

RATIONING HEALTH CARE IN EUROPE – FRANCE

D. Benamouzig & R. Launois

In J. Matthias Graf von der Schulenburg and Michael Blanke (Eds.)

RATIONING OF MEDICAL SERVICES IN EUROPE: AN EMPIRICAL STUDY

IOS Press Amsterdam 2004: p. 27-60

CONTENTS

1. GENERAL DESCRIPTION OF THE FRENCH HEALTH CARE SYSTEME.....	3
1.1 DEMOGRAPHIC AND MACRO-ECONOMIC CONTEXT	3
1.2 CHANGES IN HEALTH CARE EXPENDITURE.....	4
1.3 THE IMPOSSIBLE CONTROL OF HEALTH CARE EXPENDITURE.....	7
1.4. THE NEW PHYSIOGNOMY OF THE HEALTH CARE SYSTEM	9
2. SURVEY RESULTS FOR THE GENERAL POPULATION.....	11
2.1 CHARACTERISTICS OF THE POPULATION	12
2.1.1 <i>Socio-demographic characteristics.....</i>	<i>12</i>
2.1.2 <i>Characteristics of the sample with respect to health problems</i>	<i>13</i>
2.2 FINANCING AND REGULATION OF HEALTH CARE EXPENDITURE.....	13
2.2.1 <i>Methods of financing are known approximately.....</i>	<i>13</i>
2.2.2 <i>Methods of funding considered to be desirable</i>	<i>14</i>
2.2.3 <i>Limitation of health care expenditure widely accepted</i>	<i>15</i>
2.2.4 <i>How should increased health care expenditure be funded?</i>	<i>15</i>
2.2.5 <i>French people support “medicalised control” and greater participation</i>	<i>16</i>
2.2.6 <i>What health expenditure should be limited or increased?.....</i>	<i>16</i>
2.3 CONCLUSION.....	17
3. SURVEY RESULTS FOR THE GROUP OF PROFESSIONALS.....	19
3.1 MODIFICATIONS TO THE QUESTIONNAIRE AND SAMPLING PROCEDURE	19
3.2 ANALYTICAL METHOD	20
3.3 CHARACTERISTICS OF THE POPULATION	20
3.4. OPINION OF DOCTORS CONCERNING CONTROL OF HEALTH CARE EXPENDITURE	21
3.4.1 <i>Causes responsible for the increase in health care expenditure</i>	<i>21</i>
3.4.2 <i>Control of expenditure and its consequences</i>	<i>21</i>
3.4.3 <i>Who is responsible for controlling expenditure?.....</i>	<i>22</i>
3.4.4 <i>What are the most appropriate methods?.....</i>	<i>23</i>
4. RESULTS OF THE TESTS	24
4.1 THE GENERALIST-SPECIALIST SPLIT	24
4.1.1 <i>Near global agreement about the causes for the increase in expenditure.....</i>	<i>24</i>
4.1.2 <i>Control of expenditure and its consequences: a subject of disagreement</i>	<i>24</i>
4.1.3 <i>All agree on the responsibility for control of expenditure</i>	<i>26</i>
4.1.4 <i>A few divisions concerning methods of control of expenditure</i>	<i>26</i>
4.2 AGE INFLUENCES THE POINT OF VIEWS OF DOCTORS WITH RESPECT TO CONTROL OF EXPENDITURE.....	27
4.2.1 <i>Those under 50 years old are concerned by the lack of competition in the health care system.....</i>	<i>27</i>
4.2.2 <i>The influence of age on the importance and consequences of control of expenditure ..</i>	<i>27</i>
4.3 CONTROL OF EXPENDITURE FROM THE POINT OF VIEW OF DOCTORS’ LENGTH OF SERVICE ..	28
4.3.1 <i>The more experienced doctors were more pessimistic about the consequences of control of expenditure</i>	<i>28</i>
4.3.2 <i>Young doctors were more optimistic about methods for control of expenditure</i>	<i>28</i>
4.4 WORKING EITHER IN SINGLE-HANDED PRACTICE OR IN GROUPS INFLUENCED THE GENERAL PRACTITIONERS’ OPINIONS	29
5. CONCLUSION.....	30
6. BIBLIOGRAPHY	31

1. GENERAL DESCRIPTION OF THE FRENCH HEALTH CARE SYSTEME

This paper is a preliminary draft for an article relating the quantitative results of an European study about the perception of economic rationalisation in the health care sector. Its aims to contextualize the results of the study, by pointing out the trends of the French health care system. More precisely, it sums up some demographic and macroeconomic data, and gives an overview of the main specificities and reforms occurred in the past few years in the sector.

1.1 Demographic and macro-economic context

From a demographic point of view, the situation in France is relatively similar to that in its European neighbours. France has close to 60.2 million inhabitants and its population is increasing at a rate of 0.5% per year. The population of France was estimated during the last three censuses in 1982, 1990 and 1999, to be 54.3 million, 56.6 million and 58.5 million inhabitants respectively. Whilst it is increasing, the French population is also, however, ageing. The proportion of elderly is increasing and those over 60 years old now make up 21.3% of the population, compared to 19.9% in 1990.

This ageing of the population is a result of various factors. It can be explained, firstly, by a continuing fall in the death rate, which is estimated to be 8.9 per thousand people per year. The population is also ageing because of the increase in life expectancy, which is considerable but unequal between the sexes. Men have a life expectancy of 74.9 years, at birth ranking 15th in the world, whereas women have a life expectancy at birth of 82.3 years and are ranked second in the world, behind the Japanese. These figures indicate a marked increase in life expectancy, which was only 70.2 years for men and 78.4 years for women in 1980.

The ageing of the French population has, however, been moderated by a relatively high birth rate compared European in general, of 13.1 births per thousand people. The overall fertility index of French women, which has been estimated to be 1.7 children per woman of childbearing age, is higher than that of most European countries. This particular feature is explained by the fact that women who are currently of childbearing age were born during the baby boom, which had longer lasting effects in France than in other European countries. This difference should, however, disappear during the coming years, returning to the lower figures of the other European countries. Ageing of the population has also been slowed by a dramatic fall in infant mortality, which has fallen by 90% since the 1950s from 52 per thousand in 1950 to 4.7 per thousand in 1997. This index may fall further still in years to come because of the decreasing number of sudden infant deaths. Overall, the demographics in France are generally similar to those of other European countries with a slowing in ageing for a few years to come¹.

From an economic viewpoint, France has seen a modest improvement in its economic situation in the second part of the 1990s. After mediocre growth at the start of the 1990s when the growth rate was less than 2% by volume between 1990 and 1997, France's situation improved from 1997, with more sustained growth reaching an average of 2.8% per year over the period between 1997 and 2001. As elsewhere, this improvement appears to have slowed in France. There is now an inflexion in the growth curve with predicted growth of less than 1.7% per year. These variations, however, have never cast a doubt on the stability of inflation in the long term, which has been achieved since the 1980s. Whereas price rises were a characteristic feature of the French economy up until the 1970s, with an inflation rate of 14% at the start of the 1980s, this rate has been reduced

¹ Institut National d'Etudes Démographiques, Rapport sur la situation démographique de la France, Paris, 2001.

progressively to 3% at the start of the 1990s. Recent years have been characterised by stable prices with increases in the retail price index between 1.3 and 1.5% per year.

As in other European countries, unemployment remains the most worrying economic problem in France, although this situation has improved in recent years. In the middle of the 1990s, France had a high unemployment rate, in the region of 12% of the potential working population. Once the growth rate increased, this level has fallen from 1997 to around 9% of the potential working population, equivalent to approximately 2.5 million people seeking employment². For one year, however, unemployment has risen again. This trend may be confirmed in the near future because of the expected slowing of growth. These changes, however, mask major disparities. With an unemployment rate of 15%, women are more affected than men. Less qualified people are also more affected, with an unemployment rate approaching 30% in non-graduates. During this period, the overall size of the potential working population has changed significantly from 25 million people in 1991 to 26.3 million people ten years later. For demographic reasons, the number of potential working people is liable to increase until 2006 when there should be a change, with a significant fall in the potential working population in the region of at least 700,000 people per year. The magnitude of unemployment and size of the potential working population partly explain France's poor performance in terms of GDP/inhabitant. With a total GDP of 1.380 billion Euros in 2001, France is amongst the major European economic, or even world-wide, powers. Its situation, however, is considerably less good when the GDP is expressed against its number of inhabitants. This ratio is often used to assess the "richness" of a country and ranks France 12th in Europe³. With a GDP of 22,000 Euros per inhabitant, France lies immediately ahead of Spain, Portugal and Greece. This represents a long term deterioration of the French situation, compared to the middle of the 1990s, when France ranked seventh in Europe. This change is, however, less due to "impoverishment" of the country, than to the rapid progress made by other European countries such as Ireland or Finland and, to a lesser extent, Italy, Sweden and Great Britain.

1.2 Changes in health care expenditure

The French health system is subject to predominantly budgetary regulation. This regularly shows social deficiencies, due not only to the activity of parties involved in the health care system but to changes in the economic situation. The financing of the health care system must be assessed in the French institutional context, inherited from the post-war reforms.

In the years following the War, the Government established a Social Security system, designed to progressively cover the entire population. This incorporates a large number of social protection systems specific to various occupational activities and is financed by compulsory contributions from the income of both employees and employers. It is administered on the basis of parity between representatives of the workers and representatives of the employers. Receipts have increased considerably in a context of economic growth, which has led to a rapid increase in health expenditure, which is unanimously considered to be necessary to satisfy the needs of the population⁴. The first tensions appeared, however, with the crises in the 1970s. This required successive governments to put in place "correction plans", which were as frequent as they were repetitive in their principles. Different governments increased and diversified Social Security receipts at an average frequency of once every eighteen months from 1976 onwards, at the same time reducing the monies paid for services. The aim of this was not so much to overhaul the

² Institut Nationale de la Statistique et des Etudes Economiques, *Tableaux de l'économie française*, Paris, La documentation française, 2000.

³ Source Eurostat, 2002.

⁴ B. Valat, *Histoire de la Sécurité Sociale*, Paris, Economica, 2001.

regulation of the health care system, the benefits of which continued to extend to the entire population, but to balance the Social Security budget⁵.

New directions emerged in the 1990s in this context of controlling expenditure. These were designed to control the increase in health care expenditure more closely with interventions not only on budget aggregates themselves, but also on the behaviour of the very people involved in delivering the health care system. Although the success of these approaches was variable, they initially enabled the growth of health care expenditure to be contained, increasing at an annual rate of 3.5% during this period, compared to more than 8% during the 1970s. The effects of these measures, however, mostly appeared to be mostly transient. In light of recent changes, it appears that the measures taken have had difficulty in limiting the increase in expenditure, which has reached annual growth rates of more than 5% in the last two years. What poses a more of a problem than the increase in health care expenditure itself is the difference between the increase in health care expenditure and the increase in the GDP. As applies to many other European countries, health care expenditure has tended to increase faster than the GDP. This is a long-standing trend, the effects of which are seen right up to the present time. Whereas health care expenditure only represented 7.6% of the GDP in France at the start of the 1980s, it now represents almost 9.5% of GDP, one of the highest levels in Europe. Social Security receipts are obtained from social contributions from employees and employers and from tax receipts. They are, therefore, dependent on the economic activity of the country. When growth is high, receipts are higher and the health insurance budget is then balanced or even in surplus. Conversely, if growth decreases, receipts decrease likewise and deficits develop. As a result the change in financing has in fact no direct relationship with the structure of expenditure, changes in which depend on medical activity, technical progress, and the ageing of the population. This dissociation between receipts and expenditure explains the origin of the recurrent failures of the French health care financing system to balance.

This situation is structurally problematical. It poses almost as many problems during a period of economic slowing as during a period of strong economic growth. In both cases, mismatches occur. When the economic situation declines and the difference between the growth rate and the increase in health expenditure rises, as applies at present, deficits develop. As these threaten state finances, they require urgent response from the public authorities. In general, a series of measures attempts to remove reimbursement from certain services and increase certain contributions. When growth is at a crossover point, the situation is little better. The financing of the health insurance system is certainly provided, as was the case in the second half of the 1990s, although the situation remains problematical. Social budgets can be balanced or in surplus and health expenditure continue its course without worrying the public authorities. If there is the slightest decrease in economic situation, however, the difference between economic growth – which guarantees the volume of receipts – and health care expenditure increases suddenly. This situation requires increasingly stringent responses, becoming increasingly severe with the magnitude of the rise in expenditure. Whether the economic situation is good or bad, budgetary administration of finances requires to be adjusted periodically and at greater or lesser intervals and more or less extreme, depending on the intervals. These adjustments do not in any way hide to the original structure of the imbalance. This approach has certainly changed somewhat through the introduction of control mechanisms in the 1990s, although the health care system remains governed mostly by a budgetary approach which involves ‘balancing the books’.

For this reason, when examining the health care system attention needs to be paid to the aggregates which indicate changes in expenditure and receipts of the health care system⁶. These aggregates are

⁵ G. Johanet, *Comptes et mécomptes de la protection sociale*, Paris, PUF, 1986. B. Palier, *Gouverner la Sécurité Sociale*, Paris, PUF, 2002.

defined in the context of national accounting and are therefore different from the aggregates used by OECD for its international comparisons. In particular, the "national health expenditure" of the OECD does not correspond precisely to the "current health expenditure" (CHE) used in national accounting. This aggregate was estimated to be some 148 billion Euros in 2001, and represents all of the expenditure incurred by the different parties taking part in financing the health care system. The Social Security system contributes the greater part, 75.4%, to current health expenditure, households 11.1%, supplementary protective bodies finance slightly less than 10% of the CHE, which is divided between mutual insurance associations (7.5%), private insurance (2.4%) and provident societies (2.3%). Finally, the public authorities contribute 1.3% of current health expenditure. During the last year, the proportion of the Social Security system in the CHE has stabilised, that of the administration has fallen, whereas the contribution from the mutual insurance associations has increased markedly, from 6.1% in 1990 to 7.5% today (see table).

Table 1 : Financing of Current Health Expenditures

	1990	1995	2000	2001
Social Security	76	75,5	75,4	75,4
Public Authorities	1,1	1,0	1,1	1,3
Mutual Insurance Associations	6,1	6,8	7,4	7,5
Private Insurance		3,1	2,6	2,4
Provident Societies	16,8	1,6	2,2	2,3
Households		12,0	11,3	11,1
Total	100	100	100	100

Source : DRESS, 2002.

The "total medical consumption" is a sub-aggregate of the CHE and represents 131 billion Euros. It contains all of the cost sectors of the CHE except for daily payments paid to patients off work, expenditure on medical research and training and expenditure on administering the health care system. On the other hand, it does include expenditure on prevention and, in particular, the last major sub-aggregate "consumption of medical care and goods" (CMCG). This sub-aggregate itself is broken down into expenditure on hospital care, outpatient care and drugs and various smaller cost sectors such as lenses and assorted disposable equipment or dressings. The CMCG was 127,8 billion Euros in 2001 (see table).

By breaking down the CMCG, the structure of health care expenditure can be seen. Overall, all of the cost sectors of the CMCG contribute together to any increase. The increase in expenditure on drugs, approximately 6 to 9% per year, is however relatively greater than the other cost sectors. At 27,3 billion Euros, expenditure on drugs represents almost 21% of the CMCG. This growth is related both to the increase in the number of units sold and to the arrival of new products which are more expensive than the products they are replacing.

At a figure of 57,3 billion Euros in 2001, hospital expenditure represents 45% of the CMCG. Hospital care in France is provided jointly by a thousand public institutions which admit all patients, and approximately 2,100 private institutions, which are often geared towards surgery and obstetrics. The public hospitals have 65% of the 490,000 short stay hospital admission beds (8.5 beds per thousand people), although nowadays consume almost 80% of hospital care expenditure compared to 75% in 1990. This change demonstrates an increase in public hospitalisation at the expense of the private sector.

⁶ Ministère de L'Emploi et de la Solidarité, Direction de la recherche des études, de l'évaluation et des statistiques, *Etudes et Résultats*, n° 187, sept. 2002., « Les comptes de la santé en 2001 ».

Finally, ambulatory care makes up 26% of the CMCG, at 33,7 billion Euros. Half of the ambulatory care expenditure is due to expenditure on care provided by doctors, 20% to care provided by ancillary medical staff, 20% to dental care and 10% to laboratory expenditure. France had 175,000 doctors in 2000: 3 doctors per 1,000 people, 47% of whom were general practitioners and 53% were specialists. 113,000 of all French doctors work in a self-employed setting. As doctors are free to decide the place in which they set up practice, their geographical distribution is, however, unequal. Certain regions, such as the Paris or South of France regions, are therefore better supplied than the national average, whereas other regions, such as the North, have a lower density of doctors, despite the fact that their health indicators are poorer.

Table 2: Consumption of Medical Care and Goods

	Value (billion € 2001)	Annual increase rate							
		In value (%)				In volume (%)			
		1990- 1995	1999	2000	2001	1990- 1995	1999	2000	2001
Hospital Care	57,3	5,3	1,7	1,7	4,1	2,3	0,4	1,6	1,9
Outpatient Care	33,7	4,5	3,8	3,8	5,1	2,7	3,2	4,0	6,2
Drugs	27,3	6,1	6,7	6,7	8,3	5,5	7,0	9,9	9,5
Others	9,4	8,0	10,5	10,5	11,0	5,2	10,0	11,2	8,5
Total	127,8	5,4	3,9	3,9	5,8	3,2	3,1	4,6	5,2

Source : DRESS, 2002.

1.3 The impossible control of health care expenditure

In the face of recurrent differences between health care expenditure, which is increasing constantly, and receipts, which vary depending on the economic situation, successive governments have tried different types of measures. Overall, two processes have predominated in succession.

The first process, which characterised the period 1970-1990, involved controlling the service provided, accompanied by annual administration of the health care insurance funds budgets. The introduction of *numerus clausus* helped to control the numbers of medical and paramedical professionals which, at that time, was increasing greatly. In parallel, the public authorities set in place a "hospital charter" designed to plan and control hospital capacities. At the start of the 1980s, hospital institutions were allocated a total annual budget which replaced the fee for service tariff, which was considered to be inflationary. Annual objectives for changes in expenditure were also defined for laboratory services, nursing care and private clinics. Accompanying these measures in the budgetary management of the national health insurance funds, the Government continued to adjust the levels of reimbursement to meet its financial ability to pay, either by increasing receipts from new contributions or by removing reimbursement from certain services, usually doing both at the same time. These measures had two types of effect without limiting the increase in health care expenditure. Firstly, Social Security system receipts increasingly shifted towards taxation. The introduction of new taxes increased the proportion of receipts collected in the form of tax at the expense of social contributions from employees and employers. These measures also helped to destabilise the cover system, which was becoming increasingly expensive, and the Government therefore considered other types of measures, which were instituted in the 1990s.

From this period onwards, the public authorities concentrated not only on the financing of the health care system, but also on its operation. Between 1990 and 1995, a "clinical governance" system was placed on health care expenditure and health care professionals. Observing good practice standards, defined in advance by the public authorities in association with doctors, was assumed to avoid useless or dangerous procedures. A sanction mechanism was envisaged if the practice was not followed, although in practice this never came into application. Although this marks a turning point in the politics of control, the economic impact of good practice standards is difficult to assess. Savings of 51 million Euros have, however, been quoted in the field of drug budgets⁷. Despite these efforts, health care expenditure continued to rise, although at a rate which was certainly lower than before, in the region of 3 to 4% per year. This rate, however, could not absorb the difference from national growth rate, which itself was slowing down. As a result, at the end of 1995, the sudden deterioration in the financial system of the Social Security system demanded a robust response, resulting in the Juppé Plan.

The Juppé Plan contained short and medium term financial arrangements and more ambitious structural reforms. In addition to classical measures, the financial plan saw the introduction of a tax designed to reimburse the Social Security system deficit during the 13 subsequent years, subsequently prolonged by 5 years. This tax started a "credit" financing system for the health insurance funds, putting the burden of current expenditure on future generations.

In structural terms, the reforms preserved the private features of the French health care system, although addressed the organisation of the care offered. The Juppé Plan firstly introduced *a priori* control of expenditure, voted by the Parliament within the context of a Social Security system financing law. Each year, this law fixes a national target for health service insurance funds expenditure (ONDAM). This is, however, indicative and was, in fact, only met in 1997. Since then, the target has consistently been exceeded in increasingly high proportions, rising from 1.4 billion Euros in 1998, to 2.8 billion Euros in 2001. Overall, the target is broken down into a series of units. The unit of hospital expenditure, which covers expenditure of public hospital institutions and private clinics, is divided between regions according to an equalisation arrangement. Resources were distributed through new structures, the Regional Hospitalisation Agencies (ARH), which were also given the role of restructuring the regional hospital framework. Ambulatory medical expenditure was contained within two units, one for general practitioners and the other for specialists. These units, which were controlled by the medical services of the national health insurance funds and then by the State itself, were initially designed to claw back payments of fees from doctors who exceeded their limits. This arrangement was abandoned as it was found to be sensitive to apply, both politically and legally. A number of observers pointed out in general that separation of the units could have the effect of encouraging the parties involved in delivering the health care system to "shift" expenditure from one unit to another without necessarily promoting more efficient behaviour.

The Juppé Plan also envisaged continuing the "clinical governance of expenditure" started a few years previously, particularly through the observation of good practice standards. Doctors were therefore required to undertake continuing medical education and to become computerised. Finally, the reform encouraged studies developing co-ordinated practice bringing together professionals and health care institutions in health care networks and clinical pathways. The impact of these structures on health care expenditure is still difficult to assess. This also applies to most of the arrangements introduced over recent years, the budgetary consequences of which only emerge at an aggregate level. In view of the recent change in health care expenditure and the deficits which will continue

⁷ Annick Le Pape, C. Sermet, *Les références médicales opposables sur le médicament : bilan de trois années d'application*, Paris, CREDES, 1998.

to appear, if future economic growth is to remain poor, it is likely that the administration of the national health insurance funds will probably move towards new arrangements, probably relating to traditional budgetary administration designed to balance the social 'books'. Although the parties delivering care in the health system are now, undoubtedly, more aware of the economic constraints imposed on this sector, the regulatory mechanisms introduced over recent years scarcely appear adequate to contain the growth of expenditure, which is, again, increasing fast. Beyond their economic impact, however, these reforms have also had the effect of transforming the general physiognomy of the sector profoundly.

1.4. The new physiognomy of the health care system

If these changes are to be summarised in one word, it is the word co-ordination, which has the advantage of describing two complementary effects. The health care system has seen a dual movement of integrating medical practice bottom up and redeployment of the regulatory control from top down. A few years ago, the French health care system was characterised by two coexistent approaches. The very great freedom afforded to health care professionals interlinked both positively and negatively with attempts to plan health care organisation. The viability of this hybrid system, directive from the top and liberal from the bottom, was provided by social coverage which operated as an open ended mechanism. For both economic contextual and structural reasons (technological progress, improvement in living standard, ageing of the population) the balance of this system became progressively upset and reforms introduced in recent years had accentuated these trends, allowing the framework of the new health care system to emerge just below the surface. The rapprochement of the two, directive and liberal, poles of the system appears to have led to the birth of an intermediary co-ordination space, which is currently being established. At the top of the system the public statutory authorities have been redeployed both functionally and geographically, whereas the professionals, on their part, have seen their activities integrated into collective practices.

Integration of these practices has led to closer links between hospital medicine and ambulatory medicine. These two categories of health care, which were traditionally separated, are based on different forms of legitimacy: primary care stresses the importance of the "clinical freedom", whereas hospital medicine places the emphasis on unequivocal technical performance. These systems have the property of denying any legitimacy to external control, particularly financial control. The third party is just required to pay the bill. Following the reforms, this model became weaker in favour of more integrated regulation.

As in other European countries, the place of the traditional clinical freedom is diminishing in France. Since the start of the 1990s, the concept of quality, often linked to economic efficiency, has come into the formal definition of good practice. Good practice is juxtapositioned between the doctor and the doctor's patient. Consensus conferences bring together the leading experts on a given question and supporting medical reference texts, defined in a context of clinical governance, lead to a more collective standardised definition of practices. Computerisation of the health care sector is moving things in the same direction by increasing the integration of medical practices. Clinical freedom is being questioned by the patients themselves, who are less willing to give their trust than before. Although far from the American system, the number of legal claims on doctors by patients, which has increased by more than 75% over ten years, is testimony to this change. The reduction of clinical freedom in favour of both medical, legal and economic standards weakens the independence of the doctor, whose activity is more integrated than a few years ago.

These changes should not be seen as a deterioration in medical service. Restrictions placed on practices promote collective reorganisation of health care and the emergence of networks and health care pathways to manage patients on a local scale should help to reduce primary care–hospital care segregation. Experiments conducted in the field of drug addiction, AIDS and hepatitis C have supported this type of co-ordination. Another illustration of the collective organisation of the system can be seen in the improved incorporation of public health, which was historically deficient in France. The creation of the Higher Committee for Public Health in 1991, and the national and regional health conferences in 1996, demonstrate this revival in public health. These dynamics are linked to redeployment of the public statutory authorities.

Even before the Juppé Plan, major reforms took place affecting the organisation of public responsibilities in terms of health care. Various scandals, such as the infected blood affair, demonstrated the inability of the administrative services to fulfil their control functions. These dramatically brought to light the lack of technical expertise and inadequate reactivity of the public bodies in the face of health crises⁸. The State also chose to externalise part of its responsibilities. The creation of health safety agencies occurred after the earlier introduction of specialised agencies in the field of medical evaluation, drugs, transplantation and also blood. In the context of the Juppé Plan, this functional redeployment was also strengthened by geographical redeployment, giving a greater role to the regional level. The 1995 reforms introduced two important institutions, the Regional Hospitalisation Agencies (*Agences régionale d'hospitalisation*, ARH), responsible for the hospital services, and the Regional Unions of the National Health Insurance Funds (*Unions régionale des Caisses d'Assurance maladie*, URCAM), which combined all of the Social Security funds from the many cover systems within an administrative region. These organisations are designed to collaborate in the hospital field in order to no longer separate the production of health care from its financing. In the ambulatory field, URCAM must work with other regional, and only slightly older institutions, the Regional Professional Unions, created in 1993, to represent primary care doctors.

This approach of redeploying public responsibilities is not without danger. It carries a known risk of the agencies being "taken over" by the parties they are designed to control. This difficulty is seen, for example, vis-à-vis expert evaluations requested by the Drug Agency. Despite the precautions taken, the competent experts are sometimes linked with the company whose products they are to assess. The move towards redeployment also risks creating difficulties in co-ordination between the different bodies. The competencies of the agencies may overlap and result in inconsistent recommendations. Overall, redeployment of the public statutory authorities should, however, allow senior people to be as close as possible to the technical questions which they have to answer.

Finally, the emergence of a form of pluralism may allow new players to take part in regulating the system. One of the challenges of transforming the health care system is the possible arrival of players using competing mechanisms within the health care system. Beyond academic considerations based on foreign precedents, a few proposals have been put forward with respect to this over recent years. Some liberal politicians, albeit few in number, have occasionally stated that they are in favour of competing regional mechanisms between national health insurance funds, based slightly on the German model. In parallel, some doctors' associations, albeit wishing more than anything else to oppose the Juppé Plan, have suggested the possibility of "administrative competition" used by private operators, working to a universal specification, guaranteeing equality of services. Finally, for a few years, some insurance groups, such as AXA, have been examining the conditions for a more overt entry into the health insurance markets. These initiatives have, to date, remained mostly in proposal form, and some people consider them already to be of no merit.

⁸ M. Setbon, *Pouvoirs contre Sida*, Paris, Seuil, 1993. A. Morelle, *La défaite de la santé publique*, Paris, Flammarion, 1996.

More than the increased competition between players in the health care system, it is its movement towards innovative methods of co-ordination involving new players or new forms of practices which is taking place. These changes are repainting the French health landscape. By promoting mechanisms of integration, they are questioning the central nature of hospital services and the power of specialists to the benefit of new players, such as general practitioners who agree to work more collectively. This being the case, the reforms are meeting major resistance, which their sponsors must ensure do not threaten the management of the new health care system. Above all, continuation of these changes will, for a long time still, have to accommodate budgetary management of health care expenditure, together with management according to the economic situation. Major contradictions could then appear between these two contradictory approaches. The more or less authoritarian budgetary "control" approach, designed to contain health care expenditure in the short term, risks weakening the structural mechanisms which give greater independence to the players involved and the institutions responsible for developing co-ordination mechanisms within the system.

2. SURVEY RESULTS FOR THE GENERAL POPULATION

Three major parties are responsible for health care expenditure in France: compulsory health insurance, top-up health insurance and household contributions. The compulsory systems maintain a public service with compulsory membership and a principle of solidarity. There are more top-up systems, which relate to personal rights: these are subject to rules of competition: within these can be distinguished to the mutual insurance funds, the insurance companies and the provident institutions.

Health care expenditure is divided unequally according to age band as costs are higher towards the end of life. We also know that less than 10% of the population generate more than half of the expenditure.

The financing of this expenditure is divided between the players: 76% come from the compulsory health insurance, 12% from the top-up health insurance and 11% from household contributions (DRESS – CNS, September 2002). The conclusions of several studies suggest that approximately 90% of the population has top-up health insurance.

Several health care expenditure control programmes have been applied over more than the last 15 years. These programmes have not produced the expected results and health care expenditure has continued to advance faster than the GDP.

In order to collect the opinion of French people a survey has been conducted in a sample of 698 people representative of the population of France over 16 years old. This survey is based on a declaration type of international questionnaire adapted for France. Different questions are used to specify the socio-demographic and medical features of the sample and the methods of cover held by the people questioned. These characteristics are used to assess the opinion of the people questioned about control of health care expenditure, as a function of their demographic and medical characteristics and of their respective means of cover for expenditure.

2.1 Characteristics of the population

2.1.1 Socio-demographic characteristics

The population questioned contains 698 patients, 54.4% of whom were women. The average age was 49.3 ± 1.3 years old (minimum=16 years old ; maximum=91 years old). The age distribution revealed a predominance of patients over 60 years old (33%), followed by those between 31 and 40 years old (22%). Patients between 20 and 30 years old who make limited use of the health care and health insurance system, made up 13% of the sample. People between 16 and 20 years old made up less than 4% of the sample. (**table 1**).

Table 3 : Distribution of patient according to age band

Age band	Number of subjects	% of subjects	% in the French population
16 - 19 years	26	3.72	8.24
20 – 30 years	92	13.18	16.26
31 – 40 years	154	22.06	35.94
41 – 50 years	92	13.18	
51 – 60 years	106	15.19	14.17
≥ 60 years	228	32.66	25.40
Total	698	100	100

The age and sex distribution appears to be consistent with those of the population of France (INSEE – 1999 census). Women make up 52.03% of the French population in the age band considered. The percentages of the different age bands are shown in table 1. There is a slight under-representation of people under 30 years old and an over-representation of people over 60 years old. Overall, there is no significant difference between the 2 distributions ($p = 0.25$).

The majority of the people questioned were married (56.5%). Bachelors made up 20% whereas cohabiting partners, and divorced or widowed people made up less than 24% of the sample. A total of 36% of the people questioned were living alone.

The distribution of educational status of the people questioned was : 43% with primary or secondary level, 27% had the BAC or professional qualification and 30% were educated to above BAC level.

49% of men were 50 years old or above and 58.5% were living with a partner ; 40.5% were educated to below BAC level and 29% to a level above the BAC.

55% of women were 50 years old or above and 71% were living with a partner ; 47% were educated to below BAC level and 30% to a level above the BAC.

2.1.2 Characteristics of the sample with respect to health problems

Of the 698 people questioned 58% had suffered from either a chronic disease or from a serious health problem during the last 5 years, or by a health problem in a close relative. Assuming that there is a different perception of the control of health expenditure depending on the extent which the people are directly exposed to the disease, these findings provide an indication *a priori* of the sensitivity of the individuals to the questions which have been asked about the control of health care expenditure.

More specifically, of the 698 people questioned, 212 (30.4%) were currently being treated for a chronic disease. Of these 172 people were over 50 years old. Four times as many people over 50 years old were suffering from a chronic disease compared to those under 50 years old. The most commonly reported chronic diseases were hypertension (97 people), hyperlipidaemia (50 people), bone diseases (rheumatic pains, osteoarthritis etc. – 43 people) and diabetes (24 people). 5% and 3% of people with chronic diseases reported that they suffered from cardiovascular and respiratory diseases respectively.

During the last five years, 122 people (17.5% of the people questioned) reported that they had suffered a serious health problem. The health problems reported were diseases of the bone and joints (24 people), cardiovascular diseases (20 people), cancer (12 people), urinary and renal problems (9 people), thyroid problems (5 people) and gastrointestinal problems (5 people).

31% of men reported that they suffered from chronic disease and 17.3% had suffered a health problem during the last 5 years. These figures were 30% and 18% respectively in women. Sixty five people (9.3%) who reported that they had suffered serious health problems during the last 5 years were currently suffering from a chronic disease.

When people were asked about health problems in their close contacts, 275 people (39.5%) reported that one of their close contacts had suffered from a serious health problem.

2.2 Financing and regulation of health care expenditure

2.2.1 Methods of financing are known approximately

Before approaching regulation of health care expenditure, a series of questions was used to gain insight into the subject's knowledge about the parties involved in the financing of health care expenditure. These results indicate an approximate knowledge of the financing mechanisms which does not differ significantly according to age, educational status or state of health of the people who were questioned.

Answers obtained about the **financing of health care expenditure** are grouped in **table 2**. More than 57% of people thought that health care expenditure was exclusively financed by the social security system and mutual funds, whereas 18% of people thought that household contributions were also associated with funding. The social security system was reported as the only financing body for health care expenditure by 91 people (13.3%), whereas 20% of the people questioned did not include the mutual funds and private insurance companies amongst the financing bodies.

Table 4 : Health care expenditure financing bodies

Financing of health care expenditure	Number of subjects	% of subjects
Household contributions	19	2.77
Social security	91	13.27
Mutual funds and private insurance companies	19	2.77
Universal disease cover	6	0.87
Household contributions + Social security	26	3.79
Social security + Mutual funds	394	57.43
Household contributions + Social security + Mutual funds	122	17.78
Other answers	9	1.31
Total	686	100

Knowledge about the methods of health care expenditure funding did not appear to differ significantly depending on whether or not the person reported that they were suffering from a chronic disease. 59% of the people who reported that they were suffering from a chronic disease considered that health care expenditure was funded by the social security system and mutual funds, and 17% considered that only the social security system was responsible for funding, and 13% believed the household contributions were involved in the funding. The corresponding percentage figures for people who reported that they did not suffer from chronic disease were 53%, 18% and 14% respectively. The difference between these two populations was not significant ($p=0.85$).

The answers obtained were not particularly different according to educational status of the people questioned: the percentage of people who attributed funding to the social security system and mutual funds were 56%, 60% and 54% for educational status below BAC, BAC and above BAC.

The answers obtained were clearly linked to top-up medical insurance which these people had. This insurance is usually voluntary and is paid either totally or partially by the insured person. Involvement of the household contributions in funding was reported in less than 20% of all of the answers obtained.

2.2.2 Methods of funding considered to be desirable

The people were asked to give their view on how desirable different methods of funding were. The majority opted for compulsory contributions. 47% responded favourably to compulsory contributions compared to 22% who did not support these. 31% of the people expressed no view. Of those people who preferred compulsory contributions the age, sex and educational status distributions were no different from those of the overall sample. 2/3 of these people were living with a partner, 1/3 were suffering from chronic disease and 1/5 had had a serious health problem during the last 5 years. There was a majority of women amongst those opposed to compulsory contributions to fund health care expenditure and 25% of the people opposed were suffering from chronic disease.

2.2.3 *Limitation of health care expenditure widely accepted*

Following the many health care expenditure regulation plans adopted over the last several years, most of the people questioned felt that health care expenditure was being limited. More than half of the people questioned (51.4%) approved of the need to limit health care expenditure. Attitudes about the principle of restricting health care expenditure varied however depending on the socio-demographic and medical features of the people questioned.

Sub-group analysis of the respondents showed a significant difference between people with chronic disease and those without ($p=0.001$). More of the people without chronic disease were in support of restricting health care expenditure. A significant difference was also found according to educational status. People who had reached the BAC level were least in support of restricting health care expenditure ($p=0.01$). On the other hand there were no significant differences between the sexes.

The people opposed to restricting health care expenditure were older (54% over 50 years old) and more were suffering from chronic disease (40%). One out of 4 people agreed both to compulsory contributions and to limitation of expenditure.

2.2.4 *How should increased health care expenditure be funded?*

When improving the health care system requires an increase in expenditure, the people questioned were opposed to a rise in their contribution regardless of type.

Only 29% of people were willing to pay more in taxes or social security contributions. More than half of the people questioned would not support a measure designed to increase taxes or social security contributions.

Of those who supported compulsory contributions to finance health care expenditure, half were opposed to any increase in contributions in order to improve the health care system. 2 out of 3 people who agreed with restricting health care expenditure rejected any increase in contributions.

The attitude of the people questioned was identical vis à vis increase in top-up medical insurance premia. 29% of people supported and 55% of people did not support such an increase.

For both of the above measures, 18% of people agreed whereas 48% were opposed to an increase in contributions and in top-up medical insurance premia.

The patient's contribution is one of the levers which allow the involvement of compulsory health insurance bodies to be adjusted. 70% of people questioned were opposed to an increase in the personal charges with a view to reducing contributions, whereas 19.5% of people approved of this approach. The answers obtained were not associated with the socio-demographic characteristics of the populations.

2.2.5 French people support “medicalised control” and greater participation

Restricting expenditure emerges as a need in everyone’s eyes. The methods of achieving this however are important. The people questioned responded in a way which did not recognise all parties involved in the health care system as having an equally legitimate role in restricting health care expenditure. Doctors were seen as having a highly legitimate role, whereas this did not apply to the public authorities and the people questioned preferred medical control of “health care expenditure” to centralised budgetary control. 41% of people considered that limitations should come from medical decision making rather than political (6%) or administrative (14%). 40% of the people questioned gave no view on this issue.

The population also wants public debate about control of health care expenditure. The desire for public debate on health care expenditure forms part of a more general wish for access to information and to decision making. In the French institutional system, “regional health conferences” could offer an interesting platform for this type of debate if they emanated from local, *commune* or *département* conferences. 64% of the people questioned would support this type of debate, 9% would not support it and 27% did not answer the question.

2.2.6 What health expenditure should be limited or increased?

The survey brings out a sentiment of restriction in terms of health care. 62% of the people questioned reported that they felt the effects of such restrictions whereas 28% did not. This effect related both to access to certain care and access to certain drugs. In addition, the distribution of results by socio-demographic characteristics of the sample were no different from those of the entire population. The existence of these restrictions however was not considered to be incompatible with quality of care. 54% of people questioned considered that control of health care expenditure was compatible with quality of care compared to 23% who expressed the opposing opinion and 30% who did not answer the question.

In order to try to identify the fields in which the people considered it was possible to envisage restricting health expenditure, the survey asked the subjects to give their views about different cost sectors on which control efforts could be directed. Four types of expenditure were proposed: pharmaceutical expenditure, length of hospital stay, reduction in health care coverage and doctors’ incomes.

13% of people did not respond to the question. Three out of four of the people questioned considered that pharmaceutical expenditure was a field on which efforts to control expenditure could be made. Reduction in length of hospital stay followed this (60%), followed by a reduction in the extent of care (36%) and finally, in last position, reduction in doctors’ incomes (29%). These results confirm the highly legitimate esteemed position of the doctors. It should be noted however that the questionnaire was administered during a period when there was considerable public debate and public decisions about re-valuing medical fees.

56% of people questioned considered that reducing the latter of these cost sectors would have little impact on reducing health care expenditure (Table 3). 7% of the subjects questioned considered that the 4 cost sectors had little importance in reducing health care expenditure, whereas 17% of people considered that these sectors were very important in reducing health care expenditure.

Table 5 : Relative importance of reducing health expenditure sectors (n=698 subjects)

	Not very important	Very important	No answer	Total
Doctors income	394 (56%)	201 (29%)	103 (15%)	698 (100%)
Drug expenditure	93 (13%)	522 (75%)	83 (12%)	698 (100%)
Length of hospital stay	189 (27%)	418 (60%)	91 (13%)	698 (100%)
Extent of care covered	254 (36%)	346 (50%)	98 (14%)	698 (100%)

Identification of the fields requiring investment and increase in expenditure was assessed by a series of questions. Almost 3 out of 4 people questioned considered that the field in which the most tangible lack of health measures existed was the number of nurses. One out of two people chose management of certain treatments (including the most expensive) and number of hospital beds. Finally the number of doctors, doctors' remuneration and number of hospitals were reported less frequently, by 32%, 16% and 21% of subjects respectively.

Table 6 : Fields in which health resources were lacking (n=698 subjects)

	Number of positive answers (%)
Number of hospitals	150 (22%)
Number of hospital beds	354 (51%)
Patient management	316 (45%)
Doctors' remuneration	110 (16%)
Number of doctors	225 (32%)
Expensive treatments	377 (54%)
Number of nurses	506 (72%)

2.3 Conclusion

According to the World Health Organisation, the French health care system is one of the best in the world. Beyond its flattering nature this finding has an economic corollary. As in many other countries, health care expenditure is increasing very much faster than the Gross National Product. In this context, recurrent social security deficits and the different expenditure regulation plans developed over several decades have made the population aware of the need to control health care expenditure in order to preserve the health care system. Although French people express an awareness of restrictions existing in access to health care and to some drugs, they also in particular see control of health care expenditure as a necessity. This need appears to be even more legitimised by the fact that they do not feel that regulation of health expenditure should necessarily result in deterioration in quality of care. The acknowledged legitimacy of controlling health care expenditure is further strengthened by the fact that most French people consider that these expenses financed by contributions cannot increase indefinitely. The survey population is against an increase in compulsory contributions and other forms of funding borne by the insured.

In general terms, public decisions on the subject of funding health care expenditure in recent years have resulted in an increase of the component paid either directly or indirectly by users. Studies by the Ministry of Health (DREES) on national health care accounts, show for example, that 10% of health care expenditure is still paid by the household contributions after payments from the compulsory and top-up health insurance bodies. The budgets of these bodies come mostly themselves from household contributions resources through compulsory contributions which finance the national health insurance bodies, and which are not only carried by employers but also from salary. Top-up insurance is funded more directly either in part or totally by household contributions. These are charged by individual or collective membership through companies. Despite the increasing importance of household contributions in financing the health care system, some people still have a blurred view about the parties involved in overall funding. 20% of responses about funding, for example, entirely excluded the mutual fund associations. Several contemporaneous studies have also pointed out that 90% of the population of France currently has top-up health insurance.

The increasing part of the household contributions in the funding of health care expenditure is associated with a desire for greater involvement in choices made with respect to health. Firstly, in terms of collective decisions, the results of this survey indicate that French people have a real interest in the management of their health care system. Despite a number of approximations vis à vis their own involvement in the system, they are well informed and express a wish for greater participation in debate about the regulation of health care expenditure. This involvement also emerges in terms of funding methods. Increasingly, the level of contribution to peoples health expenditure depends on top-up cover which they opt for. For some people, participation in top-up insurance bodies is so low however, that it may be considered to be non-existent. Top-up cover organisations have also excluded the costs of serious diseases for which their insured members are given exemption from the patient's contribution.

The increasing part of the user in the health care system follows an approach of shared responsibility. In addition to 'responsibilising' households responsible, the survey identifies a desire to 'responsibilise' doctors. The doctors are recognised as having a central position in the dynamics of control of health expenditure. The French people questioned expressed a preference for medicalised regulation coming from doctors, rather than administrative or political regulation. The confidence awarded to doctors is also seen in a desire not to reduce their income in order to reduce health care expenditure, particularly as the people questioned considered that this type of reduction would not have a major impact on health care expenditure. The recognised central role of doctors is also not unrelated to the increasing involvement of users. To look at several measures taken recently, making doctors responsible is becoming a reality: they are now for example, invited to report non medically justified consultations or drugs prescribed outside of their marketing authorisation. These declarations will not be paid for by the national health insurance funds. Because of their implications, these changes tend to increase the levels of responsibility played by all parties in the system. The development of health care networks and sharing information about patients is one of rationalising patient management.

3. SURVEY RESULTS FOR THE GROUP OF PROFESSIONALS

After the dark years during the period 1993-1996, the general budget of the Social Security system experienced three years of surplus during 1999, 2000 and 2001. Despite projections based on a slight positive balance, a deficit of 3.4 billion euros was posted in 2002 according to the figures from the Social Security accounts commission. Projections for the year 2003 are more pessimistic still. The Social Security “black hole” is expected to deepen, reaching 7.9 billion euros.

These changes raise various ideas in order to change some of the principles of financing health care expenditure. Traditionally, health care expenditure in France was supported by three types of bodies: the Social Security, top-up cover and personal contributions. Recently, 76% of expenditure was financed by the Social Security, 12% from supplementary coverage and 11% from personal contributions. The need to control expenditure may upset this distribution placing a larger part of financing on top-up cover and personal contributions.

For some fifteen years, many plans have been introduced to control health care expenditure, without actual success. In order to understand the reactions of doctors liable to be affected by this type of plan a study has been conducted in collaboration with SOFRES in 185 representative doctors. Their responses to a questionnaire constructed on a European scale provide considerable information about their characteristics and general opinions about the problem of controlling health care expenditure which ultimately reflects medical consumption. The responses to the questionnaire also provide information about their opinions depending, for example, on their speciality, age or type of practice.

3.1 Modifications to the questionnaire and sampling procedure

The initial procedure was modified for several reasons. Firstly the population targeted by the questionnaire was reduced to doctors only. The European protocol proposed to include 10 to 20 representatives of parties involved in the health care world in the study (Government, associations, top-up insurance companies, approximately 200 practitioners (doctors, pharmacists) and 10 to 20 opinion leaders (journalists, political parties, consumer associations). The disadvantage of this protocol is that each population is represented in small numbers which does not allow a good statistical analysis to be conducted. Question 5 of the questionnaire concerning professional was therefore removed.

The second of the questionnaires was reconstructed, keeping the same questions, in order to make it easier to administer by telephone. The operating version of the questionnaire is shown in annex 2.

In addition, questions relating to ophthalmological care had to be adapted to the French context. The term “ophthalmological care” is ambiguous. It describes both ophthalmological consultations which are paid for 65% by compulsory National Insurance or optical goods (glasses and lenses) which are very little reimbursed by the Social Security System and which are financed by the mutual health funds and supplementary insurance. This latter feature appears to be the reason for the responses obtained.

The sample of 185 doctors contained 95 general practitioners and 90 hospital consultants practising in mainland France. No private specialists were included in the sample.

Specialists and general practitioners were separated in the sampling plan. Generalists were drawn randomly from the regions selected. For hospital consultants, selection was randomised both by region and by speciality.

3.2 Analytical method

The method used to distinguish the different opinions of doctors according to their characteristics (speciality, age, type of practice) was the Kruskal Wallis test. This test offers a non-parametric alternative to univariate tests such as the Anova or the Chi2. The aim was to differentiate two or more populations according to a specific qualitative criterion. In this case we tested the hypothesis that the median values were equal. In order to do this the Wilcoxon scores are calculated for each observation. These scores represent the ranks of observations. Use of these scores in one factor analysis of variance then produces the Kruskal Wallis test.

3.3 Characteristics of the population

The study population consisted of 185 doctors, 51.35% (n=95) were generalists and 48.65% were hospital consultants (n=90).

All of the specialists were practising in a hospital environment. 68% were working in public institutions, 17% in private institutions not participating in the Public Hospital Sector (PSPH) and 13% in private PSPH institutions. Amongst those specialists who were most represented in the sample, 20% of those questioned were anaesthetists, 15% were surgeons and 13% were psychiatrists. Almost 9% of the specialists were practising in internal medicine. Finally, cardiologists and gynaecologists-obstetricians each made up approximately 7% of the specialists.

Of the generalists, 62% were single-handed practitioners. 92% of the sample were sector 1 (only 7% of generalists were practising at tariffs beyond the agreed rates).

The mean age of our population was 47.4 years old and approximately 56% of the people were under 50 years old. 52% of the generalists were under 50 years old in our population compared to 61% of specialists.

With respect to length of practice, of the 185 doctors questioned only 23% had been practising for less than 10 years. The proportion of generalists who had been practising for more than 10 years was higher than the proportion of hospital consultants.

Table 7: Two by two table showing length of practice/speciality

	General practitioner	Hospital consultant	Total	P value
Less than 10 years	13 (13.68 %)	31 (34.44 %)	44 (23.78 %)	0.0009
More than 10 years	82 (86.32 %)	59 (65.56 %)	141 (76.22 %)	

The great majority of the population questioned was male (80% of the doctors). Of 38 females, 17 were general practitioners and 21 were specialists, 13 of whom were practising in public institutions.

The young doctors could not be distinguished within our population from those over 50 years old with respect to their type of practice. Only 40% of the young doctors were practising in a group compared to 35% in those over 50 years old. Length of practice was also not a discriminatory factor for this point. 63% of doctors with more than 10 years experience were single-handed practitioners compared to 53% for those with less than 10 years experience.

3.4. Opinion of doctors concerning control of health care expenditure

3.4.1 Causes responsible for the increase in health care expenditure

Control of health care expenditure was an important challenge for the doctors. They were asked about the major causes of the increase in expenditure (q6). The most important causes were considered to be ageing of the population and technical progress in terms of diagnosis and treatment. Although not considered to be as important, over-consumption due to medical insurance cover also emerged as an important factor for the increase in health care expenditure. Conversely, the method of remuneration of health care professionals and even more, lack of competition in the health care system were less important causes for the increase in expenditure in the view of the health care professionals. We found in general that doctors attributed the increase in health care expenditure to factors which did not arise directly from their behaviour. Objective findings such as ageing of the population or development of expensive medical techniques or behavioural findings attributable to other parties in the health care system, particularly people with social insurance coverage appeared to be more important reasons for the increase in health care expenditure.

Table 8: Number and % of doctors who considered a cause to be important or very important

Cause for the increase in expenditure	Number of people	%
Ageing of the population	174	94.05
Technical progress in terms of treatment	165	89.19
Technical progress in terms of diagnosis	163	88.11
Over-consumption caused by medical insurance cover	127	68.68
Method of remuneration of health care professionals	51	27.57
Lack of competition in the health care system	38	20.54

3.4.2 Control of expenditure and its consequences

The doctors were questioned about decisions which would be liable to enable better control of health care expenditure. In their view certain areas merited specific attention (q7). The doctors felt it was important to reduce the growth of expenditure on drugs (81 %), to control expenditure associated with full hospitalisations (80%) and to reduce the Social Security administration costs (76%). Measures in other fields, however, emerged as less of a priority. They attracted a large but significantly lower number of positive opinions. This applied to day hospitalisation (53%), dental care (40%), ophthalmological care and expenditure on optical goods (38%). These latter two fields are traditionally reputed to be poorly managed by the national health insurance.

The doctors were also questioned about the consequences which decisions taken to control health care expenditure could have in these different areas. The first impact of controlling expenditure was medical. This could lead to changes in the quality of care provided and therefore influence the state of health of the population (q15). 45% of doctors considered that controlling expenditure in

the field of complete hospitalisation would lead to a deterioration in state of health through a deterioration in quality of service and 40% considered that it would produce the same result for ophthalmological care. In general, and for all of the fields questioned, the doctors felt however that the situation remained unchanged (from 34% to 60%). Control of expenditure could even have positive consequences on patients' state of health, particularly in the field of drugs and day hospitalisation (30.27% and 48.11% respectively considered that there could be an improvement in these fields). In both of these cases controlling health care expenditure could avoid over-prescription of drugs and contribute to the development of day hospitalisation.

The questionnaire asked the doctors about the risks of rationing as a result of measures taken to control health care expenditure in different domains (q16). The doctors' opinions on this subject were very widely shared for most of the fields examined. Half of the doctors feared rationing as a result of controlling expenditure, whereas the other half did not express any specific concern about this. 65% of doctors questioned however considered that control of expenditure in the area of full hospitalisation would lead to a form of rationing, compared to 35% in the area of day hospitalisation. Doctors asked about the subject described various forms of rationing spontaneously:

- rationing of drugs (15.82%), by removing the reimbursement for comfort drugs and useful drugs and because of an obligation to use generics;
- rationing of access to hospital care (13%), by reducing hospitalisation time and closing hospital beds;
- rationing of dental and ophthalmological care (12.43%);
- rationing of laboratory and paramedical procedures (11.3%), limiting access to high technology to nursing care and to physiotherapy.

3.4.3 *Who is responsible for controlling expenditure?*

The great majority of doctors questioned (63.78%) considered that public health expenditure should increase (q8). In this context the state would inevitably have an important role to play in regulating health care expenditure.

75% of the doctors considered that the responsibility for controlling expenditure fell on the politicians. The responsibility, however, was shared with the doctors themselves (67%), and to a lesser extent with the Social Security system (58%) and the pharmaceutical industry (49.73 %). Only 30% felt that patients themselves should take on part of the responsibility (q9). Overall the party involved in regulation should above all be politicians and the doctors themselves.

Although a slightly corporate approach, this position however exhibits subtleties. It is open to the democratic design of political choices, leaving a place for the citizens. 71.89% of doctors felt that control of expenditure should be explicit, i.e. based on decisions arising from public debates, rather than implicit, i.e. results of personal decisions taken on a case by case basis (q13). The doctors also expressed the will to link citizens to the future of the health care system and to offload the responsibility for regulation onto politicians.

A large proportion of the doctors considered that the financial efforts made by the health care system were insufficient overall in the fields of mass screening, preventative treatments and health education campaigns, (from 40% to 48%). The idea of a financial contribution from the beneficiaries of mass screening was also considered to be acceptable by the doctors although they tended to a greater extent to reject mass screening in favour of health education (q10 and q11). The explanation for this contrasting attitude is not clear and we can only offer hypotheses. Health

education for doctors appears, therefore, to come from a public health policy followed by the state. Conversely, screening often involves local communities and doctors, and in some cases would involve the patient visiting medical consulting rooms.

3.4.4 *What are the most appropriate methods?*

Most of the doctors questioned felt that the increase in expenditure could be controlled. 32.43% of them however considered that this was not possible (q17).

The methods used to control the expenditure derive from different principles (q14). The most widely reported principle was taking into account the clinical decision of the doctor (this principle was important or very important for 97.3% of doctors). Then comes the quality/price ratio of the care provided to patients (88.65%). Although attracting a large number of positive views, political choices emerged in last position (72.43%). Clinical criteria, where applicable taking account of financial facts, therefore took preference over purely political decisions. These views indicate an acceptance of the principle of medicalised control of health care expenditure and less acceptance of more overall regulation.

This impression also emerges from the opinion of the doctors about methods used to control health care expenditure. A non-exhaustive list of the existing expenditure control methods was offered in order to determine whether the doctors considered these to be appropriate or otherwise (q12). Some methods were considered to be relatively or very appropriate: good practice recommendations (83%), the personal contribution (69%), marketing of generic drugs (67%) and circulating lists of drugs accepted for reimbursement (59%). Other methods were considered to be not particularly appropriate or totally inappropriate: registering patients on waiting lists (84%), the existence of budget limits (68%) and introducing lists of de-reimbursed drugs (53%). Putting aside the principle of the personal contribution, the methods considered to be most appropriate related to medicalised control, maintaining the decision-making autonomy of the doctors, whereas the methods considered to be least appropriate were more authoritarian in nature.

The doctors' preference for medicalised control also emerged in the methods which they cited spontaneously. Medicalised control was cited by 29% of the doctors. They considered that this control was possible through the delivery of appropriate care, making correct diagnoses, reducing hospitalisations, limiting consultations and controlling the number of procedures per doctor per institution. The doctors also considered that it was important to make patients responsible, informed and aware. Cost-control also required more appropriate training of doctors. Finally, 8% of doctors considered that prescriptions of drugs must be controlled, in favour of generic products, removing reimbursement from comfort drugs or simply by prescribing the drugs which are most appropriate to patients and to their disease.

In the opinion of the doctors, the control of expenditure must overall be based more on clinical criteria through medicalised and economic control, giving responsibility to patients through the personal contributions. Political choices were also important, although emerged only as a last resort in inspiring methods for controlling expenditure. These must also take place in the context of public debates.

4. RESULTS OF THE TESTS

4.1 The generalist-specialist Split

Opinions of general practitioners and hospital consultants about control of health care expenditure were often different. Their conditions of practice were also different. There is in principle no reason for them to consider this question in the same way.

4.1.1 Near global agreement about the causes for the increase in expenditure

Generalists and specialists shared the same ideas about the causes of the increase in health care expenditure (q6). There was a difference, however, with respect to technical progress in terms of treatment. We found a significant difference ($p=0.0421$) for this point between the opinions of generalists and those of specialists. Generalists tended more to consider that this progress was an important cause for the increase in expenditure.

Table 9 : Percentage of responses concerning technical progress in terms of treatment

	Important or very important	Little importance/unimportant
General practitioners	93.68 %	6.32 %
Hospital consultants	84.44 %	14.44 %
Total population	89.19 %	10.27 %

4.1.2 Control of expenditure and its consequences: a subject of disagreement⁹

Both generalists and specialists were conscious of the need to control health care expenditure. Their opinions, however, showed certain differences about the opportunity of controlling expenditure depending on the fields.

In terms of dental care, generalists considered the importance of the efforts to be made to be less than specialists ($p=0.0146$). It is true that in this field patients receive little reimbursement by the Social Security system. Generalists perhaps did not see a way of controlling expenditure at this level.

In the area of thermal cures, more specialists than generalists considered it necessary to control expenditure ($p=0.0401$). They felt that this would help to improve the state of health of the population ($p=0.003$). On the other hand the generalists considered that increased regulatory efforts in this field would not lead to any change in the state of health of the population and would also not imply rationing of health care ($p=0.0301$). Specialists considered that controlling expenditure would slow the increase in use of thermal cures and would contribute to a general improvement in the state of health of the population, whereas generalists considered that such control would neither stimulate nor reduce consumption nor change the state of health of the population. We may consider therefore that for the specialists, thermal cures is not a priority area and the funds allocated to these should be used for other more useful purposes. Conversely, for the generalists, consumption of patients' thermal cures would have no reason to change and would be financed from the patients' own resources.

⁹ Reference to questions 7, 15 and 16

In terms of all of the other fields, being a generalist or specialist had no impact on the importance attributed to control of expenditure ($p=ns$). There were, however, many differences in opinion about the consequences of such control.

For primary care specialists in particular, the hospital consultants considered that control of expenditure would lead to a form of rationing although would not actually change patients' state of health ($p=0.0323$). Hospital consultants therefore consider that primary care specialists could make efforts in terms of their services without affecting the quality of care. Generalists considered that control of costs in this field would not lead to rationing but could conversely result in deterioration in patients' health ($p=0.0054$). This may be understood if regulation of expenditure involved reducing the fees of primary care specialists who would then be inclined to lower the quality of their care.

In the drugs field, specialists considered that control of expenditure would create situations of scarcity ($p=0.0003$), which however, they considered to be beneficial as this would improve patients' state of health. Efforts made in this field would allow patients to receive the treatment appropriate to their needs and at reduced cost. Generalists did not share this opinion ($p=0.0063$), but rather envisaged a situation which would be unchanged for patients after controlling the increase in expenditure.

Opinions also differed when we examined the impact of regulation policies introduced with respect to full hospitalisation on the patient's state of health. Whereas 65% of generalists and specialists each thought that control of expenditure would cause rationing, the general practitioners felt that such control could result in deterioration of the care provided to patients, whereas the hospital consultants felt rather that quality of care would improve ($p=0.0041$). Control of expenditure therefore affects this cost sector (as there is rationing) although the consequences in terms of quality of care are not seen in the same way. If we consider that control of full hospitalisation expenditure would lead to better organisation and improved use of resources, the point of view of the specialists is supported. However, if we consider that it would lead more to a reduction in staffing or bed numbers, we can understand the opinion of the generalists.

For ophthalmological care and expenditure on optical goods, generalists and specialists were again different. The specialists considered that any attempt to influence the increase in cost in this field would not have consequences on quality of care whereas the generalist considered that care would deteriorate ($p=0.0084$).

Finally, we can see that generalists tend not to associate a reduction in costs with any form of rationing. They considered that the effect of regulation of expenditure would not influence either the development of day hospitalisation or primary care activities ($p=0.0303$ and $p=0.0108$ respectively).

Table 10 : Opinions of general practitioners (GP) and specialists (SP) on the consequences of control of health care expenditure

Fields	Opinions of GP	Opinions of SP
Full hospitalisation	deterioration	improved
Day hospitalisation	no rationing	
GP primary care	no rationing	
SP primary care		rationing
Ophthalmological care	deterioration	no change
Thermal cures	no change + no rationing	improved
Drugs	no change	improved + rationing

It appears, therefore, that generalists and specialists have different views on the consequences of control of health care expenditure. Specialists tend to think that it causes rationing although that the rationing has neutral or even positive consequences for patients. General practitioners for their part do not associate control of expenditure with rationing but do however consider that it may have negative consequences on the quality of care.

4.1.3 All agree on the responsibility for control of expenditure

Generalists and specialists agreed on the importance of the role of the State and of doctors in controlling health care expenditure ($p=ns$). Their opinions, however, were different about the role of the private insurance companies and mutual insurance funds (q9). The generalists tended to consider that responsibility for control of expenditure did not fall on these types of bodies ($p=0.016$), who in their opinion only existed to provide a service to the patients who wanted it, without having to set tariffs.

A subtle difference also emerged about financial efforts made by the health care system (q10). General practitioners considered that efforts in terms of preventive treatment were very inadequate whereas specialists were less critical and considered that they were just inadequate ($p=0.044$).

In terms of user participation in some expenditure (q11), the opinions of the two types of doctors were the same ($p=ns$).

4.1.4 A few divisions concerning methods of control of expenditure

The majority of the doctors considered that control of expenditure should be explicit (q13). Generalists and specialists however shared this view in different proportions. The principle of decision-making following public debate appeared to be more important for specialists than for generalists ($p=0.0342$).

In addition, the generalists and specialists did not agree about the suitability of two methods of control of expenditure (q12): they expressed different views about the development of generic drugs and on the publications of de-reimbursed drugs ($p=0.0288$ and $p=0.0146$ respectively). Specialists considered that these methods were appropriate in reducing health care expenditure whereas the generalists did not share this opinion. We know that generic drugs are poorly accepted by the population. Patients are attached to their customs and tend to prefer brand drugs to generics. The generalists are perhaps faced more directly with this problem which may explain their scepticism about the suitability of these methods.

4.2 Age influences the point of views of doctors with respect to control of expenditure

4.2.1 *Those under 50 years old are concerned by the lack of competition in the health care system*

Whereas the lack of competition in the health care system was not afforded much importance by all of the doctors questioned (q6), those under 50 years old were different from their elders and considered that lack of competition was an important cause for the increase in expenditure ($p=0.0069$).

In addition, those over 50 years old considered to a greater extent than the younger generation that the method of remuneration of health care professionals was an important cause for the increase in expenditure ($p=0.0489$). They were more aware of two effects which contribute to cost inflation: retrospective reimbursement of patients encourages patients to consult doctors and payment of doctors on a fee for service basis is an expensive method of remuneration.

4.2.2 *The influence of age on the importance and consequences of control of expenditure¹⁰*

Those under 50 years old attached greater importance to control of health care expenditure in the fields of primary care general practice and thermal cures ($p=0.0241$ and $p=0.013$ respectively). More of this group than their older colleagues considered that this control was important or very important.

The older doctors felt that control of day hospital expenditure would not necessarily lead to rationing ($p=0.036$) and even felt that it would improve quality of care ($p=0.044$). In their opinion, control of expenditure therefore did not have a general effect on this cost sector as no rationing would occur. Conversely this area would develop amongst the alternatives to full hospitalisation which would lead to improvement in quality of care.

The doctors had different opinions about the consequences of health care drug expenditure depending on age ($p=0.046$). Younger doctors tended to consider that such control would not provide anything to patients whereas the older doctors considered rather that it would help to improve their state of health: control of costs in this field encouraging practitioners to use treatments more appropriately for patients.

The doctors had different opinions about the effects of control of expenditure in terms of Social Security administration costs, according to age. Those over 50 years old feared that this would lead to a deterioration in their patients' state of health whereas the younger doctors considered that it would have no impact on the state of health ($p=0.01$). The other doctors were perhaps more aware that reimbursement rate would take longer and would therefore penalise patients.

Finally, the doctors did not agree about the rationing liable to be caused by control of specialist primary care costs. Younger doctors considered that such control would lead to rationing whereas the older doctors thought the reverse ($p=0.008$). The proportion of hospital consultants under 50 years old in our population was slightly higher than for generalists. These young hospital specialists are perhaps more sensitive to these situations of shortage.

¹⁰ Reference to questions 7, 15 and 16

4.3 Control of expenditure from the point of view of doctors' length of service

4.3.1 *The more experienced doctors were more pessimistic about the consequences of control of expenditure¹¹*

62% of the doctors questioned considered that control of expenditure in the field of medium stay care was important. A larger number of the less experienced doctors, however, considered such control to be important or very important than the doctors who had more than 10 years experience ($p=0.0412$). In addition, although they felt it important, they also tended more to consider that it could lead to a form of rationing (more difficult access to hospital for patients for example) ($p=0.0073$). The more experienced doctors perhaps considered that control of expenditure should not focus on this field but conversely that the method of hospitalisation should be developed as an alternative to full hospitalisation.

Similarly, control of costs in the field of thermal cures appeared to be more important to those doctors with less than 10 years experience ($p=0.0405$). They also linked such control of expenditure to improved state of health of the population (the finance spent in this field could be spent on more useful purposes), whereas the more experienced doctors felt that it would have no impact ($p=0.0087$).

With respect to specialist primary care, the doctors with more than 10 years experience considered that control of expenditure would lead to a deterioration in patients' state of health ($p=0.0024$). We have already noted, however, that the generalists had the longest experience in our population (statistically significant). This also reflects, therefore, the perceptions of generalists about care provided by primary care specialists, according to which control in expenditure would lead to deterioration in the quality of care.

With respect to Social Security administrative fees, the more experienced doctors felt that control of these fees would have negative consequences on the state of health of the population, particularly because of prolonging the settlement times for reimbursement claims ($p=0.0062$).

Finally, the doctors with more than 10 years experience were also pessimistic about reducing cost of ophthalmological care and optician goods. They considered that control of expenditure in this field would have adverse effects on quality of care provided to patients ($p=0.0088$). Conversely the younger doctors considered that such control would not impact on the state of health of the population.

4.3.2 *Young doctors were more optimistic about methods for control of expenditure*

Compared to doctors with more experience, the doctors with less than 10 years experience tended more to consider that methods did exist to influence the increase in health care expenditure ($p=0.0393$).

¹¹ Reference to questions 7, 15 and 16

Table 11: Can the increase in health care expenditure be controlled by any form of expenditure control?

	yes	no	NA
Doctors with less than 10 years experience	79.55 %	15.91 %	4.55 %
Doctors with more than 10 years experience	60.99 %	37.59 %	1.42 %
Total	65.41 %	32.43 %	2.16 %

It was not, however, possible to distinguish opinions about different methods proposed for controlling expenditure according to the doctors' experience. Opinions did, however, differ in terms of the list of non-reimbursed drugs ($p=0.0179$). The less experienced doctors had a greater tendency to believe that these lists were a relatively or very appropriate method of cost control. Doctors with more than 10 years experience were perhaps more conscious of the limits of this method with patients who prefer to use the drugs they are accustomed to taking even if they are no longer reimbursed (q12).

4.4 Working either in single-handed practice or in groups influenced the general practitioners' opinions

Opinions about the causes for the increase in health care expenditure and the areas in which control of expenditure was important were the same whether the doctors worked in single-handed practice or in groups ($p=ns$). The generalists who practised in groups, however, placed greater emphasis on the quality/price ratio to control expenditure than did their single-handed colleagues ($p=0.0486$). Quality/price initiatives are easier to implement for doctors practising in a group as they share part of their fees. Conversely, it is more difficult for a doctor practising alone to reduce his/her tariffs (q14).

The type of practice influenced the doctors' opinions about the consequences of control of expenditure. For generalist primary care, generalists practising in a group considered that cost control would lead to an improvement in the quality of care provided whereas the single-handed generalists considered that it would change nothing ($p=0.0434$). Grouping doctors together therefore appears to facilitate financial initiatives.

For specialist primary care, opinions were even more contrasting and in this case doctors practising alone considered that the patients' state of health would deteriorate ($p=0.0043$).

The difference in perception between doctors practising in a group and those practising alone was less with respect to the consequences of reduced Social Security administrative costs ($p=0.0386$). Generalists practising in a group considered that this would have no impact on the state of health of the population whereas those practising alone considered that it would have a negative impact because of longer reimbursement times.

With respect to dental and optical care, both populations of doctors were also different. The single-handed practitioners considered that control of expenditure in these fields would lead to a form of rationing, which did not apply to doctors practising in a group ($p=0.0327$ and $p=0.0181$ respectively for dental and optical care).

5. CONCLUSION

According to the World Health Organisation the French health care system is the best in the world. France, however, has not escaped the economic problem which affects a large number of countries: the very rapid increase in health care expenditure. This increase is far faster than the increase in GDP, contributing to the growth in the Social Security deficit. In this context many health care expenditure control plans have been put in place without real success. French doctors are optimistic, however; most of them consider that this expenditure can be controlled.

The major causes described for the increase the cost in expenditure were ageing of the population and technical progress in terms of diagnosis and treatment. Doctors over 50 years old, however, were different here from their younger colleagues by attributing specific importance to the method of remunerating health care professionals.

Some areas participated more than others in the National Insurance deficit. It is important to successfully target these and to introduce effective methods in these areas. The Ministry of Health has recently decided amongst other things to target expenditure on drugs, by removing reimbursement from certain drugs or by reimbursing brand drugs in the form of generics. For doctors control of expenditure in the area of drugs, full hospitalisation and administrative costs is essential.

The doctors were, however, aware that such control may have either negative or positive consequences. In general they consider that it would have little impact on the patient's state of health. Differences, however, exist. They consider that control of expenditure in the fields of full hospitalisation and optical care could lead to a deterioration in the state of health of the population. In particular, doctors with more than 10 years experience consider that there would be a deterioration in ophthalmological care. Conversely, control of expenditure could be beneficial in some areas. This applied, for example, to drug care and day hospitalisation: doctors over 50 years old considered that patients' state of health could be improved.

Control of health care expenditure could also lead to forms of rationing. On this subject, the opinions of the doctors were shared and in some instances were different depending on the specific points. In general they tended to consider that control of full hospitalisation expenditure would lead to rationing resulting for example in bed closures. This did not apply to day hospitalisation which was less constricting. Specialists also considered more than generalists that cost control would lead to rationing. They did not necessarily see rationing in a bad light, however, as for some services they considered that there would be a parallel improvement in the population's state of health as a result of rationing. For these people, control of expenditure was an opportunity to make efforts in terms of efficacy which would have a positive impact on the method in which patients were treated.

As to determining who should be responsible for putting in place expenditure regulation plans all doctors agreed that this fell firstly on the state, or more precisely on those with political responsibilities. Doctors, the Social Security system and the pharmaceutical industry carried this responsibility to a lesser extent. Financial input from the state, however, was considered to be mostly inadequate in the areas of mass screening, preventative treatment and health education campaigns.

Use of effective appropriate methods to control expenditure is, however, not easy as shown by the many ministerial plans introduced over the last two decades. According to the doctors, the principle which should guide these plans should be the doctor's clinical opinion. The methods felt to be most appropriate were good practice recommendations, introduction of the personal contribution and publication of lists of reimbursed drugs. Conversely, putting patients on waiting lists or publishing lists of de-reimbursed drugs were considered to be relatively inappropriate methods. The doctors' opinion, however, was contrasting on this subject. As opposed to generalists, the hospital consultants considered that the development of generics and publications of drugs for which reimbursement has been removed are good methods to control expenditure.

6. BIBLIOGRAPHY

1. Johanet, G., Comptes et mécomptes de la protection sociale, Paris, PUF, 1986.
2. Le Pape, A., Sermet, C., Les références médicales opposables sur le médicament : bilan de trois années d'application, Paris, CREDES, 1998.
3. Institut National d'Etudes Démographiques, Rapport sur la situation démographique de la France, Paris, 2001.
4. Institut National de la Statistique et des Etudes Economiques, Tableaux de l'économie française, Paris, La documentation française, 2000.
5. A. Morelle, La défaite de la santé publique, Paris, Flammarion, 1996.
6. Ministère de L'Emploi et de la Solidarité, Direction de la recherche des études, de l'évaluation et des statistiques, Etudes et Résultats, n°187, sept. 2002., « Les comptes de la santé en 2001 ».
7. Palier, B., Gouverner la Sécurité Sociale, Paris, PUF, 2002.
8. Setbon, M., Pouvoirs contre Sida, Paris, Seuil, 1993.
9. Valat, B., Histoire de la Sécurité Sociale, Paris, Economica, 2001.