is adjusted as the measure of group practice on the probability of working less than 5 days per week is corrected from the effects of other GP characteristics.

Source: General Practitioners' Health Barometer, 2009, INPES. **Exploitation:** Irdes.

BACKGROUND

At the time of the 2009 General Practitioners' Health Barometer survey conducted by the National Institute of Health Prevention and Education (INPES) among a representative national sample of general practitioners, INPE and IRDES collaborated within the framework of the Prospere¹ research project to evaluate group practice trends, its characteristics and evolution among sector 1 GPs on the basis of three barometer surveys conducted in 1998², 2003³ and 2009. A chapter on group practice trends from which this article has been extracted will be published in the *Baromètre santé médecins généralistes 2009* publication (INPES, end of 2010). The chapter will deal with an aspect of group practice not dealt with here; the influence of group practice on the opinions and attitudes of patient health education and prevention.

¹ <http://www.irdes.fr/Prospere/index.htm>

² *Baromètre santé médecins généralistes. Press review on the INPES web site:* <http://www.inpes.sante.fr/70000/dp/00/dp000119.pdf>

³ *Baromètre santé médecins/pharmaciens/ supervised by Arnaud Gautier. Paris, ed. INPES, 2003, on the INPES:* <http://www.inpes.sante.fr/CFESBases/catalogue/pdf/793.pdf>

Group practice GPs devote more time to training and are more likely to use computerised patient files

Even if group practice GPs work on average fewer days per week, they are not more numerous to declare participating in other medical activities (table 2). They are, however, more involved in training activities either as teachers or for personal advancement within the framework of continuing medical education or the evaluation of professional practices. This trend is confirmed when the question concerning training in health education or therapeutic education is broached. Other than the fact that group practice GPs may be more interested in this type of training, it is possible that some of the time gained in working fewer hours has been devoted to personal training activities.

Finally, group practice GPs more often declare using computerised patient files. We cannot for as much confirm a greater or lesser degree of file sharing as this information was not available from the survey.

* * *

different: the percentage of GPs declaring a high average weekly activity (over 135 acts) is greater among doctors working in

multidisciplinary group practices (41% *vs.* 27%). These results remain the same after adjustment.

To conclude, this study confirms the growing trend towards group practice that is now in the majority, more particularly

among young GPs. It equally allows us to estimate the impact of group practice on work organisation. Our definition of group practice is nevertheless limited to a description of size and composition. In addition, we are unable to assess the impacts of group practice on medical practice or access to care. Over the last few years, following the initiative of a certain number of health professionals supported by regional and national health authorities, group practice, and more particularly multidisciplinary group practice, has been encouraged. Our results show that health policy, among which the Hospital, Patients, Health and Territories Act (HPST), can base itself on young GPs

preferences for group practice to reorganise ambulatory care. If GPs tend to prefer working in general medicine group practices, the conditions of multidisciplinary group practice need to be defined in order to guarantee access to a wide range of ambulatory care services and their better distribution throughout the territory. Leverage for this policy could be achieved through supporting the creation of research and training centres in general medicine and primary care as is already the case in certain regions. These centres would notably enable the reception of house physicians in general medicine whose future numbers will increase as the *numerus clausus* has been doubled since 1998.

GLOSSARY

- **[INPES] National Institute for Health Prevention and Education:** [INPES] Institut national de prévention et d'éducation pour la santé
- **General Practitioners' Health Barometer:** Baromètre santé médecins généralistes
- **Group practice:** pratique de groupe
- **'Physician (only)' group practice:** groupe médical
- **Multidisciplinary group practice:** groupe pluriprofessionnel
- **Solo practice:** pratique individuelle/solo
- **Group practice:** pratique de groupe
- **Continuing medical education:** [FMC] Formation médicale continue

FURTHER INFORMATION

- Arrêté du 23 mars 2007 portant approbation de l'avenant n° 20 à la convention nationale des médecins généralistes et des médecins spécialistes. Journal Officiel, 28 mars 2007a : p. 5797.
- Article 44 de la Loi n° 2007-1786 du 19 décembre 2007 de financement de la Sécurité sociale pour 2008. Journal Officiel, 21 décembre 2007b : p. 20603
- Audric S. (2004). « L'exercice en groupe des médecins libéraux ». Drees, *Études et Résultats*, n° 314 : 12 p.
- Aulagnier M., Obadia Y., Paraponaris A., Saliba-Serre B., Ventelou B., Verger P. (2007). « L'exercice de la médecine générale libérale. Premiers résultats d'un panel dans cinq régions françaises ». Drees, *Études et Résultats*, n° 610 : 8 p.
- Baudier F., Thomas T. dir. (2009). « Les maisons de santé : une solution d'avenir ? ». *Santé Publique*, vol. 21, suppl. n° 4 : 111 p.
- Beauté J., Bourgueil Y., Mousquès J. (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 ». Irdes, Document de travail, n° 5 : 28 p.
- Bourgueil Y., Clément M-C., Couralet P-E., Mousquès J., Pierre A. (2009). « Une évaluation exploratoire des maisons de santé pluridisciplinaires de Franche-Comté et de Bourgogne ». Irdes, *Questions d'économie de la santé*, n° 147 : 8 p.
- Bourgueil Y., Mousquès J., Marek A. « La pratique collective en soins primaires dans six pays européens, en Ontario et au Québec : état des lieux et perspectives dans le contexte français ». *Santé Publique*, 2009, vol. 21, suppl. n° 4 : p. 27-38.
- Délégation interministérielle à l'aménagement du territoire et à l'attractivité régionale (2010). Compte rendu du Comité interministériel d'aménagement et de développement du territoire et d'attractivité régionale, 11 mai : 44 p.
- Juilhard J.M., Crochemore B., Toubia A., Vallancien G., Chambaud L., Schaezel F. (2010). *Le bilan des maisons et pôles de santé et les propositions pour leur déploiement*. Paris : La Documentation Française, 2010 : 52 p.

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