Health economics letter

n° 122 - May 2007

questions d'économie de la santé

Issues in health economics

synthesis

Background

This research forms part of a study carried out on behalf of the Observatoire national des professions de santé (ONDPS) [National Healthcare Professions Watchbody] and was funded in part by the Research, Studies, Appraisal and Statistics Division (DREES) of the Ministry of Health and Solidarity. Summary of this research was published in the annual report 2005 of the ONDPS and in an IRDES report in June 2006.

In a previous issue of Questions d'Economie de la Santé, the policies implemented in foreign countries to redress inequalities in the geographic distribution of health care professionals were analysed on the basis of a review of the international literature.

This issue of Questions d'économie de la santé takes a look at the policies that currently exist in France and which specifically focus on doctors.

INSTITUTE FOR RESEARCH AND INFORMATION IN HEALTH ECONOMICS

Address:

10, rue Vauvenargues 75018 Paris - France

Téléphone : 33 (0)1 53 93 43 02/17
Télécopie : 33 (0)1 53 93 43 50

E-mail : document@irdes.fr
Web : www.irdes.fr

Director of the publication:
Chantal Cases

Writer as a head:
Nathalie Meunier

Dummy maker:
Khadidja Ben Larbi

Translator:
ICI LA BAS

ISSN : 1283-4769

Diffusion by subscription: 60 € per annum

Price of the number: 6 €

On line on sur www.irdes.fr

10 to 15 numbers per annum

Improving the geographical distribution of practitioners: the measures adopted in France

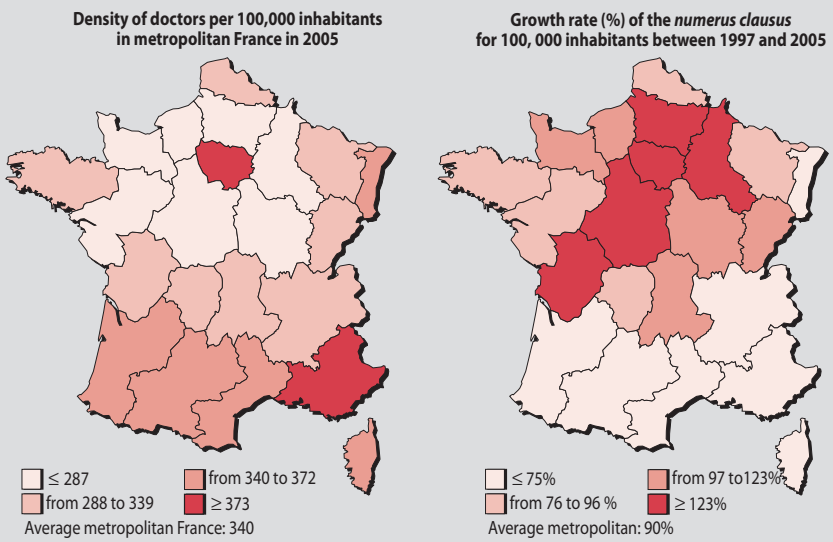
Yann Bourgueil, Julien Mousquès, Anna Marek, Ayden Tajahmadi

Despite the fact that the density of medical practitioners has never been as high, the geographical and disciplinary distribution remains very unequal across France. This situation is likely to worsen given the decrease in the number of doctors that is predicted for the coming ten years.

For many years, an increase in the number of trained doctors and the regional adjustment of the *numerus clausus* and junior doctors' positions were the only measures taken to try and redress these imbalances.

More recently, new measurements aimed at encouraging doctors to set up practices in more difficult areas, be they rural or urban, have been implemented. On a national scale, the government and the Social Security service provide financial assistance for setting up or maintaining practices in these areas, as well as guidance and information. At a more regional level, the measures taken focus principally on training and provide support to initiatives undertaken by healthcare professionals who wish to organise their practices differently (group practices, task delegation, remote medicine). Although few of these measures have so far been properly appraised, a number of results can nevertheless be underlined. These results can be set against the findings from international literature on the subject.

Density of doctors and regional adjustments to the *numerus clausus*



It is in the regions which have the lowest medical densities that the *numerus clausus* (number of students in the second year of medical studies) has been increased the most, such as in the regions Centre and Picardie, as opposed to the region Provence-Alpes-Côte d'Azur. The only exception is the region Ile-de-France.

Source: Eco-Santé Régions 2007 and DREES data (Adeli)

Long-standing unequal distribution which is likely to worsen

The inequalities in the distribution of doctors have existed for very many years and have only been reduced slightly over the last twenty years. Against a background of strong growth in the number of qualified doctors and of medical density, regional adjustments to the *numerus clausus* and to the movements of specialists have not led to any significant redressing of the imbalances between regions and departments. For example, there has only been a very moderate movement of regional and departmental medical densities towards the national average. The gap between the medical densities of the best endowed and least well endowed regions was reduced by barely 20% between 1985 and 2005, going from 1.98 to 1.62. Today, this gap varies depending on the speciality, with a maximum interregional difference of 50% for general practitioners, and sometimes a twofold difference for some specialists.

As a result, the regional hierarchy, as well as the departmental, has not been modified and the least well endowed regions in 1985 remained the same in 2005. Furthermore, according to the forecasts published by the DREES in 2004, in which some of the hypotheses for regional and speciality distribution are now being questioned[1], those regions where the population is likely to decrease strongly (Auvergne, Champagne-Ardenne and Limousin) and where current medical density is very low are those where the rebalancing will be the strongest in the years to come.

The general increase in densities has therefore not led to satisfactory rebalancing. What is the situation likely to be given that doctors' numbers are set to fall? The question is all the more pressing given that in addition to this decrease, there is also the issue of the demographics of the medical profession (ageing and feminisation) and new expectations that doctors have in terms of working conditions and quality of life, which also play a role in their choice of location and the way they practice. This new context has already given rise to difficulties in maintaining local healthcare practices in certain rural and urban areas. While currently the number of people living in an area considered to be problematic in terms of access to general practitioners is no greater than 5% of the total metropolitan population, according to two studies by the CNAMTS and the DREES[2], this proportion is likely to rise in the coming ten years.

The continuing existence of these distributional inequalities and the perspective of future problems in terms of the health care offer have recently led public authorities, both national and local, to implement measures to maintain and better distribute healthcare professionals across the country. The medical demographics plan published in January 2006, on the basis of work by the Observatoire national de la démographie des professions de santé (ONDPS) is aimed at redressing the balance and promoting the installation of healthcare professionals across the whole of the country, focusing on three areas in particular: making current financial incentives more visible and offering new ones; increasing the number of trained doctors, attempting to increase their loyalty to the region and encouraging them to look towards a career in general medicine; encouraging innovative practices liable to increase productivity.

In this paper, we present the main measures taken at a national level and, on the basis of a survey, we attempt to list the various actions undertaken at regional, and in some cases infraregional levels, which, without explicitly looking to maintain healthcare professionals within the original region, have this as their de facto objective by supporting training and the development of local healthcare professional work organisations, for example. At the end, we will draw some conclusions on the basis of the appraisal of some of these measures and the international literature.

At the national level: priority given to financial measures

The measures taken at a national level have either been taken by the State (legislative or regulatory measures) or by the Social Security (conventional or contractual measures). The measures were initially limited to the national and regional regulation of the number of qualified doctors, though more recently they have turned to financial incentives to encourage the installation and maintenance of practitioners in areas considered to be priority, both urban and rural. Some of the measures taken by the State are implemented at a regional or local level, on the basis of contracts, directly by local authorities or similar bodies.

Non-financial measures on training and installation information

Since 1997, the *numerus clausus*, i.e. the number of students admitted to the second year of medical studies, has constantly risen and over the last nine years has practically doubled (3,583 in 1997 and 7,100 in 2006)[3]. Regional increases in the *numerus clausus* have varied from 80% (Provence-Alpes-Côte d'Azur) to 149% (Poitou-Charentes) in absolute terms. When expressed as a percentage of population, this increase is even more varied between regions and is the result of an attempt to redress the balance between regions in terms of the number of qualified doctors. This adjustment does not however guarantee that

[1] *The implementation of the national tests in 2004, 2005 and 2006 led to a change in the distribution of generalists/specialists (targeted at 50/50) in the choice of junior doctors' posts, which has been less than 40% for general practitioners and extremely variable depending on the region since 2004.*

[2] *A given territory is considered to be problematic in these two studies by the CNAMTS and the DREES if it combines a low density of practitioners, a high level of activity for each individual practitioner and a low level of recourse to healthcare professionals per patient.*

[3] *It must be noted that this kind of measure has also been adopted for other first recourse professionals, for whom geographical distribution poses the same kind of problems as in the case of doctors. For example, the number of available places in nursing training institutes has also been increased.*

young qualified doctors will set up their practices in the region where they studied (cf. maps p. 1).

The regional distribution of specialist junior doctor posts, in order to redress regional disparities, was announced in the Demographics Plan 2006. An analysis of the regional distribution of specialists' posts on offer for the university year 2006-2007 does not however show that the imbalance has been corrected[4].

Last of all, a measure aimed at encouraging the practice of medicine in general hospitals stipulates that junior doctors, other than generalists, must carry out at least two six-month periods in non-university hospitals, which are usually the least popular.

The impact of these measures however has been attenuated by a circular[5] which stipulates that the number of work experience opportunities provided to students must be significantly higher than the number of students in question. This decision goes counter to the policies in place for the last few years in certain regions (Aquitaine, Alsace, Lorraine) which, by limiting the number of places available, ensured that positions in unpopular disciplines or environments would be filled.

It should also be recalled that a two-month period working in a general practitioner's surgery, a project first mooted more than ten years ago[6], should be up and running for the year 2007-2008[7], and should lead to students in their second phase of medical studies having a better vision of the profession of general practitioner.

While these measures, which concern the period of study itself, have mainly been implemented by the State, the Social Security plays a role in the installation of doctors' practices, by offering two additional regional information tools. The first of these, the CartoS@nté cartographic tool, makes it possible to visualise the healthcare offer and activity within a given region, down to the level of the village. The second tool, InstalS@nté, provides information on the funding and assistance that local authorities can provide to doctors who want to set up their practices in areas defined as priority sites by Regional Health Missions (MRS). However, in practice, the assistance and monitoring provided to healthcare professionals by the local Social Security Offices is not particularly well developed.

Financial assistance to students, for the installation and maintenance of doctors

Among the new financial measures on offer, some are aimed at students or at the installation of doctors in zones that the Regional Health Missions have deemed to be a priority.

The financial assistance provided to medical students in their third phase of studies, which are now provided by certain regions, include:

- accommodation indemnities (limited to 20% of the monthly flat rate pay for third year junior doctors, i.e. €400 per month) and travel expenses (mileage indemnities to be agreed upon) to students in their third phase of general medical studies when they carry out their work experience programmes in priority areas;
- study indemnities (limited to the annual pay a for a third-year junior doctor for each year of study in the third phase following the signature of the contract, i.e. €24,000 a year) and a professional career indemnity for any student as from the first year of the third phase if he or she commits to setting up a practice as a general practitioner for at least five years in a priority area.

The implementation of financial assistance for the installation and maintenance of doctors requires that agreements be signed between the local authorities which provide the assistance, the local Social Security organisations and the professional healthcare bodies. This funding includes:

- income tax rebates for payments received for healthcare provided during on-call duty by doctors or their replacements, up to a limit of 60 days a year;
- assistance for all or part of the investment or operational overheads, the provision of premises and accommodation, the payment of an installation bonus and an offsetting of the VAT for investments made by local authorities on behalf of the installation of healthcare professionals.

A wide range of financial incentives that are usually unappraised

Two measures exist that are specifically aimed at hospital practitioners: on the one hand, the creation of so-called 'priority' hospital practitioners positions, providing a specific grant of €10,000 in return for a commitment to work for five years[8] ; on the other hand, the creation of hospital-university assistant posts providing their holders access to sector 2 remuneration. Neither of these measures has proved to be effective because these posts are not always easier to fill than the others. The creation of the priority hospital practitioner posts, which are aimed essentially at priority regions and disciplines, have not proved particularly attractive to doctors[9]. The creation of hospital assistant posts providing access to sector 2 remuneration has not proved any more successful, because many of the hospital-university assistant posts on offer have still not been filled.

4 *Decisions of 25 May and 19 June 2006 establishing the number of positions on offer for National medical examinations by region and by discipline, as well as their distribution by intern subdivision for the university years 2005-2006 and 2006-2007.*

5 *Circular DGS/SD2C/2004/446 of 20 September 2004 relative to the choice of work experience courses taken by students in their third phase of medical studies in university year 2004-2005.*

6 *Decision of 4 March 1997 relative to the second part of the second phase of medical studies, JO n° 72 of 26 March 1997.*

7 *Decision of 23 November 2006 taken by virtue of article 8 of the decision of 4 March 1997 amended, relative to the second part of the second phase of medical studies, JO n° 273 of 25 November 2006.*

8 *Circular DHOS/M/2001/610 relative to priority recruitment positions of 12 December 2001.*

9 *According to a national appraisal conducted by the DHOS for the years 2002, 2003, 2004, giving rise to a service memo by M. Bernard Chenevière.*

All of the other legislative or regulatory measures taken concern private practices. They provide tax exemptions or assistance with overheads in the case of installation in specific zones (urban free zones, rural revitalisation zones, towns with fewer than 10,000 inhabitants). They form part of wider ranging rural and urban development projects. The oldest of them dates back to 1996[10] and stipulates that doctors with practices in towns with fewer than 10,000 inhabitants or in urban free zones are entitled to partial tax exemptions for two years (on profits or income) and on their welfare contributions for five years.

More recently, the law relative to the development of rural territories[11] offers local authorities the possibility of granting three major series of new financial measures, at three different geographical levels:

– in villages with fewer than 2,000 inhabitants or in rural revitalisation zones: exemption from business tax, for a period from two to five years, as from the year following the initial installation of a private practice in these villages or areas;

– in rural revitalisation zones: total exemption from income tax for five years, and continuing gradual exemption over the nine following years;

– in zones which the Regional Health Missions have defined as priority: financial assistance to students in their third phase of medical studies (accommodation and study grants) or for the installation or maintenance of doctors (tax exemptions and payment of investments expenses and overheads) (cf. box p. 3).

National Social Security also provides financial assistance as part of its policy of conventions. Since 2005, it has implemented good practice contracts in order to encourage the installation or maintenance of general practitioners in specific zones (mountain resorts, urban free areas or rural zones[12]). These contracts focus on the provision of assistance for providing replacements, and agreed fee increases, in return for a commitment to practice in the area for a predetermined period (cf box below).

It would appear, on the basis of an initial appraisal undertaken by the CNAMTS at the end of 2005 that these contracts have attracted very few doctors, since the take-up rate is systematically less than 10%.

Last of all, following on from the national and regional measures implemented by the Regional Health Missions to define priority zones, National Social Security has set up two new incentive programmes:

- health care provided or prescribed by a general practitioner who has set up a private practice for the first time in these zones are exempt from all forms of penalties of 'healthcare pathway' for a period of five years[13] ;

- the fees for consultations and visits carried out by general practitioners working in a collective surgery or in a pluridisciplinary health centre in these zones are increased by 20%[14]. This financial assistance is paid directly by the Social Security, such that there is no additional expenditure for patients.

Good practice contracts

Good practice contracts, made available by Social Security, refer to the practice of general medicine in rural areas or urban free zones. They provide for a replacement indemnity of €300 per day up to a limit of 10 days per year, in return for a commitment to work for three years in these areas.

Furthermore, in urban free zones, a payment of €240 per half day, up to a limit of 10 days a year, can be made for work on health prevention, health education or medico social coordination.

Last of all, the good practice contract relative to mountain areas, where the problems are very different, provides for a flat rate fee of €2000 in return for a commitment to work for three years in the area.

At the regional level: a variety of measures, with emphasis on training and working conditions

The survey carried out with the regional boards of the National healthcare professions watch body ONDPS (cf. box p. 5) provides an assessment, which is not exhaustive of course, of the measures taken at a regional level to improve the geographical and disciplinary distribution of healthcare professionals. The measures most frequently cited focus on the working conditions and training of doctors, but also of certain paramedical professions. On the other hand, the initiatives taken at an infraregional level which aim at encouraging the installation of doctors (premises and equipment) are little documented.

Very few measures have been analysed thus far, despite the fact that such an assessment is provided for by law. Here we present the results which are nevertheless available.

Training related measures: information and financial assistance

Given the variety of training-related measures, it is important to distinguish between those which are prior to the training and those which come into effect during the training of healthcare professionals.

Pre-training measures consist in particular in providing information on and promotion for healthcare professions, and in most cases are aimed at non-medical professions.

[10] *Law n° 96-987 of 14 November 1996.*

[11] *Law n° 2005-157 of 23/02/2005, articles. 114 (1464 D of the general tax code), 38 and 38 bis, 108 and 111.*

[12] *Defined as practice in a surgery at least 20 minutes away from an accident and emergency service and situated in a canton in which the density of general practitioners is less than 3 for 5000 inhabitants.*

[13] *Social Security Funding Act for 2006, article 42, decree of application 2006-1 adopted 02/01/2006.*

[14] *Rider n° 20 to the national convention of 12 January 2005, signed on 7 February 2007 and which was not published in the JO.*

The study conducted with the Regional Boards of the Observatoire National Healthcare professions watch body (CR-ONDPS)

Objectives and methodology of the survey

The objective of the survey carried out with the Regional Boards of the ONDPS in 2005[1] was to list and appraise the measures undertaken in the regions in order to encourage health care professionals to practice in specific areas or to choose specific specialities.

The study was based mainly on a questionnaire sent out to the regional boards of the ONDPS and also involved interviews carried out at regional and national level. It is therefore what is known as a declarative survey, which can under no circumstances guarantee the exhaustiveness of the information collected[2].

The response rate of the CR-ONDPS was very high, around 85%. Out of the 26 regional boards, 4 - i.e. 15% of them - were not able to respond within the deadline given (Guadeloupe, Guyana, Martinique and Reunion).

Out of the 207 measures that were initially indicated for the purposes of the study, 137 were included and analysed. The exclusion of 70 measures was justified either because it was a regional or local version of a national measure, or because the measure in question did not explicitly aim at dealing with a problem of professional, disciplinary or geographical distribution, or because the information provided was insufficient to properly analyse the measure.

Distribution of the regional measures and people involved in their implementation

Half of the French regions account for the majority of the measures

Ten regions[3] accounted for almost all (more than 98%) of the measures under study. Of these ten regions, seven can be considered to be less well endowed in terms of doctors compared to the average national density, and are therefore in the front line of the problems of health care distribution imbalances. The link between the intensity of the activities undertaken and the reality of human resource distribution problems is therefore very clear, although we do observe that some underprivileged regions are not particularly dynamic[4].

Nevertheless, this absence of dynamism may be the result of a number of factors: the measures declared by the CR-ONDPS reflect a differing capacity to list the actions undertaken at a local level, and which may not therefore be identified at a regional level. Furthermore, a medical density which is less than the national average does not necessarily lead to the perception of a problem at a regional level; conversely the overall medical density may hide disparities at lower levels or between professions. This would go to explain why certain regions with a high medical density nevertheless undertake actions to improve the distribution of health care professionals.

A host of different actors

The players involved in implementing these measures are for the most part the Agences régionales d'hospitalisation (ARH) [Regional Hospitalisation Agencies] and the Unions régionales des caisses d'assurance maladie (URCAM) [Regional Health Insurance Fund Unions] which act by means of regional network development funds (DRDR) and urban health care quality assistance funds (FAQSV).

The regional councils also play a role, but a smaller one, mainly by means of the financial assistance they provide (study grants, investment in buildings and equipment).

1 Already conducted in 2004 by the ONDPS, this study was widened in 2005 in order to increase exhaustiveness.

2 While in most regions, the CR-ONDPS have a very good knowledge of existing systems, it is sometimes the case that they only have partial information, which made it necessary to contact other people involved in actions aimed at improving the geographical regulation of health care professionals across the territory, such as the URCAM, the URML and locally elected representatives (regional Council, departmental council, towns and agglomerations).

3 Aquitaine, Basse-Normandie, Bourgogne, Champagne-Ardenne, Franche-Comté, Haute-Normandie, Ile-de-France, Lorraine, Midi-Pyrénées, Nord-Pas-de-Calais.

4 Auvergne, Centre, Limousin, Pays-de-la-Loire, Picardie, Poitou-Charentes.

With regards to those measures that come into effect during training, we make a distinction between information and awareness measures on the one hand and measures providing incentives to choose certain disciplines or priority environments on the other. The former are particularly focused on increasing the awareness of specific areas for practice - in local hospitals or rural zones for example - as well as information on and promotion of specific practices, such as the practice of general medicine in priority zones. The latter usually come in the shape of study grants, subject to an agreement to undertake specific training courses or to set up specific areas. The survey in the region of Bourgogne and the département of Manche demonstrated that there were two kinds of study grant available: in the first case, the aim is to encourage doctors to undertake a period of general medicine in underprivileged areas, and in the second case, to encourage doctors born and raised in the département to set up their practices there. It would appear, on the basis of these two experiments - which respectively involved 10 and 5 doctors - that the costs incurred are an obstacle to their generalisation.

We should also mention that this kind of measure has also been set up for paramedical professions (nurses, masseur-physiotherapists and midwives). In the case of these professions, the study grants have a contradictory impact: rather positive in the case of Bourgogne for the installation of nurses and midwives in underprivileged establishments, and more negative in the case of Haute Normandie (nurses) or Picardie (masseur-physiotherapists) because the requests for reimbursement are very frequent and installations in the region much less so.

Measures focusing on practice conditions: supporting and financing innovation

The regional measures focusing on practice conditions mainly involve support and funding for innovative healthcare organisation and on access to new information and communication technologies. Currently, these organisations are financed by innovation funds (Assistance fund for the improvement of urban health care quality and regional network funding) and the regional councils. There is no guarantee that overheads, in particular additional payments made to professionals (flat rate fees for doctors attending meetings, salaries of coordinators, etc) will continue to be paid over the long term.

These innovative organisational methods principally involve pluri-professional medical centres, as well as 24-hour on-duty health care systems.

Medical centres vary in size: ranging from the single speciality surgery which, over time, may play host to other health care professionals, to the pluri-professional medical centre including general practitioners but also care provided by other health care professionals or even specialists. It must be noted that there is not always sufficient reflection as to the choice and suitability of geographical locations for such centres. In most cases these are projects initiated and carried by the professionals themselves rather than an impetus from a regional centre. The impact that these medical centres have on improving territorial coverage and health care quality has not yet been looked at. As for the 24-hour care systems, they are in a position to meet the issues of emergency care coverage and continuity of care (access time to or congestion in accident and emergency services). However, their efficiency has yet to be demonstrated.

The measures aimed at improving access to new technologies mainly revolve around remote medicine projects. However, these systems have yet to be deployed on a large scale: they involve very few professionals or medical acts. In addition, the costs incurred are often unknown and sometimes considered to be an obstacle to generalising experiments such as this.

Other regional measures aimed at encouraging the local installation of doctors are divided equally between assisting doctors to take the decision to set up a practice in the area, and hospital recruitment actions.

Further information

Bourgueil Y., Mousquès J et Tajahmadi A. *Comment améliorer la répartition géographique des professionnels de santé ? Les enseignements de la littérature internationale et des mesures adoptées en France.* Rapport IRDES n° 1635.

Voir aussi la synthèse publiée dans le *Question d'économie de la santé* n° 116.

Those measures that focus on professional qualifications and promotion concern non-medical professions for the most part.

Summary and findings of the analysis of the international literature

In this final section we present the main results of our analysis of the international literature on policies which aim at a better distribution of health care professionals (cf. Questions d'économie de la santé n° 116).

The national measures adopted so far in France revolve mainly around doctors, and correspond to the two types of policy which have most frequently been implemented overseas: on the one hand, saturating the offer by a global increase in the number of doctors, and on the other the development of exclusively financial incentives concerning the initial training, installation and maintenance of health care professionals. However, our analysis of the literature demonstrates that these measures would appear only to have a moderate influence in the short term on reducing geographic imbalances, and that the influence is very weak in the long term.

Modifications to the training of doctors - in particular by more frequent recourse to work experience in general hospitals or outpatient centres in order to increase the awareness of students about these forms of practice - as well as installation assistance programmes, form part of both national and regional measures overseas but are still rather modest and disparate. According to the literature, these measures give better results, in particular when focusing on those students most likely to set up their practice in priority zones, or on adapting the contents of training courses to the specific context of medical practice in such areas.

A number of national or regional measures that have been adopted in France form part of territorial development laws or work hand in hand with regional development policies. The literature shows that taking account of an individual's living conditions has a major impact on the choice made by doctors to set up in particular areas.

The survey carried out with the regions shows that there are a great many projects, involving a host of different players, the aim of which is to encourage the maintenance or installation of health care professionals by providing them with new forms of practice and organisation. Such approaches, which in all likelihood were underestimated in our survey, are a demonstration both of the concern and mobilisation of local stakeholders. The very fact that so many different partners are involved is a risk, well represented in the literature, of competition between operators, hospitals, local authorities, the State and the Social Security.

* * *

To conclude this study of policies that aim at improving the geographical distribution of doctors across the territory, we wish to highlight:

- the role that medical faculties can play by increasing student awareness of the various future forms of medical practice, in particular in outpatient work, but also by training them in new forms of practice;

- the absolute necessity of coordinating the measures, stakeholders and institutions involved in order to ensure that human resources are distributed in a way that meets the needs of local populations. With this in mind, it would appear that the region is the best level at which such projects should be managed, on the basis of a joint analysis of the issues at hand;

- the importance of providing an accurate assessment of past and current public policies, both in terms of effective implementation and of results.

- last of all, we feel that particular attention should be paid to an appraisal of the effects of the financial transfers that can be carried out between the various stakeholders in these policies, in particular between the local and national levels.