

Organization and Reform of Primary Care in France

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Recours)

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- 1 – History and background
 - 2 – Primary care organization in France : trends and levers
 - 3 – Reforms: networks, referring doctor/preferred doctor scheme
 - 4 – Toward primary healthcare system
 - 5 – Payment scheme reforms, team work

1 – History and background

- Agreement about definition of « Libérale » medicine in 1927
 - Freedom to settle, freedom of choice by patient, freedom of prescription, payment by fee for service, direct payment, freedom of fee.
- Introduction of universal coverage insurance in 1946
 - Insurees instead of inhabitants and shared governance between trade unions and shareholders
 - Mandatory Health insurance (Social security contributions of employees and employers, Complementary funds from taxation, Universal health insurance scheme since 2000)
- Wit supplementary insurance (90% of population)
 - To cover co-payment extra fee for specialists (Private and mutual (for non profit) insurance)

1 – History and background

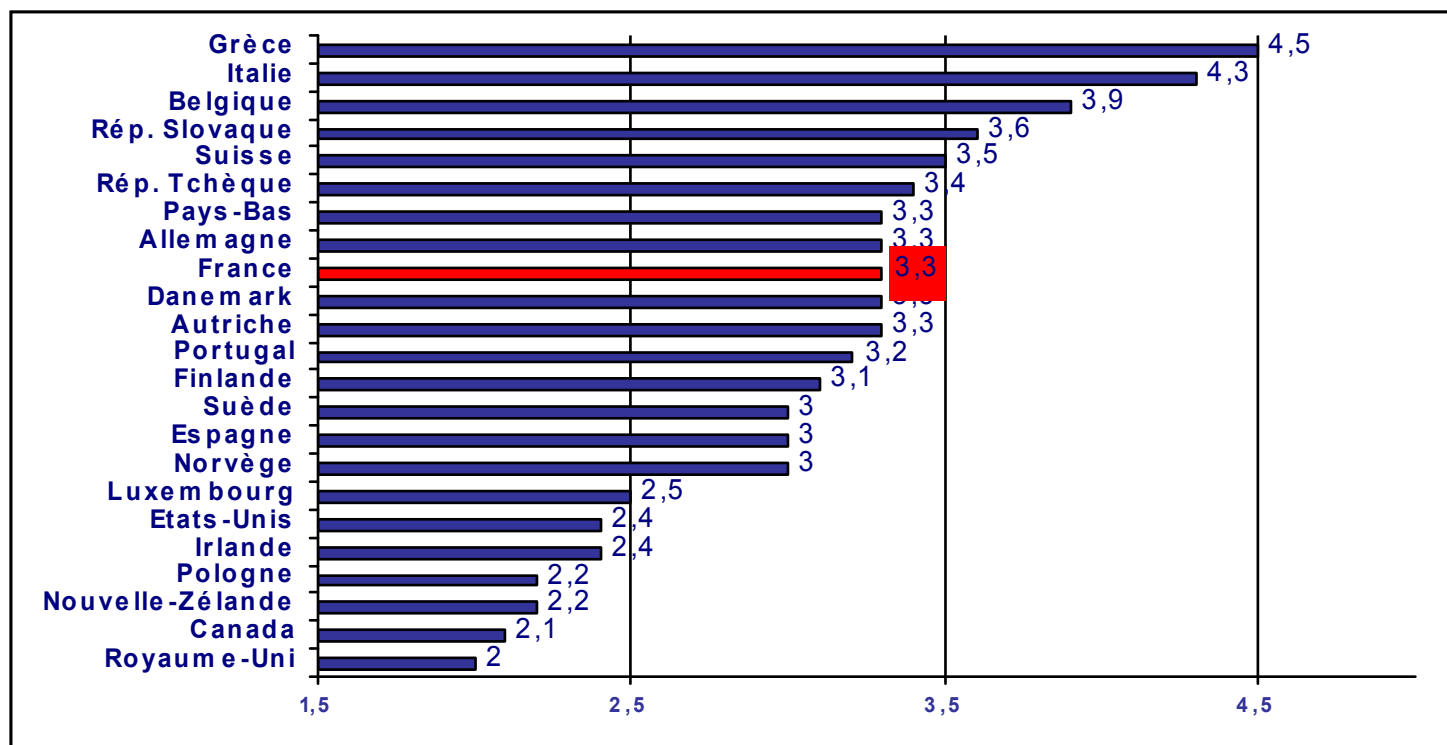
- Debré reform en 1958
 - Academic Hospitals and it's medical hierarchy (flexner 1910)
- Delivery of health care : public/private mix
 - Ambulatory sector : private office-based practices (Gp Practice and specialists),
 - Hospital sector : public hospitals (doctors are salaried) private hospitals (doctors are paid by fee for services)
- Abundant medical supply in ambulatory care
 - Diversified, concurrence, no formal coordination , many institutions

Ambulatory care in France : many professionals and actors in primary care

- **One single obligatory social insurance** which reimburse 70 % of fees and lot of complementary insurances (for profit and for non profit)
- **Private practices** : 60 000 GP's (majority (54%) in group practices), 60 000 specialist (large part in private hospitals), 57 000 nurses, 40 500 dentists, 14 400 midwives, 4000 laboratories, 40 000 physiotherapist (self-employed paid on a fee for service basis almost exclusively).
- **Primary care organizations for specific problems or populations**
- **High level of resources and expense**
 - High health professional density (3,4 MD per 1,000)
 - 10,4% of GDP, second position in Europe
- **Results** : Equitable access, high quality but efficiency...

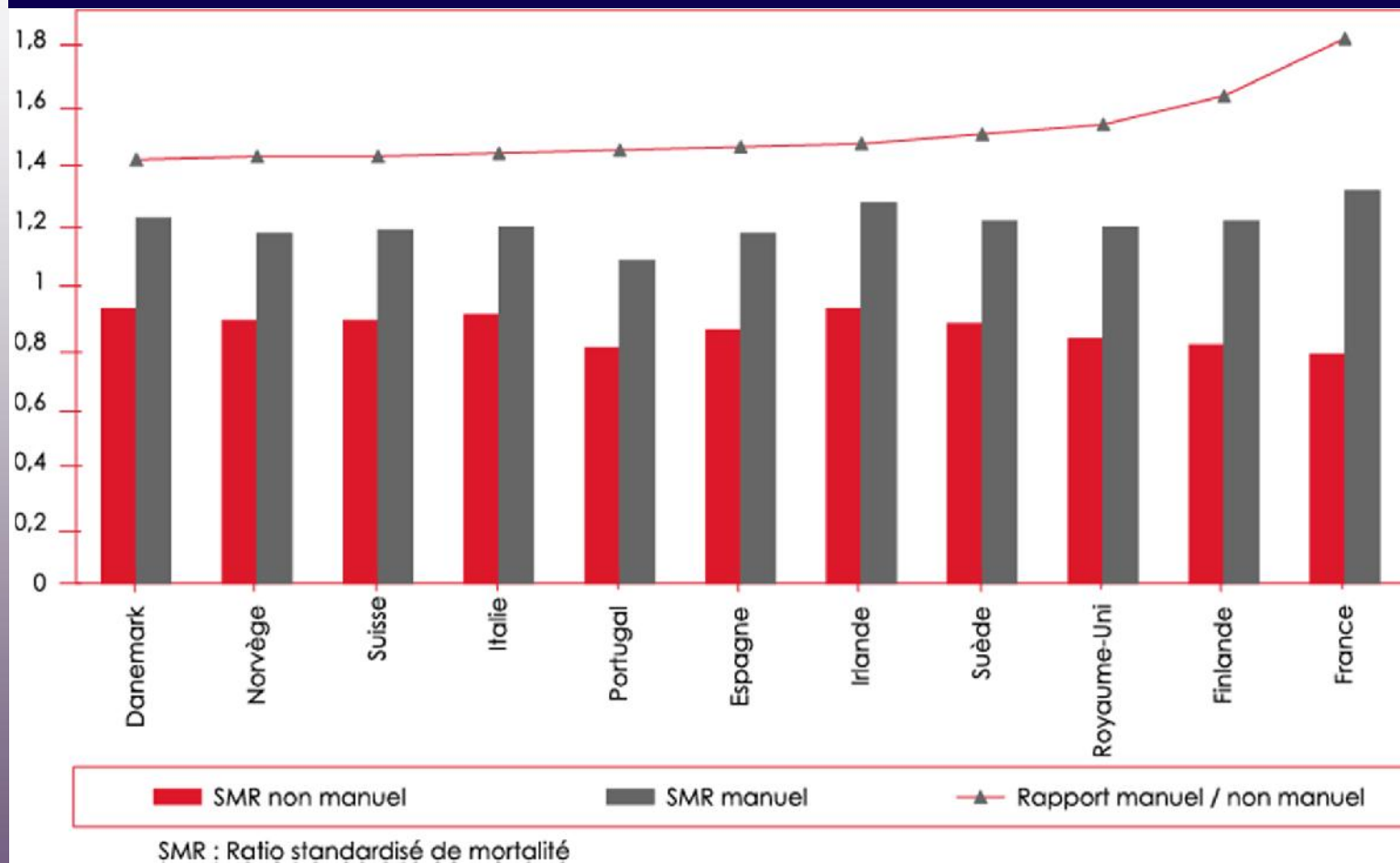
France has a high medical density compared to other OECD Countries

Medical density in OECD countries - 2001



Source : Ecos Sante – OECD - 2004

Comparative ratio of prematurity mortality of manual and non manual workers in different european countries

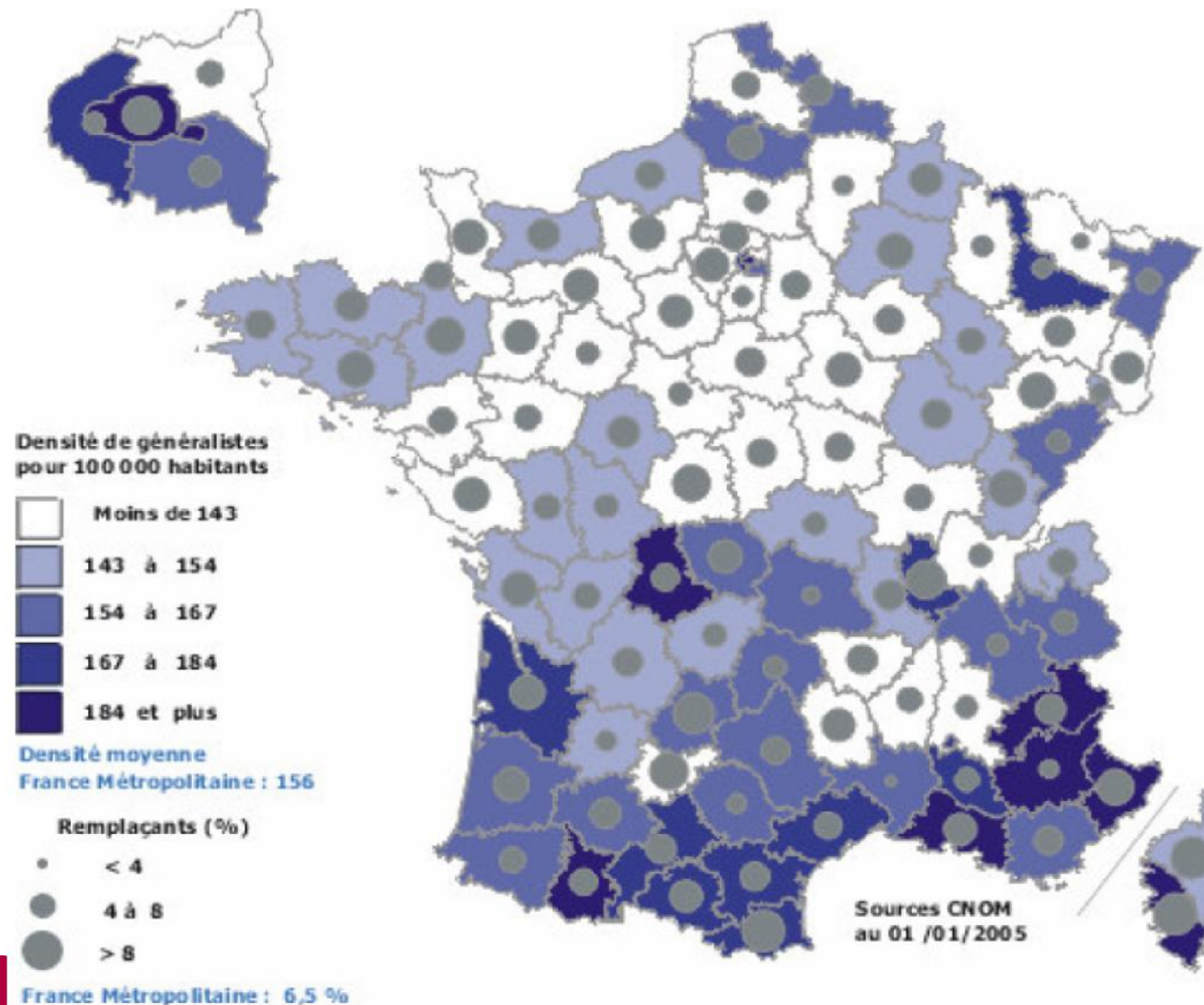


But inequalities : 50% more GP per 100 000 inhabitants in South of France than in North

Density of
active
doctors

Source :
Conseil
National de
l'Ordre des
Médecins

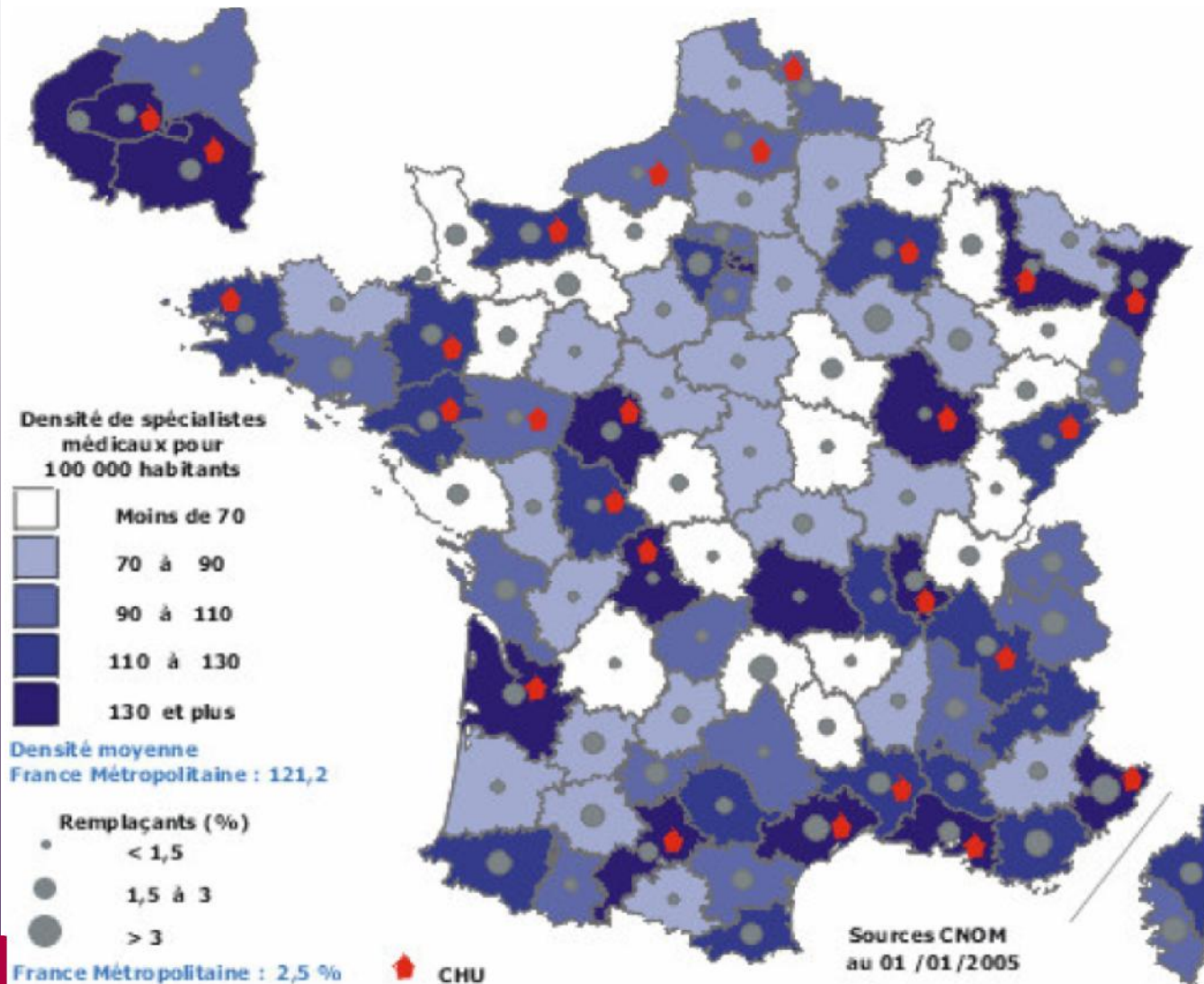
23/05/2011



More than 100% difference of specialists density between regions

The highest density in cities with AHC (in red)

Source :
Conseil
National de
l'Ordre des
Médecins



Coordination mainly informal is lacking

- Professionals : free to settle, solo practice, continuity based on trust
- Municipalities, counties : Home care, prevention, prenatal care, health care centre
- Regional authorities and hospitals : mental care, emergencies..
- Medical schools (university – ministry of education) : training of GP's in hospitals
- No integration of institutions : no incentive for continuity
- No common Information system : weak informational continuity
- No function of coordinators or culture in management : no managerial continuity
- Maybe good but not sustainable with new challenges

Example of emergencies and out of hours

- Traditionally many actors in competition (hospital and emergency units, SAMU – C15, firemen and general emergencies, out of hours doctors SOS 15, local organization of GP's)
- Continue increase of admission in hospital emergency units
- Abandon of GP from out of hours
- Policy at the county (department) level in 2005
 - List of out of hours GP's by doctors body and requisition by state representative, Regulation by GP's beside "emergency" regulation
 - Out of hours houses for GP's, Specific payments by Insurance fund (20h until 00h and from 00 until 8h00)
- Evaluation in 2007
 - Less effective, non reliable, expensive, not clear for users, Proposition of unique leadership (finance and authority), An issue of integration of institutions

2 - Trends and levers

- Epidemiology and cost of chronic diseases
- Human Resource for Health “Crisis”
- Regionalization of governance
- Weak organizational culture in professional culture

Weight of chronic diseases

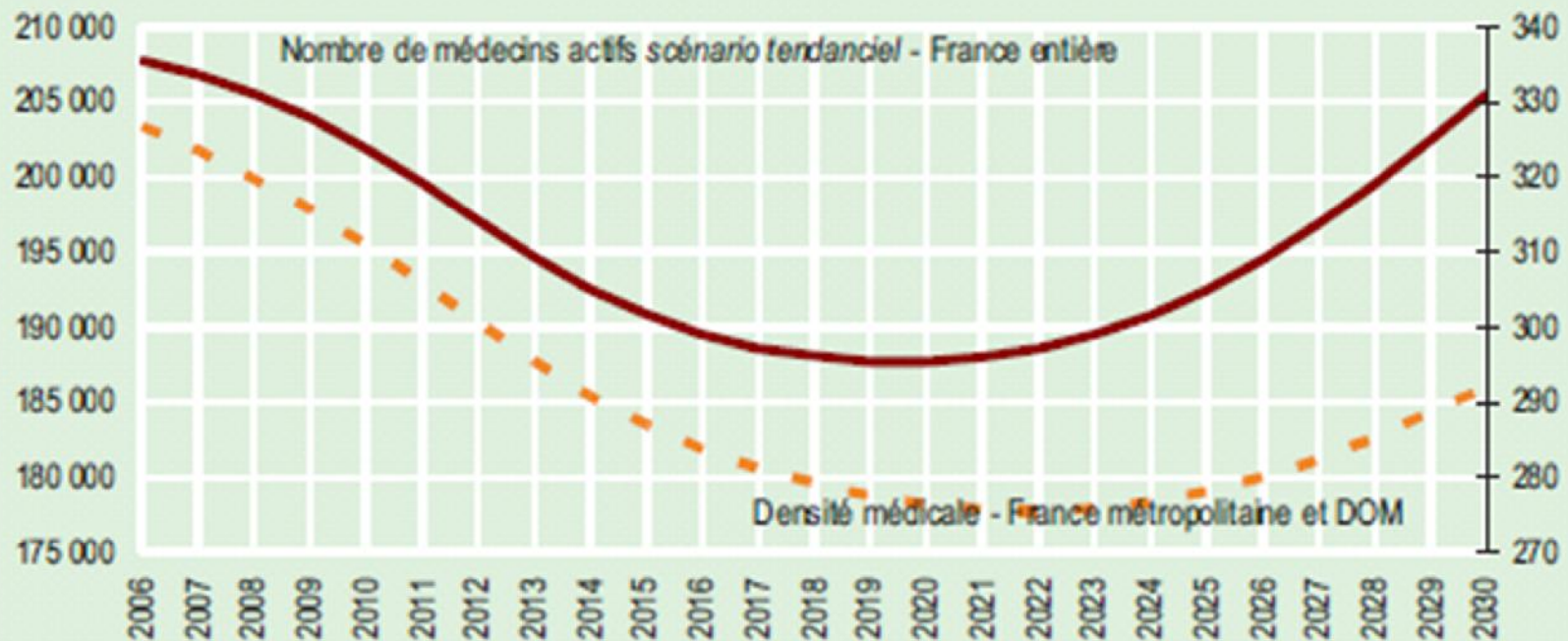
- 30 long terms diseases (ALD) concern 13% of insures and represent 60% of total expenses of national fund
- Increase 73,5% persons in long term disease status between 1999 et 2004. Hypothesis of 10 Millions in LGTD 2010 (source HCAAM juillet 2006)
- Financial issue : cardiovascular diseases, cancer, mental diseases and diabetis : from administrative reimbursement to managed follow up
- Recommandations by Haute Autorité de Santé (list of reimbursed acts, doctor guide, patient guide)
- Couselling, therapeutic education (source reco HAS mai 2006)

**Repartition of expenditures for pour les 30 ALD – source –
N. Vallier et al - Points de repères octobre 2006, n° 3; CNAMTS.**

Public and private hospitalisation	57,8 %
drugs	20 %
Fee of physicians (out hospitalisation)	5,7 %
Nursing care	4,4%
Medical devices	3,8 %
Transports	3,1 %
Rehabilitation	1,9 %
Biology	1,7 %

Future decrease of MD for ten years and increase of population

Nombre et densité de médecins en activité d'après le scénario tendanciel



Champ • Médecins en activité régulière ou remplaçants, hors médecins en cessation temporaire d'activité, France entière.

Sources • Fichier du Conseil national de l'Ordre des médecins pour l'année 2006 (traitement DREES), projections DREES.

Source : Etudes et Résultats DREES n°679 – février 2009

Main features of healthcare professional regulation in France

- **Education and training**

- Medical studies are free of charge (10 years to become a GP, 12 years to become specialist)
- Public medical schools in CHU (Academic Health Centers)
- Minimum of one per region (France is divided in 22 regions)

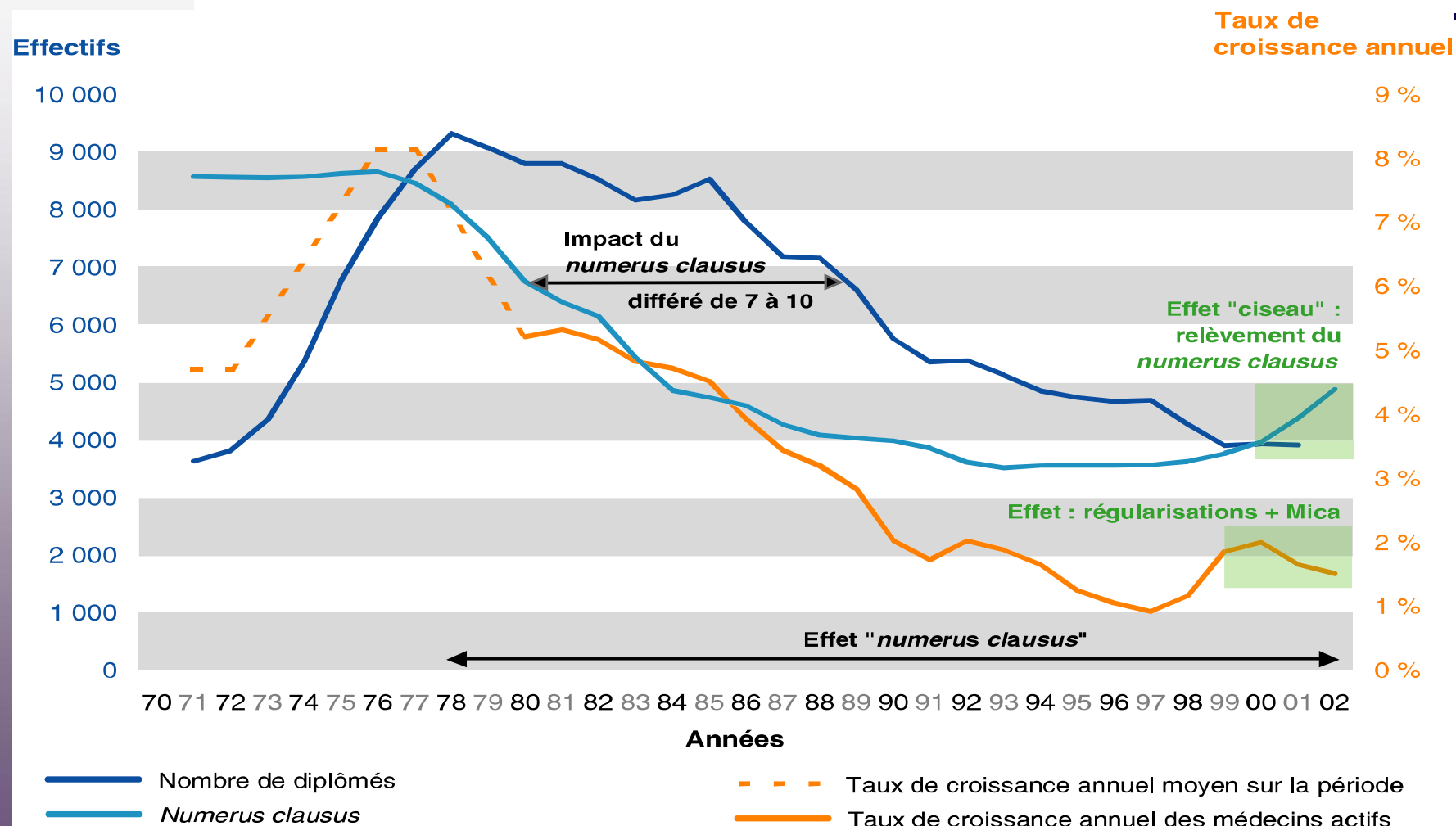
- **Two main tools of medical regulation**

- *Numerus clausus* : limitation of global number of medical students allowed to remain in medicine (selection after first year of medical studies) – Centralized decision of health ministry - 1979
- Limitation of access to specialty : national examination and choice of region and specialty depending the ranking - 1981

- **No limitation to install private practice in ambulatory care**

- **Isolated and limited measure to promote early retirement** (end of 2000)

A conservative policy from 1979 to 1997 : reducing the *numerus clausus*



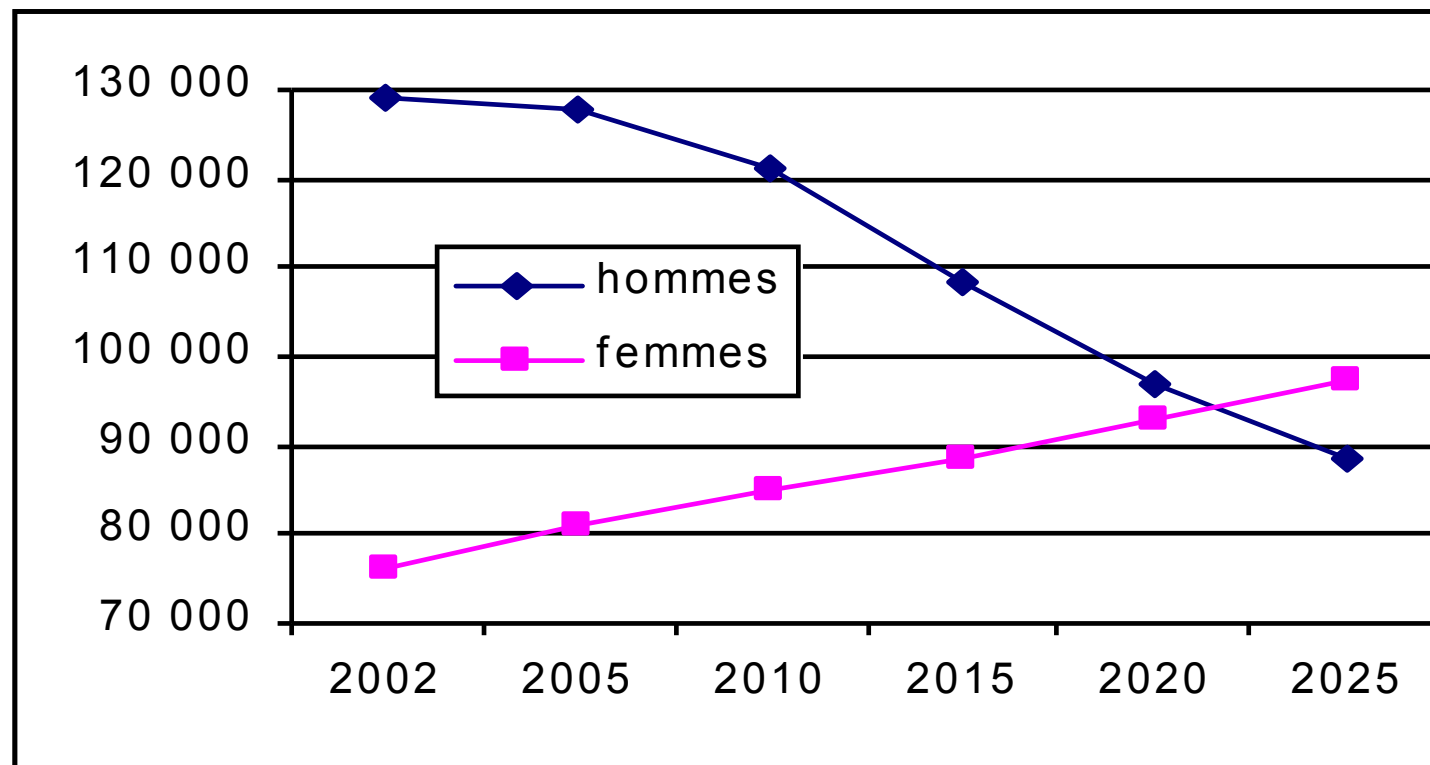
Source : CNOM 2003

Other factors influencing the medical workforce in France

- work legislation : introduction of 35 hour working week in France (in hospitals) and european working time directive
- Increasing feminisation medical profession
- Change of attitude towards work
 - group practice seems more attractive for the young doctors
 - Interest for less out of services hours and other organizations of work (networks)

Other factors influencing the medical workforce in France: feminisation

Modelisation of sex ratio of future doctors. More women than men in 2025



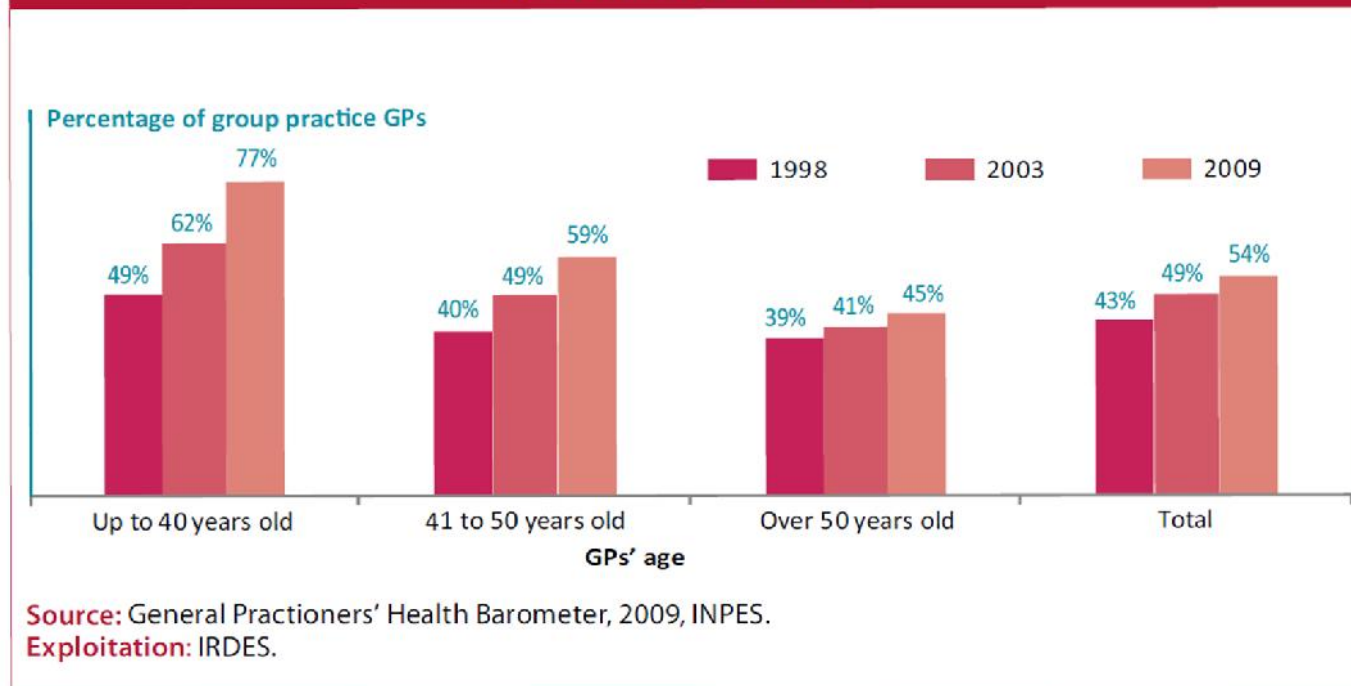
Source : DREES

The decline of the classic model of GP practice

- A minority of young doctors want to practice as GP's in a context of future MD's shortages, as independent paid by fee
- Traditional solo practice do not fit young doctors expectations

G1

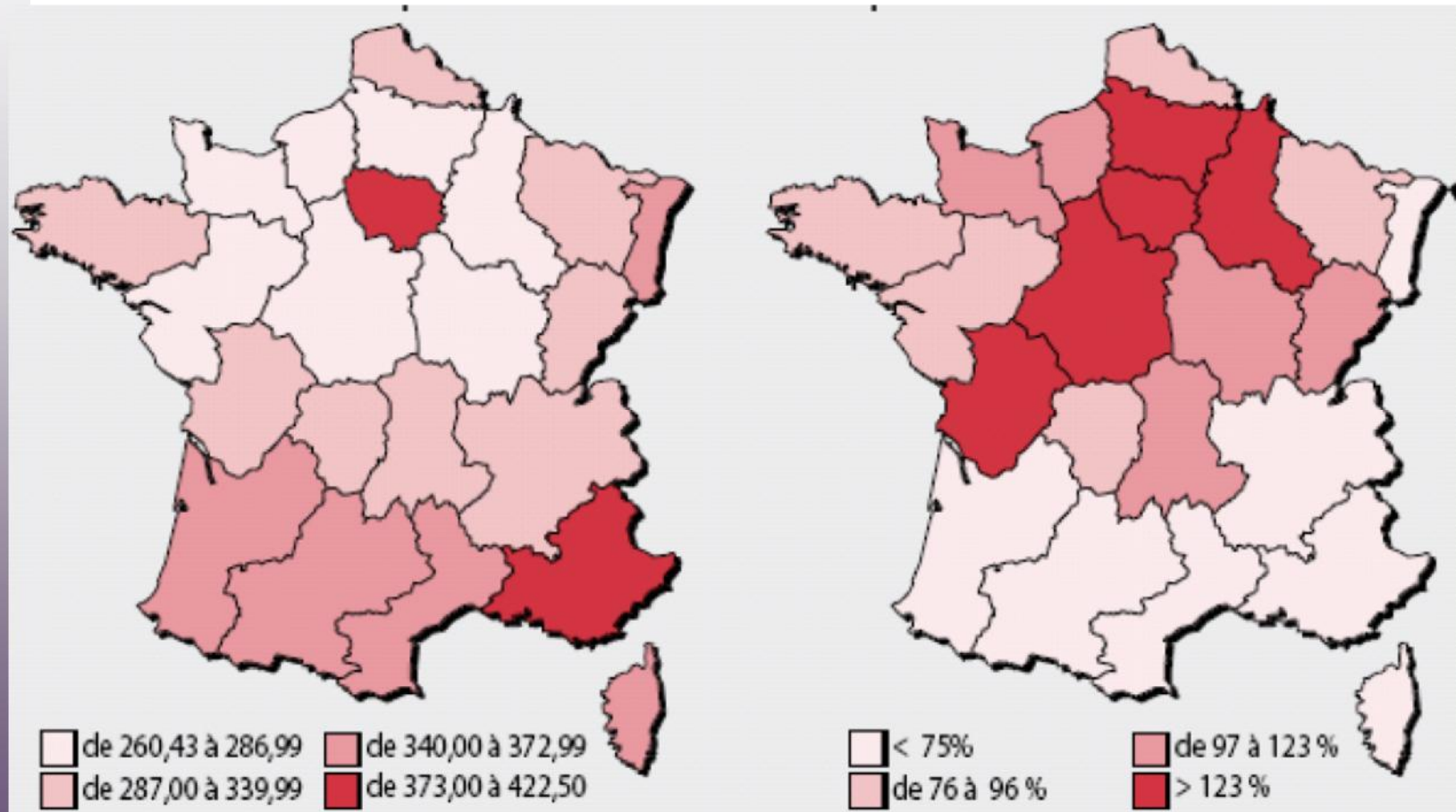
Evolution of group practice rates among sector 1 private general practitioners between 1998 and 2009



Effort to prevent mal distribution of medical work

- To increase *numerus clausus* in regions with low medical density
- Many financial incentives in medically deprived areas
 - Localities are allowed to give study allowance to medical students in exchange of practicing for a minimum period (5 years) or to provide financial aid to doctors who wish set up practice
 - Tax revenue rebate for doctors who participate to out of hours services
 - Higher remuneration of 20% per year given by health insurance funds for doctors who practice in group (minimum 2 physicians)

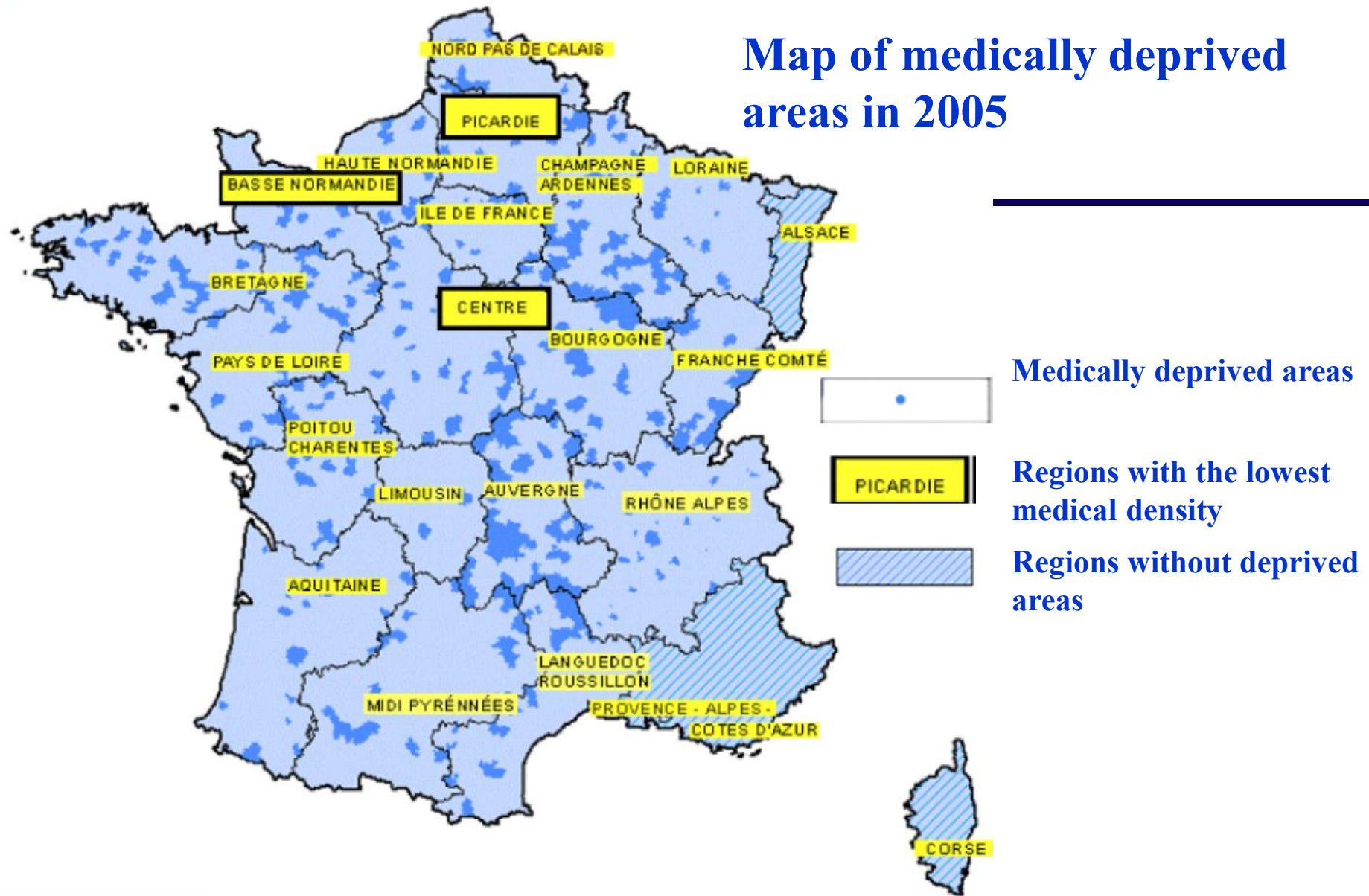
Regional medical density in 2005 (left) and increase of *numerus clausus* between 1997 and 2006 (right) : a corrective policy to reduce regional disparities



The medically deprived areas for GP's

- Two criteria to define an area
 - where medical density is 30% below the national average
 - where the per capita medical activity is 30% above the national average
- Definition after consultation with regional stakeholders
- Areas concern : 4,500 municipalities (12%), 1,600 GP's (3%) and 2,6 millions inhabitants (4%)

Map of medically deprived areas in 2005



3 - Reforms : incremental changes in primary care

- Many innovations in a fragmented and professional/patient driven ambulatory sector
 - Health care centres in 80's, Health care networks in 90's
 - « Referring doctor's » in 90's (value for gate keeping)
 - Médecin traitant in 2004 (preferred doctor scheme)
- So little changes
 - To keep : freedom of choice, freedom to settle a practice, fee for services, maintain social hierarchy of medicine
 - Médecin Traitant/ Preferred doctor's scheme
- Successive reforms to integrate state and national sicknessfunds at regional level
 - Achieved for hospital but for ambulatory care....

Reforms : 2009 Health Patient and territory Bill

- **Definition by law of « first contact care »**
 - prevention, detection, diagnosis, treatment, follow up
 - Drug delivery, products, pharmaceutical counselling
 - Circulation in healthcare and social system
 - Éduocounselling pour la santé
- **Definition of GP's**
 - prevention, detection, diagnosis, treatment, follow up
 - « coordination » of care
 - Guidelines implementation, medical synthesis, out of hours,
- **Recognition of GP's as a specialty 10 professor position's**
- **Increase of primary care trainees**
- **Recognition of skill mix practices**

Reforms : P4P, experimentation of payment for team's, planing of primary care

- Mix payment: P4P with « CAPI », sum lump for chronic patients (ALD)
- Team work:
 - Support of French Medical Home (maisons de santé pluriprofessionnelles) with investment funds
 - Experimentation of payment (medical homes, health care centers, local networks - 150)
 - Payment for coordination
 - Payment for counselling
 - Payment for skill mix ?
- Regional agenceie for health have to build schemes for primary care

The solution of « Maisons de Santé Pluridisciplinaires »

- Local initiatives in some regions mostly in rural areas with support of local authorities to maintain health workers
- An alternative to group all independent workers (GP's, nurses, physiotherapists....)
- National political support to develop multidisciplinary group practice:
 - National consultation in 2008 about primary care
 - Experiments for new models of payment
 - Health Patients Territory Bill passed in July 2009 and defined First Line Care and missions of GP's
- But: What is a MSP ? What efficacy ? What are the costs ?

Objectives of the Survey

- General :

- Specify practice in MSP compared to traditional GP practice – inflation costs ?

- Specific :

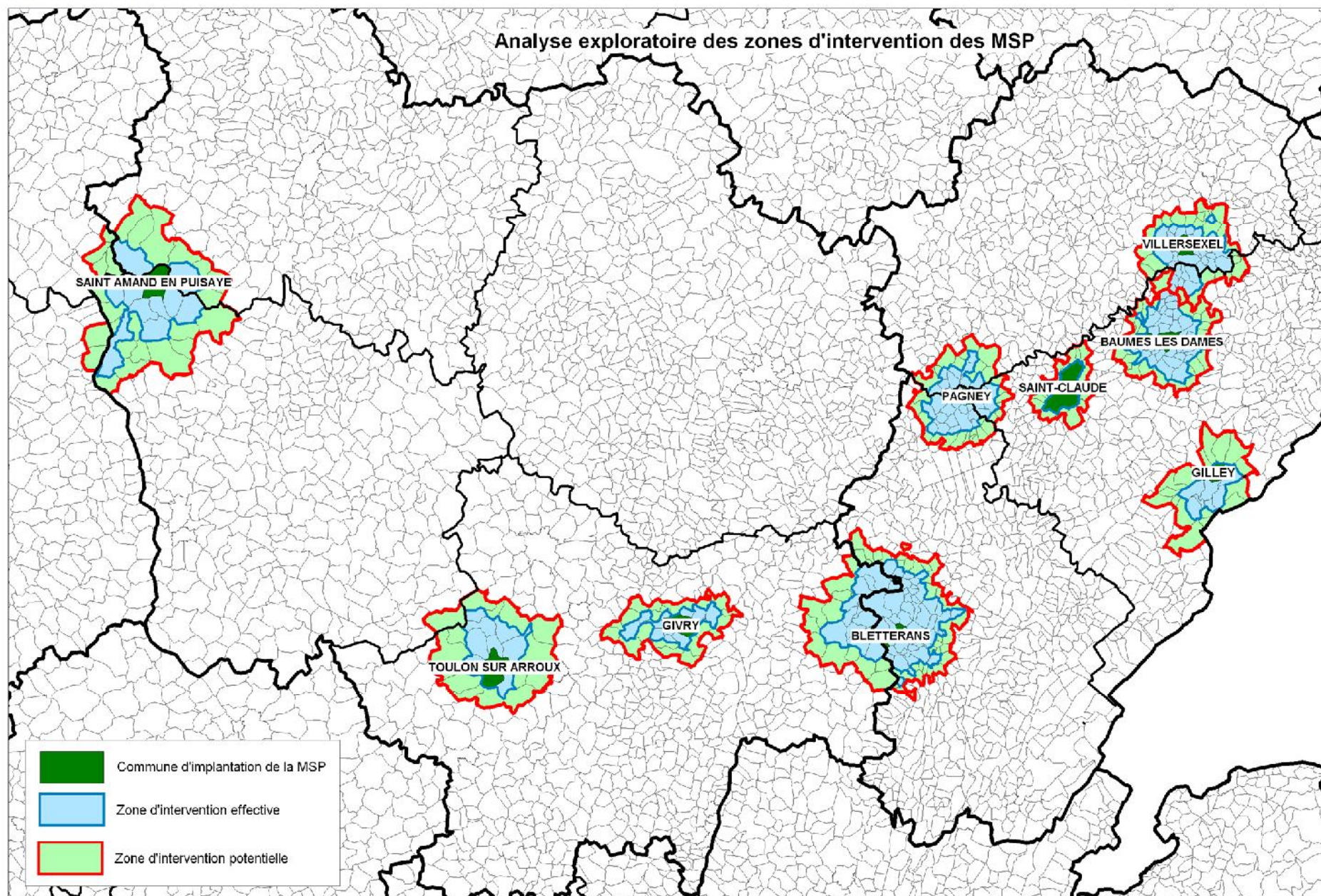
- To describe precisely MSP
- To assess activity and costs in MPS compared to solo practice
- To assess quality of care with claims data

Method and Material

- Focus on two regions of France (Bourgogne, Franche Comté) and sample of 9 MSP
- Inclusion criteria:
 - To have both GP and nurse in MSP
 - + third health profession
 - Opened since 31/12/2007
- Design : control case study
 - Local group control (Local Control Zone)
 - National group control (EPAS/EPIB)

Method and Material

- Health professional and structure survey
 - 3 questionnaire (Structure, MD, Allied professions)
 - Data collection in summer 2008, visits
- Activity analysis (MD's)
 - Descriptive statistical analysis: populations of patients, integration in MSP, acts (sources claims data 2007)
- Analysis of health consumption of patients and quality (claims data 2007 - patients)
 - Descriptive analysis, multivariate analysis (volume, costs)
 - Quality analysis (claims data limited to diabetes patients)



Data : cases and control groups

T1

Structure and care provision of maisons de santé pluridisciplinaires

MSP location zone	Sample**	Number of patients	Number of patients having declared a Preferred Doctor***	Number of GPs	Number of health professionals other than GPs	Number of nurses	Number of different health professionals	Surface area of MSP	Annual number of days worked		
									in a MSP	per 'MSP' GP	per 'LCZ' GP
Zone 1	MSP	9,636	4,096	9	3	2	3	400 m ²	303	196	-
	LCZ	10,3432	42,148	106	-	-	-	-	-	-	186
Zone 2	MSP	4,813	1,802	4	17	3	10	750 m ²	310	186	-
	LCZ	11,395	4,804	10	-	-	-	-	-	-	205
Zone 3	MSP	1,543	559	2	3	2	3	431 m ²	254	142	-
	LCZ	26,655	12,057	25	-	-	-	-	-	-	194
Zone 4	MSP	2,468	1,183	2	4	2	5	409 m ²	281	206	-
	LCZ	5,281	2,590	6	-	-	-	-	-	-	162
Zone 5	MSP	3,479	1,463	4	6	2	5	330 m ²	307	193	-
	LCZ	8,323	3,469	9	-	-	-	-	-	-	184
Zone 6	MSP	8,165	2,648	6	13	5	5	800 m ²	358	189	-
	LCZ	48,743	23,289	50	-	-	-	-	-	-	183
Zone 7	MSP	1,391	718	2	4	3	3	200 m ²	233	81	-
	LCZ	8,249	3,966	9	-	-	-	-	-	-	164
Zone 8	MSP	3,703	1,700	3	10	2	9	600 m ²	301	222	-
	LCZ	18,943	9,441	14	-	-	-	-	-	-	211
Zone 9	MSP	Data unavailable		5	6	2	4	443 m ²	Data unavailable		
	LCZ			-	-	-	-	-			
All zones combined*	MSP	35,198*	14,169*	32	60	21	11	-	293	177	-
	LCZ	231,021*	101,764*	229	-	-	-	-	-	-	186

* The totals do not include numbers for zone 9. ** MSP: multidisciplinary MSP; LCZ: local control zone.

*** See footnote 5 page 4.

Field: patients affiliated to the statutory health insurance scheme (SHIS) and local health insurance* divisions (mutual insurance companies who are authorized to act as the SHIS for local civil servants).

Study period: from January 1st 2007 to December 31st 2007, except for zone 3 (from March 1st 2007 to February 28th 2008) and zone 7 (from July 1st 2007 to June 30th 2008).

Data: Erasmus 2007-2008, Cnamts. **Exploitation:** Irdes.

Cases and Control Groups (LCZ – National Sample - EPAS)

	LCZ		MSP		Total		EPAS	
	N	%	N	%	N	%	N	%
na	253	0,25	41	0,29	294	0,26	1	0
female	58226	57,57	8121	57,44	66347	57,56	37006	54,13
male	42653	42,18	5977	42,27	48630	42,19	31361	45,87
Without LT disease	78812	77,93	10964	77,54	89776	77,88	57356	83,89
With LT Disease	22320	22,07	3175	22,46	25495	22,12	11012	16,11
Without Aid	93238	92,19	13416	94,89	106654	92,52	63252	92,52
With Aid	7894	7,81	723	5,11	8617	7,48	5116	7,48
Mean age	101132	50,79	14139	49,36	115271	50,61	68368	38,96
Without shortstay hospit	91409	90,39	12681	89,69	104090	90,3	/	/
With short stay H	9723	9,61	1458	10,31	11181	9,7	/	/
Without lonstay	88246	87,26	12240	86,57	100486	87,17	/	/
With longstay H	12886	12,74	1899	13,43	14785	12,83	/	/
Without hospit	81378	80,47	11199	79,21	92577	80,31	/	/
With hospit	19754	19,53	2940	20,79	22694	19,69	/	/

Results structure Survey (1)

- Medical project : Quality of care, better access, better conditions of work
- Many different juridical status : Mainly for buildings and loans
- History of projects
 - Old fashions multidisciplinary group practices in 70th (2)
 - Two models in 20th
 - Entrepreneurial MSP : professional ownership, more than 20 professionals, competition, comprehensive services (2)
 - Community subsidies, local authorities ownership, shortages area, little size (5)

Results structure Survey (2)

- Information system
 - 8/9 share electronic medical records between MDs, but not with others professionals
 - No use for population analysis and public health strategies
- Accessibility
 - Access for disable patients, no extra fee, larger opening hours (8h00 to 20, 6 days a week, and all year)
- Same activity but less working days for doctors
- Skill mix between nurse and MD's
 - mainly informal, no protocols for task transfer (lunch, per case, few training sessions)
- Integration : MD's share patient and medical records

Activity and substitution of GP's in MSP

T2

Activity of GPs practising in maisons de santé pluridisciplinaires (MSPs) or local control zones

MSP location zone	Sample*	Average annual number of GP's medical treatments per patient		Average number of patients per GP		Percentage of GPs' treatments carried out in MSPs or LCZs (A+B)	Percentage of acts carried out in an MSP by...	
		Per GP having been declared 'Preferred Doctor'***	per patient having declared a 'Preferred Doctor'	total	Having declared a 'Preferred Doctor'		The patient's 'Preferred Doctor' (A)	Another GP (B)
Zone 1	MSP	3.7	6.1	1,681	455	82	59	23
	LCZ	3.4	6.4	1,245	398	75	-	-
Zone 2	MSP	3.7	5.6	2,077	451	91	48	43
	LCZ	3.8	6.1	1,421	480	83	-	-
Zone 3	MSP	3.7	5.1	1,083	280	92	59	33
	LCZ	3.4	5.6	1,276	482	83	-	-
Zone 4	MSP	4.7	7	1,625	592	89	77	12
	LCZ	4.3	6.1	993	432	83	-	-
Zone 5	MSP	4.2	5.9	1,445	366	91	64	27
	LCZ	3.6	6.4	1,088	385	84	-	-
Zone 6	MSP	4.1	6.7	2,386	441	90	48	42
	LCZ	3.5	5.8	1,205	466	82	-	-
Zone 7	MSP	3.6	4.4	862	359	87	73	14
	LCZ	4.4	5.6	1,147	441	82	-	-
Zone 8	MSP	3.8	5.9	1,577	567	90	75	15
	LCZ	3.3	5.8	1,680	674	80	-	-
Zone 9	MSP	Data unavailable	Data unavailable	Data unavailable	Data unavailable	Data unavailable	Data unavailable	Data unavailable
	LCZ	Data unavailable	Data unavailable	Data unavailable	Data unavailable	Data unavailable	Data unavailable	Data unavailable
All zones combined**	MSP	-	6.0	1,592	443	88	60	28
	LCZ	-	6.1	1,257	444	79	-	-

* MSP: multidisciplinary MSP; LCZ: local control zone. ** The totals do not include numbers for zone 9.

Field: patients affiliated to the statutory health insurance scheme (SHIS*) and local health insurance divisions (mutual insurance companies who are authorized to act as the SHIS for local civil servants).

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Data: Erasmus 2007-2008, Cnamts. **Exploitation:** Irdes.

Ambulatory expenditures of patients is “higher” for MSP patients but lot of heterogeneity if zone/zone

T4

Effects of maisons de santé pluridisciplinaires (MSPs) on insured patients' total expenditures, general medicine expenditures, nursing and pharmacy

	Total ambulatory care expenditures	General medicine expenditures	Nursing care expenditures		Pharmacy expenditures	
	Analysis of consumers' expenditures	Analysis of consumers' expenditures	Analysis of care use	Analysis of consumers' expenditures	Analysis of care use	Analysis of consumers' expenditures
Model 1: test of global 'MSP' effect						
Marginal effects MSP vs LCZ ^a	2.0%*	2.2%**	9.0 pts***	-7.5%***	0.02 pt	-5%***
Reference ^b	377.0€	312.2€	36.2%	1,215.7€	98.8%	450.7€
Model type						
N	115,203	115,203	115,203	43,341	115,203	112,999
r ²	40%	26%	-	28%	-	42%
Pseudo-r ²	-	-	14%	-	8%	-
Model 2: test of 'MSP' effect by site location zone						
Marginal effect						
Zone 1: MSP vs LCZ	0.7%	-4.0%***	-2.2 pts**	-16.6%***	-0.1 pts	-5.5%**
Zone 2: MSP vs LCZ	4.2%	-3.7%	-4.4 pts**	-3.3%	0.2 pts	-17.0%***
Zone 3: MSP vs LCZ	2.3%	-1.1%	23.8 pts***	-18.0%	0.5 pts	4.8%
Zone 4: MSP vs LCZ	9.3%**	6.5%*	5.5 pts**	-29.0%***	-0.3 pts	-4.8%
Zone 5: MSP vs LCZ	-3.5%	1.8%	2.0 pts	1.9%	-0.3 pts	-20.9%***
Zone 6: MSP vs LCZ	10.7%***	25.5%***	27.8 pts***	26.1%***	0.4 pts*	16.5%***
Zone 7: MSP vs LCZ	-7.9%*	-20.0%***	5.7 pts**	-28.5%***	-1.1 pts*	-18.0%***
Zone 8: MSP vs LCZ	-5.5%*	0.0%	22.5 pts***	-18.2%***	-0.2 pts	-7.1%*
Zone 9: MSP vs LCZ	Data unavailable	Data unavailable	Data unavailable	Data unavailable	Data unavailable	Data unavailable
Reference ^b	377.0€	311.9€	36.1%	1,213.6€	98.8%	450.7€
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N	115,203	115,203	115,203	43,341	115,203	112,999
r ²	40%	27%	-	28%	-	42%
Pseudo-r ²	-	-	15%	-	8%	-

^a Multidisciplinary MSP vs local control zone.

^b Average expenditure or probability of reference individual using care (statistical methods insert).

Rate of examinations is better for MSP patients but lot of heterogeneity if zone/zone

T3

Effects of maisons de santé pluridisciplinaires (MSPs) on the quality of follow-up care for type 2 diabetes patients

	HbA1c	Cardiology	Creatininemy	Microalbumin test	Blood lipid test	Ophtalmology
Model 1: global 'MSP' effect test						
Odds ratios MSP vs LCZ ^a	1,616***	1,565***	1,637***	1,121	1,055	1,115
Model quality <i>Pseudo-r²</i>	7%	8%	6%	8%	4%	3%
Concordant pairs	61%	65%	64%	61%	60%	58%
Model 2: 'MSP' effect test by site location zone						
Odds ratios						
Zone 1: MSP vs LCZ	1,494**	1,655**	2,674***	1,464*	1,137	1,089
Zone 2: MSP vs LCZ	2,482***	0,891	3,203***	0,853	1,043	1,121
Zone 3: MSP vs LCZ	0,986	0,224	2,463	0,384	0,943	0,963
Zone 4: MSP vs LCZ	0,898	1,515	1,242	0,202***	0,316***	0,954
Zone 5: MSP vs LCZ	0,323***	1,402	1,431	0,248**	1,303	0,727
Zone 6: MSP vs LCZ	1,432	2,046**	0,703	0,859	1,342	1,791**
Zone 7: MSP vs LCZ	1,292	2,238*	0,968	0,459*	1,011	1,141
Zone 8: MSP vs LCZ	4,085***	1,920**	2,790**	3,258***	1,458	1,041
Zone 9: MSP vs LCZ	Data unavailable	Data unavailable	Data unavailable	Data unavailable	Data unavailable	Data unavailable
Model quality <i>Pseudo-r²</i>	7%	8%	6%	9%	5%	3%
Concordant pairs	62%	65%	63%	62%	61%	59%

^a multidisciplinary MSP vs local control zone.

Field: patients with type 2 diabetes having declared a Preferred Doctor1 practising in a multidisciplinary MSP (MSP) or a local control (LCZ), that is, 842 'case study' patients and 6,373 'control zone' patients for the year 2007.

Thresholds of significance: * 5%, ** 1%, *** 0.1%.

Reading guide: An OR > 1 means that, all things being equal, a patient with type 2 diabetes whose Preferred Doctor1 practices in a MSP has more chance of receiving better follow-up care than a patient whose Preferred Doctor practices in a local control zone (LCZ).

See footnote 5 page 4.

Conclusions (1)

- Very little sample but common points
 - **Structure** : space, information system, informal team work
 - **Accessibility** : physical, hours (day, week, year)
 - **Integration** : it exists between MD's, and between nurses and MD's for home care
 - **Organisation** : less working days, same activity : longer days ? Shorters visits ?
 - **Expenditures** : low increase, no costs inflation
- Many variability : size, status, projects, practices, expenditures
- Claims data bring a lot but we need clinical data

Conclusions (2)

- Group practice is a sociological trend and interest of professionals
- Is group and multidisciplinary practice better ?
 - Too early to answer : research question
 - No real change without any change of incentives (fee for services, independent practice for all professionals..) : experimentation process in France (150 sites in 22 regions, new framework)
 - So what makes multidisciplinary better ? Research, training, payment ?
- What patients expects ?
 - Continuity of care ? Coordination ? Access ? Rapid access to secondary care ?

Some references (www.irdes.fr)

- **Medical group practice in primary care in six European countries, and the Canadian provinces of Ontario and Quebec: what are the lessons for France?**
Questions d'économie de la santé n° 127. November 2007.
Bourqueil Y., Marek A., Mousquès J.
<http://www.irdes.fr/EspaceAnglais/Publications/IrdesPublications/QES127.pdf>
- **Referral to specialist consultations in France in 2006 and changes since the 2004 Health Insurance reform - 2004 and 2006 Health, Health Care and Insurance surveys**
Questions d'économie de la santé n° 134. August 2008
Le Fur P., Yilmaz E. <http://www.irdes.fr/EspaceAnglais/Publications/IrdesPublications/QES134.pdf>
- **GPs teamed up with nurses: a skill mix experiment improves management of type 2 diabetes patients - Main results of the ASALEE experiment.** *Questions d'économie de la santé* n° 136. November 2008
Bourqueil Y., Le Fur P., Mousquès J., Yilmaz E.
<http://www.irdes.fr/EspaceAnglais/Publications/IrdesPublications/QES136.pdf>
- **Three Models of Primary Care Organisation in Europe, Canada, Australia and New-Zealand**
<http://www.irdes.fr/EspaceAnglais/Publications/IrdesPublications/QES141.pdf>
- <http://www.irdes.fr/EspaceAnglais/Publications/IrdesPublications/QES147.pdf> Group Practice Dynamics Among Private General Practitioners from 1998 to 2009