Universal Health Insurance in France

How Sustainable?

Essays on the French Health Care System

Victor G. Rodwin and Contributors

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Foreword

The health care systems in France and the United States face a crisis of unprecedented scope. In the United States, uncontrolled health care inflation exacerbates the federal budget deficit, threatens the competitiveness of business and increases the already large number of Americans (some 45 million) without any health insurance. In France, whose health care system has been ranked as No. 1 by WHO in 2000, increasing health care expenditures threaten the sustainability of its national health insurance system.

Policymakers in France and the U.S. could benefit from an understanding of their health systems' strengths, weaknesses and reform policies. It is for this reason that the Office of Social Affairs, Embassy of France in Washington, supported Professor Victor Rodwin's initiative to organize a colloquium on the recent health care reforms in France, as well as the publication of this book[1]. I thank Victor Rodwin for his enthusiasm and for his efforts, over the years, to build bridges between the U.S. and France and to encourage mutual learning on how access to health care and quality may be improved on both sides of the Atlantic.

Jacques Drucker, MD - Health Counselor
Embassy of France - Washington DC
May 20, 2006

1. The colloquium, "What's New in French Health Care Reform?" was held at New York University (NYU) on November 29, 2004 and co-sponsored by the Ecole Libre des Hautes Etudes, the French-American Foundation, and NYU's Wagner School.

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Introduction

1. The Relevance of French National Health Insurance for the United States

Victor G. Rodwin

The French health system has not attracted much attention among U.S. policymakers. One might argue that health policy in the United States is largely home grown and that there is little interest in experience abroad. But such a view does not explain why—in thinking about how to extend coverage to the 45 million Americans who are now uninsured—so many more studies have been published, and so many more policy analysts have invoked the Canadian, British and German health care systems.[1] Whether this fact reflects the history of tempestuous love affairs between our nations, the perception by the health policy community that France is irrelevant, or simply a cultural divide reinforced by a language barrier, is a matter of speculation. I believe that an important part of the explanation is simply the language barrier and that is why a critical criterion for selecting the essays assembled here is their capacity to stimulate

interest about French National Health Insurance (NHI) among readers of English, who are typically not proficient in French.

In discussing the French health care system, most contributors to this volume would probably share my assumption that there is sufficient similarity among the health systems of wealthy nations to make comparative analyses and case studies of individual systems worthwhile. All nations, after all, are grappling with the same issues of how to sustain their health care systems while introducing new medical technologies, covering their populations, and keeping their health care providers satisfied. Policymakers around the world invoke the "exceptional" nature of their distinctive health care institutions and the pitfalls of "learning from abroad."[2] But this view smacks of ethnocentrism. It supports the status quo, and in that sense, a conservative view of the world.[3] A more daring approach, more open to policy innovation and the possibilities of mutual learning, starts with the recognition that health systems—however much they differ—are converging, and investigates what might be learned from differences across nations—good practices as well as interesting failures.[4] It is in this spirit that studies on learning from health systems abroad are conducted.[5] But why France?

The French health system stands out in contrast to most other European health systems in its stronger resistance to the most recent wave of reform efforts that have sought to introduce a dose of competition and market forces within a social context that maintains its commitment to national (although not European) solidarity.[6] In France, American nostrums of unleashing market forces under the banner of "consumer-directed health care," and selective contracting by private health insurers, have gained little ground. But that should not lead one to conclude that the French health care system is irrelevant to the United States. The organization and financing of health care, in France, resembles, in many respects, that of the United States—more so, in fact, than do Britain's National Health Service or Canadian and German NHI. The French reliance on a public-private mix that includes a significant proprietary

hospital sector, private fee-for-service medical practice, and enormous patient choice among a pluralistic organization of health care providers makes French NHI a model for what Senator Ted Kennedy and Congressman Pete Stark have called "Medicare for all." Moreover, the fact that French NHI includes extensive pharmaceutical benefits, makes France more attractive than Canada as a possible direction for health care reform in the U.S.

Of course, as in Canada, Britain and other European nations, the role of government is different in France than in the U.S.[7] Also, a unitary centralized state has different implications for health care management than a federal decentralized system. Despite this notable difference, however, it can still be illuminating to study how the French health care system has evolved to the point where the entire population is now covered under NHI while maintaining the freedom to navigate across a vast range of health service providers. The big policy question for the future is whether the system is sustainable. Indeed, that is the question that unites the essays in this volume.

Since the initial choice of papers for this book, two recent articles articles, in English, were published on the French health care system. The first by Martine Bellanger and Philippe Mossé suggests that there are embryonic signs of an emerging decentralization around the possibilities of greater integration through managed care contracting mechanisms that have the potential to increase consumer involvement and improve performance.[8] Another article by Lise Rochaix and David Wilsford, argues that big reforms in France are unlikely and that the health care system will remain organized very much as it is today.[9] True enough, incremental change appears most likely in all health systems. As new technologies appear and more specialty services are diffused, patients are likely to pay more for their health care. This trend is often applauded as an emerging element of "consumer driven care" by some policy analysts in the United States.[10] In France, the same trend is occurring in a more disguised form while, on the surface, everyone has access to quality health services.

The essays in this volume attempt to understand—in more depth—how French policymakers are struggling to sustain universal coverage while delivering high quality services to all. They were written as separate articles, working papers or book chapters, over the period 1993-2005, and with the exception of Jean de Kervasdoué's essay, were previously published in English (Appendix A).[11] They are assembled here to provide American policymakers, policy analysts and all those concerned with issues of improving access to health care, a balanced view of how the French are attempting to sustain universal coverage under NHI, what current reform efforts seek to achieve, how the health system has evolved and is currently organized, what are its salient characteristics and what lessons might be derived for health care reform in the United States.

In Part I of this book, the essays focus on health care reform, in France, and speculate on how the system is likely to evolve. Opinions range from raising the policy dilemmas posed by state-led managed care (Claude Le Pen and I in Ch. 2) to presenting the system and its recent reforms as a possible model for Americans (Paul Sorum in Ch. 3) to analyzing current strains and "cleavages" that threaten to make the system implode (Jean de Kervasdoué in Ch. 4). In Part II, I present my own views on the French health care system and its lessons for reformers in the United States (Ch. 5) followed by an analysis of the system by three economists (Ch. 6) from the Organization for Economic Cooperation and Development (OECD). Next, I include two essays that provide an overview of the system and its historical evolution. The first (Ch. 7) is drawn from a full-length WHO Regional Office monograph on the French health system (European Observatory on Health Systems and Policies); the second (Ch. 8) is a paper I wrote with Simone Sandier, which demonstrates an essential characteristic of French NHI—its low prices and high levels of service provision. Although the paper dates from 1993, I believe the analysis still holds up in 2006.

Finally, I present a selected bibliography, in English (Part III), on

the French health care system, including some important web sites for French readers who wish to pursue research on the subject.

Acknowledgments

I thank Dr. Jacques Drucker, former Director of the French CDC (Institut de Veille Sanitaire), and currently Health Counselor at the French Embassy in Washington D.C., for proposing to produce this book, and Dr. René Jahiel, President of the Ecole Libre des Hautes Etudes, for co-sponsoring a colloquium with the Robert F. Wagner School of Public Service, New York University. The colloquium served as an opportunity to bring Jean de Kervasdoué and Claude Le Pen to New York and strengthened my conviction that such a book could serve as a useful resource for all those interested in improving access to health care in the U.S. Also, I thank my colleagues, Michael K. Gusmano and Paul Sorum, for their editorial suggestions on this introduction, and Patrick Nazer for his careful preparation of the final manuscript. Above all, I am grateful to Robert N. Butler, President and CEO of the International Longevity Center (ILC)-USA, for encouraging me to study French NHI, supporting my efforts over the years, and inviting me to be part of his ILC-USA.

Permissions were obtained to reproduce all previously published articles in this book. Full citations for all of them are provided in Appendix A. I thank the contributors to this book for their collaboration, and refer readers to Appendix B for brief biographical information on each of them. Appendix C provides a list of acronyms used most frequently throughout the book.

Notes

1. See e.g. the leading book on this topic published by the Congressional Budget Office: L. Graig *Health of Nations: An International Perspective on U.S Health Care Reform.* Washington D.C.: CQ Press, l999. There is not even a chapter on France.
2. Brown L. Exceptionalism as the Rule? U.S. Health Policy Innovation and Comparative Learning. *Journal of Health Policy, Politics and Law* (23)35-51, 1998.
3. Rodwin V. American Exceptionalism in the Health Sector: The Advantages of 'Backwardness' in Learning from Abroad. *Medical Care Review* (44)119-54, 1997.
4. Rodwin V. and M. Gusmano, eds. G*rowing Older in World Cities: New York, London, Paris and Tokyo.* Nashville. Vanderbilt University Press, 2006. Ch 1, p. 11.
5. Rodwin V. A Comparative Analysis of Health Systems Among Wealthy Nations. In Kovner A. and J. Knickman, eds. *Health Care Delivery in the United States.* New York: Springer, 2005, 8th Edition, Ch. 6.
6. Oliver A. E. Mossialos A. Maynard, eds. *Analysing the Impact of Health System Changes in the EU Member States.* Special Issue of Health Economics (14)51, 2005.
7. Brown L. Comparing Health Systems in Four Countries: Lessons for the United States. *American Journal of Public Health* (93)52-6, 2003.
8. Bellanger M. and P. Mossé. The Search for th Holy Grail: Combining Decentralised Planning and Contracting Mechanisms in the French Health Care System. *Health Economics* (51)S119-32, 2005.
9. Rochaix L. and D. Wilsford. State Autonomy, Policy Paralysis: Paradoxes of Institutions and Culture in the French Health Care System. *Journal of Health Politics, Policy and Law.* (30)97-119, 2005.
10. See section on "Consumerism and Managed Care," *Health Affairs.* (24)6, 2005.
11. The one exception to this is Jean de Kervasdoué's paper which is an adaptation and translation of a paper based on his edited book, *La crise des professions de santé.*Paris: Dunod, 2003.

Part I

French Health Care Reform– How Will the Health Care System Evolve?

2. Health Care Reform in France – The birth of state-led managed care

Victor G. Rodwin and Claude Le Pen

The World Health Organization recently ranked the French health care system the best in the world.[1] Although the methods and data on which this assessment was based have been criticized, there are good grounds for being impressed by the French system. Yet in August 2004, with the national health insurance (NHI) system facing a severe financial crisis, France enacted Minister of Health, Philippe Douste-Blazy's, reform plan. Like previous efforts at health care reform, this one seeks to preserve a system of comprehensive benefits, which is supported by the major stakeholders.

French policymakers typically view their NHI system as a realistic compromise between Britain's National Health Service, which they believe requires too much rationing and offers insufficient choice, and the mosaic of subsystems in the United States, which they consider socially irresponsible because 15 percent of the population younger than 65 years of age has

no health insurance. Whether reform measures in France have come from the political left or right, French politicians have defended their health care system as an ideal synthesis of solidarity, liberalism, and pluralism.

Beyond a range of tax increases to finance health care, the recent law seeks to implement what the French call *la maîtrise médicalisée*—a kind of state-led managed care. Like the 1996 reform enacted by then Prime Minister Alain Juppé, it proposes to apply techniques that were designed for managed care organizations in the United States (e.g., computerized medical records, practice guidelines, and incentives to encourage the use of primary care physicians as gatekeepers) to a unitary state system.

The idea of state-led managed care in France has gained momentum over the past decade, but its implementation poses enormous challenges. The idea is compelling for two reasons: it seeks to modernize the health care sector and increase the quality of care, and it promises to control costs by increasing the efficiency of resource allocation within targeted expenditure limits. In these respects, the reform will reinforce the powerful role of the central state, which will oversee vast institutional renovation, apply administrative and information technology to health care, and design incentives and regulations to improve quality. The limitations of state-led managed care, however, are rooted in the centralization of policymaking in France and the successful resistance of the medical profession to all efforts at micromanaging medical practice and second-guessing physicians' authority.[2]

In contrast to many European nations—such as Britain, the Netherlands, and Germany—France has eschewed two popular ideas in health care reform: consumer choice and price competition among local health insurance funds and selective contracting between these funds and health care providers. The avoidance of these approaches reflects France's commitment to the freedom of beneficiaries to choose among all willing providers, as well as the belief that competition would lead to privatization—an unacceptable departure from the "solidarity" principle, which requires mutual aid and cooperation among the sick and the well, the inactive and the active, and the poor and the wealthy and insists on financing health

insurance on the basis of ability to pay, not actuarial risk.

But like the U.S. health care system, the French system is also structured according to principles of liberalism and pluralism, as a market-based economic system with extensive organizational diversity and individual choice. Most physicians in private practice tenaciously support the present arrangements, embracing the principles enshrined in *"la médecine libérale:"* selection of physicians by patients, freedom for physicians to practice wherever they choose, clinical autonomy, doctor-patient confidentiality, and direct payment to physicians by patients who are reimbursed a good share of their expenditures. With limited and experimental exceptions, France does not use primary care physicians as gatekeepers in the way managed-care organizations do in the United States. Although the hospital system is dominated by public hospitals managed by the Ministry of Health and its regional agencies, private practice remains largely unmanaged.[3]

The NHI system is financed by a mix of mandatory payroll taxes, government general-revenue funds, and a small share of consumer coinsurance. In contrast to Medicare, French NHI coverage increases when a patient's costs increase; there are no deductibles; and pharmaceutical benefits are extensive. Patients with debilitating or chronic illness are exempted from paying coinsurance if they consult physicians who accept NHI reimbursement as payment in full. When patients consult any of the 26.5 percent of physicians who do not do so, a portion of their coinsurance is reimbursed by complementary health insurers, through a system that resembles Medigap coverage for U.S. Medicare beneficiaries. Thus, despite widespread use of coinsurance, patients remain well covered under NHI and enjoy a broad array of choices by European and American standards.

Although French policymakers claim to have a health care system that reconciles solidarity, liberalism, and pluralism, the system has changed decisively. One change is unique to France. The Juppé reform increased fiscal taxes (on income, capital, cigarettes, and alcohol), reducing the share

of employer-based payroll-tax financing from 95 percent of total health care expenditures to roughly one half. Since the health system is more heavily dependent on central-government financing, the central state's legitimacy in implementing health care reform has been strengthened. The second change has been driven by the global evolution of medical technology, proliferation of medical specialties, and explosion of medical knowledge—which make most principles of la médecine libérale seem anachronistic and render solo private practice quaint at best.[4]

There is emerging consensus on some of the conclusions of a recent task force.[5] First, the secular growth of health care expenditures will continue. Second, health policy should aim to achieve value for money in the allocation of health care resources and equity in the distribution of services. Third, when expenditures meet these goals, they must be financed collectively. The first and third propositions do not provoke controversy in France. The second proposition, however, forces recognition of two problems that threaten the sustainability of the health care system.

First, it is difficult to control expenditures in a system deeply committed to liberalism and pluralism. Although the French health care system is not expensive compared with that of the United States (Table 1), France is one of the biggest spenders in Europe. Second, access to care is no longer a sufficient objective, given that the quality of health services is unevenly distributed among both geographic regions and social classes. This problem is exacerbated by patients' freedom of navigation within the system and the increasing consciousness of possibilities offered by state-of-the-art treatments.

The French health care system has reached a turning point that should interest clinicians and policymakers in the United States, for the current reform represents the French response to a fundamental question: Can the balance among solidarity, liberalism, and pluralism be maintained while health care costs are kept under control and the cherished features of the present system are sustained? The birth of state-led managed care in France has clarified the challenge ahead: Can France adapt the NHI

system to the exigencies of technological and economic change without provoking insurmountable opposition from the medical profession? In other words, can the Douste-Blazy reform actually be implemented, or will it provide support for that well-worn aphorism—*plus ça change, plus c'est la même chose*?

Notes

1. World Health Report 2000. *Health Systems: Improving Performance.* http://www.who.int/whr/previous/en/ (accessed November 4, 2004).
2. de Kervasdoué J. *Pour une révolution sans réforme.* Paris: Gallimard, 1999.
3. Rodwin VG. *The Health Care System under French National Health Insurance: Lessons for health reform in the United States. Am J Public Health.* (93)31-7, 2003.
4. Le Pen C. *Les habits neufs d'Hippocrate.* Paris: Calmann-Lévy, 1999.
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Table 1. Basic Indicators, France and the United States, 2002.*

Indicator	France	United States
Demographic and economic characteristics		
Total population	59,486,000	288,369,000
Population >65 yr of age — %	16.3	12.3
GDP per capita — $	28,094	36,006
Health care system		
Heath care expenditures — % of GDP	9.7	14.6
Per capita health expenditures — $	2736	5267
Public expenditures on health — % of GDP	7.4	6.6
No. of practicing physicians per 10,000 population	33	30
No. of physician consultations per capita	7.9 (1999)	4.2 (1999)
No. of acute care bed-days per 1000 population	1100 (2001)	700 (2001)
No. of acute care beds per 1000 population	4.0 (2001)	2.9
Population satisfied with health system — %	65.0 (1998)	40.0 (2000)
Health status		
No. of infant deaths per 1000 live births	4.2	6.8 (2001)
Life expectancy at birth — yr	79.3	77.1 (2001)
Life expectancy at 65 yr of age — yr	19.1 (2001)	17.9 (2001)
Life expectancy at 80 yr of age — yr	8.7 (2001)	8.6 (2001)
Disability-adjusted life expectancy at birth — yr	73.1 (1999)	70.0 (1999)
Years of life lost per 100,000 population due to death before 70 yr of age	4182 (1999)	5120 (2000)

* Data on physician consultations in the United States are from the Department of Health and Human Services, National Center for Health Statistics, National Ambulatory Medical Care Survey. Data on the number of physicians in the United States are from the American Medical Association. Data on patient satisfaction are from Eurobarometer Survey Series no. 49 (1998) and the Harvard School of Public Health (2000). Data on disability-adjusted life expectancy at birth are from the World Health Report 2000. All other data are from the Organization for Economic Cooperation and Development (OECD) Health Data, 2004. When data were not available for 2002, the year of the latest available data is indicated in parentheses. GDP denotes gross domestic product; per capita expenditure values are U.S. dollars, adjusted for OECD purchasing power parities.

3. France Tries to Save its Ailing National Health Insurance System

Paul Clay Sorum

The People in France, compared to those in other countries, are in good health[1] and are quite satisfied with their health care.[2-5] Nonetheless, in response to its rising health care expenditures, France, like other developed countries, is attempting to change its health care system. The aim of this essay is to explain how health care was delivered before the current reforms, what problems had developed, what reforms are called for in the 2004 legislation, how they are faring so far, and how they compare to those instituted by France's neighbors.

Health care in France before the current reforms

The foundation of the French health system was the national health insurance (or sickness) funds, part of France's extensive social security

system.[6-10] Modeled after the German sickness funds fostered by Chancellor Bismarck and strengthened by France's socialist-led government after the Second World War, the funds were, in theory, independent of the government, administered primarily by representatives of labor unions and business, and financed by payroll levies paid by employers and employees (by 2004, 12.8% and 0.75% of salaries, respectively, compared to an average of 7% by both employers and employees in Germany).[11-13] In contrast, in the United Kingdom, the Labor government, inspired by Lord Beveridge, set up after the Second World War a unitary, government-controlled national health care system financed by general tax revenues.[14-16] In principle, therefore, in the United Kingdom, health care was an attribute of citizenship; in France and Germany, of being a worker or a dependent of a worker.[17,18] All French were, however, required to belong to one of these funds (whereas wealthier Germans could chose not to enroll); in 2003 they paid for 76% of all health care expenses. The National Health Insurance Fund for Salaried Workers or "general fund" covered 86% of the population, and the 17 other funds for special groups had increasingly aligned their policies with those of the general fund. Accordingly, France had, for all practical purposes, a single payer health insurance system.[19] Control of the funds was centralized, in contrast to Germany where the numerous sickness funds were regional or tied to profession, firm, or guild. These funds handled claims efficiently, conveniently, and cheaply: the general fund's administrative overhead was about 5%, [20,21] as compared to 1.3% in Canada, 3.6% for U.S. Medicare, and an average of 11.7% for U.S. private insurers.[22]

The details of coverage and reimbursement were the result of negotiated agreements or contracts ("conventions") between the funds and the unions representing the relevant providers. The result for most private physicians and other providers ("sector 1") was fixed schedules of charges. A minority of physicians, 15% of generalists and 35% of specialists in 2003, were in "sector 2," i.e., allowed by the funds to charge more in return for giving up some social security benefits.[23] Almost all providers in both sectors 1 and 2

signed on to these agreements because their patients would otherwise not have been reimbursed by the funds. The general fund, advised by health care experts, had since 1995 issued short lists of practices considered inappropriate and had developed a handful of more detailed evidence-based recommendations. Nonetheless, physicians were largely unconstrained in ordering tests and prescribing medications.

Most physicians outside the hospitals were private and paid by fee-for-service, as in, for example, Germany and Canada. Unlike in Germany and Canada, however, patients paid physicians at the end of the visit, unless they received public assistance or the physicians were procedure-oriented specialists. Patients had been responsible for sending the statements to local insurance fund offices; recently, however, at the funds' insistence, most physicians started transmitting their bills electronically—88.2% of bills in the first half of 2002—and the funds then reimbursed the patients or practitioners. People were, for the most part, free to see whatever generalists and specialists they wanted. The attempt in 1996 to create a system of primary care coordinating and referring physicians (as in the United Kingdom and U.S. managed care) did not have much success.[24]

Patients, unless receiving public assistance, were responsible for some of the cost of most goods and services, as, for example, in Germany (except for visits to physicians) but unlike in the United Kingdom. The basic levels of coverage in 2004 were physicians' services 70%; dental care (limited) 70%; paramedical services 60%; laboratory tests 60%; medications 35, 65, or 100% (for comfort, "normal," or irreplaceable and costly medications); and hospitalization 80%. To take care of many co-payments (and some non-covered expenses), 86% of people had variable amounts of voluntary supplementary health insurance, mostly paid for by their employers or by the state for those receiving public assistance. Non-profit mutual associations provided the majority of this supplementary insurance; private, for-profit companies the rest. In 2002, supplementary insurance paid for 12.7% of health expenditures, leaving 10.6% paid out

of pocket. The system had other protective mechanisms so that cost sharing would not prevent people from receiving needed care.[19]

The central government and its ministers had overall responsibility for the functioning of the health care system. They had direct control over public hospitals (including academic medical centers), which had 65% of beds: state ministries set their budgets; and public hospital physicians and other salaried workers were civil servants. The government had to agree to the "conventions" with private providers before they could take effect. Beginning in 1996, the National Assembly set annual spending targets for the private sector even though it could not enforce them. Moreover, since January 1, 2000, the state has paid for coverage by the general fund of all people legally residing in France. As Victor Rodwin pointed out, France thus demonstrated it is possible to achieve universal coverage incrementally, within a pluralistic delivery system, and without excluding private insurers (even if only in the supplementary insurance market).[9]

In short, in their health care system, the French shared fundamental characteristics with the citizens of other European countries and Canada,[25-28] but not of the United States.[17] In line with the principle of social "solidarity," they agreed that coverage of basic health care should universal and that citizens (and in France's case non-citizen residents) should contribute according to their means (by payroll deductions or taxes) and obtain services according to their needs.[29] Furthermore, they agreed that the state had a legitimate role in regulating the delivery of health care.

Like the other developed countries, however, France had evolved its own particular blend of Bismarck and Beveridge, of public and private, and of centralization and decentralization. First, the interaction of patients and private physicians was, from a financial point of view, more unmediated and unregulated in France than elsewhere: patients could chose what physicians to see; physicians had almost unfettered freedom to prescribe tests and treatments; and patients typically paid physicians directly at the time of service and were subsequently reimbursed. In Germany, physicians were paid by the sickness funds; in the United Kingdom and Canada, by

the national or provincial health service, respectively. Second, both the insurance funds (as in Germany) and the central government (as in the United Kingdom) played large roles in financing and managing health care. Third, decision making about health administration and policy was centralized, as in the United Kingdom before Margaret Thatcher's internal market reforms and Tony Blair's primary care trusts[30] and in contrast to the importance of states or provinces in Germany and Canada. In spite of major efforts to develop more local and regional autonomy in the health care,[8] the system remained controlled by Paris, namely, by the funds' governing councils and the Premier and ministry of health. Fourth, in contrast to physicians in Germany and the United Kingdom, those in France were poorly organized, divided by type of practice and ideology, and hence at a disadvantage in negotiations with the centrally-controlled funds.[31,32] At the same time, the French faced a challenge common to all countries: the rising costs of health care. By 2002, France was spending 9.7% of its GDP on health, the United Kingdom 7.7%, Canada 9.6%, Germany 10.9%, and the United States 14.6%.[5]

The problems of the French health insurance funds

The fundamental problem in France was that the growth in health care expenditures persistently surpassed the growth of the economy. Consequently payrolls were increasingly unable to provide the monies required to pay for the health care consumed. By 2004, payroll levies accounted for only 62% of the general regime's receipts.[33] Since 1991, a supplemental income tax, the "general social contribution," had supplemented the payroll levies; in 2004 it was set at 7.5% of income (6.2% for retirees), of which 5.25% went to health care. It financed 36% of the general fund's expenditures in 2004. Yet the deficit in health care continued to rise and was projected to be 11 billion euros in 2004, 29 billion in 2010, and 66 billion in 2020 (not counting debt service).[34]

By means of centralized negotiations, the health insurance funds had kept prices low for health care services and goods—in particular, for office visits, procedures, drugs, and hospital days, as had other developed countries except for the United States.[35] But they could not restrain France's high consumption of health care, i.e., restrict people's freedom to see physicians, limit physicians' freedom of prescription, and prevent supplementary insurance from nullifying the impact of high co-payments. Nor could they increase the receipts from payroll levies. The government had, therefore, to take a larger role. In Germany, in comparison, similar economic changes also forced a limited decoupling of health insurance from employment,[36] such as introducing competition among sickness funds by giving patients in 1996 the right to join the fund of their choice,[37] and in the early 1990s the minister of health took over from the Federal Committee of Sickness Fund Physicians and Sickness Funds the responsibility for making overall policy decisions. Nonetheless, the German health care system, reflecting Germany's stronger tradition of federalism and decentralization, remained firmly based on the multiple, self-governing sickness funds.[11,12]

The turning point in France was the wide-ranging decrees of Premier Alain Juppé in 1996.[38] The central government, which already controlled the budget of the public hospitals, was now charged with setting a target for private health care expenditures as well. Private physicians were to be held collectively responsible for exceeding allowed annual limits on expenditures. In contrast to Germany, where the funds gave the physicians' associations lump capitation-based payments that the associations subsequently divided up quarterly in accordance with each physician's relative productivity, French physicians were to make retroactive paybacks at the end of each year. This unpopular system of collective responsibility was, however, declared unconstitutional in 1997. Consequently, annual expenditure targets for private practitioners could not be enforced, although governments continued to set them.

Threatened by these efforts to manage care, physicians were also embittered by the stagnation of their earnings in the 1990's; they earned

less than two-thirds of their German and one-third of their American counterparts. [9,39,40] Furthermore, hospitals suffered from a strain on personnel aggravated by the socialist government's introduction of the 35-hour work week in 2001. The various providers brought their complaints into the political arena through a multitude of demonstrations and strikes, resulting in the unique phenomenon of what Jean de Kervasdoué has labeled "health policy through strikes."[41]

The most notable physician actions were the residents' strike of 1996[38] and the generalists' strike of 2001-2. Charging that the Juppé decrees would undermine their future careers as private practitioners, residents in most of France's teaching hospitals went on strike in April and May of 1996. Although this strike failed, private physicians' disillusionment with Juppé helped the socialists to gain control of the National Assembly in the elections of June 1996. At the end of 2001, many generalists refused to do night or weekend call until their reimbursements were increased from 17.53 to 20 euros for regular office visits, 30 euros for home visits, and more for night office visits. Local authorities had to requisition the striking generalists in order to fill the gaps. In addition, some generalists began, illegally, to charge their patients the higher fees. In June 2002 the newly elected conservative government finally acceded to their demands. Meanwhile, pediatricians started to charge their patients more and, in turn, gained a compromise increase in fees. Others specialists followed suit—by early 2004, about a third of the private specialists in sector 1—and demanded that all specialists be allowed to enter sector 2, the category of those permitted to charge higher fees.[42]

The leaders of the physicians' unions saw the government as their primary interlocutor, not the insurance funds. In a March 2004 interview of the heads of the five unions, only Pierre Costes, head of the MG-France (which solely represented generalists), talked about strengthening the funds.[43] Dinorino Cabrera, head of the Syndicat des Médecins Libéraux, appeared to summarize the others' feelings: "It is necessary to stop the hypocrisy. Today, it is the State that decides. We must therefore negotiate with it." Already in

September 2001 the major business organization had stopped participating in the governing council of the general fund, citing the council's impotence.

In pursuit of major reforms

The conservative government of President Jacques Chirac and Premier Jean-Pierre Raffarin decided in 2003 that, since paying for the funds' deficits through taxes would imply a politically unpalatable doubling of the general social contribution by 2020, it was time to try again to restructure the health insurance system.[34] The government appointed a High Council for the Future of Health Insurance, composed of 53 representatives from a variety of stakeholders, to do an in-depth study and propose solutions. In a long report made public in January 2004, the High Council proposed to make French medical care more evidence-based, cost-effective, efficient, and quality-oriented; to obtain new funds from those able to pay; and to create a governing council of the health insurance funds with more authority and responsibility.[34]

In spite of stinging defeats in the regional and local elections of late March and in the European elections in June, the need to appoint a new health minister, Philippe Douste-Blazy, and howls of protests against attacks on the social security system, the government forged ahead, confident in its large parliamentary majority, 358 out of 568 deputies. Douste-Blazy introduced the new law in May; the National Assembly adopted it with minimal changes in August; and, without public outcry, the government issued the decrees needed to put the changed system into effect in 2005.

According to the Douste-Blazy law, the State would continue to determine the principle orientations of health insurance, set a yearly target for reimbursable health care expenses, and contract with the health insurance funds to manage the system.[44,45] The funds would now be combined as the National Union of Health Insurance Funds (Union Nationale des

Caisses d'Assurance Maladie, or UNCAM). UNCAM would continue to negotiate agreements with the medical and paramedical professions about modes of practice and would also, in association with them and the supplementary insurers, propose changes in what products and services would be reimbursed (thereby saving money on ineffective drugs and other treatments). An independent High Health Authority would act as technical consultant to UNCAM and the government. UNCAM's governing council would still be composed primarily of representatives of labor and business, but the balance of power would shift from the council's elected president (always a labor union representative) to its general director, named as before by the government. The general director would set specific priorities and budgets, name the regional and local administrators of the funds, and negotiate with the various providers. The council could delay but not block the general director's plans. Moreover, whereas in the past the general director would resign if he disagreed with the president of the council, now the council could force a resignation only by a two-thirds vote of censure. At the same time, the general director, appointed to a term of five years, could not be forced to resign by the government.

The law aimed "to provide better care while spending less."[34] It would achieve better coordination of care, with less duplication of services, by developing a shared, computerized medical record for each patient, by giving financial incentives to patients over 16 to choose a primary physician, and by instituting care teams for patients with chronic illnesses. It would improve the quality of care by developing and enforcing more practice guidelines, by educating both professionals and patients, and by creating a sense of responsibility in both groups. It would have more attention paid to prevention and would decrease costs by using more generic medications and negotiating lower prices for medications and other health products. Douste-Blazy expected these measures—dubbed by Victor Rodwin and Claude Le Pen as "state-led managed care"—to save some 10 billion euros a year.[46]

Meanwhile new monies had to be obtained to pay for past deficits and prevent future deficits. With the health insurance system was losing

23,000 euros a minute, the law included a broad series of measures that, Douste-Blazy claimed, would raise an additional 5 billion euros a year. First, to give patients a sense of responsibility as well as to raise money, they would receive 1 euro less of reimbursement for every visit to a physician or other medical service (and supplementary insurances would be prohibited from covering this). They would also pay 14 instead of 13 euros per hospital day, which would increase to 16 euros by 2007. Similarly, in Germany, since January 2004 patients have had to pay 10 euros to their primary care physicians on the first visit of each quarter (or less often if they agree to more restrictions), to specialists unless referred by their primary care physician, and to emergency rooms.[47,48] Second, the general social contribution would be assessed on 97% rather than on 95% of people's salaries and, for retired people, the rate would be raised from 6.2% to 6.6% of their pensions. Third, the rate of "the social contribution for solidarity by companies," previously used only for other aspects of social security, would be raised from 0.13% to 0.16% of their sales, with the additional 0.03% going to health insurance. Fourth, revenues from certain financial investments and from gambling would be taxed more. Fifth, the state would give a billion euros to the Uncam to compensate, partially, for employers' various exemptions from payroll contributions. Sixth, the accumulated debt of 32 billion euros would be transferred to the "Fund for the Redemption of the Social Debt," necessitating the prolongation beyond the year 2014 of the special tax of 0.5% of income called "the contribution for reimbursing the social debt" and its assessment on 97% rather than 95% of people's salaries. The pain was thus to be spread throughout society.

These reforms aroused little serious opposition, in contrast to the Juppé decrees of 1996. First, unlike the Juppé plan, they were carefully prepared and openly debated. Representatives of all stakeholders participated in the High Council for the Future of Health Insurance and had to sign off on its final report.[49] Then for several months the public and the National Assembly were able to debate the law's provisions. Second, Douste-Blazy promised

to uphold the fundamental French principles of solidarity and equality of access.[50] As the law put it, "The Nation affirms its attachment to the universal, obligatory, and *solidaire* character of health insurance. Independently of his age or state of health, each person with social insurance benefits, against the risk and consequences of illness, from a protection that he finances according to his resources."[44] Third, the government made everyone aware of the financial crisis faced by the health insurance system. Fourth, the government tried not to alienate the private physicians, who were already getting used to practice guidelines, generic drugs, "referring" physicians, and computers in their office. The new law did not directly attack their freedom of prescription, nor did it, unlike the Juppé plan, establish penalties for exceeding the expenditure targets. The physicians in specialties that had not yet gained increases in reimbursement could expect to obtain them by applying pressure (as they have subsequently done).

The first major success of the new general director of Uncam, Frédéric Van Roekeghem, was on December 15 to sign a new contract with the heads of three of France's five physicians' unions.[51] Physicians' remunerations are to increase—those for repeat visits to specialists, for example, will rise from 25 euros to 27 in 2005 and 28 in 2006—even though the less-favored pediatricians, in particular, are not satisfied. In return, the contract commits physicians voluntarily to change their prescribing practices to reduce expenditures. More controversially, it requires patients to select a "treating" physician, without whose referral it will be more expensive to see other physicians. This is similar to the system in effect in Germany since January 2004, but less stringent than primary care gatekeeping in the United Kingdom or in early phase of U.S. managed care.[48] The generalists of MG-France objected to the loss of the prior system's payments to referring physicians for coordinating their patients' care, and they and others warned of creating a two-tier system since specialists would welcome the higher payments from patients who could afford to bypass their treating physicians. Private insurers threatened to undermine the referral system (and increase their share of the supplementary insurance market) by reimbursing

subscribers for the extra payments for non-referred visits.

The fundamental impact of the new reforms on France's health care system remains to be seen. Nonetheless, several points seem clear. First, like most other developed countries, France remains committed, in the name of social solidarity, to the access of all its citizens (if not necessarily, in the Raffinin government, to all its residents) to the same basic health care. Second, the law increases central control. In spite of early speculation that the government would introduce internal markets within the system, as have, to a limited extent, the United Kingdom[15,30,52] and Germany,[36,37] and would, in particular, expand the role of private for-profit insurers, this did not occur, although supplementary insurers were given a larger place at the UNCAM table.

Third, the law reinforces the power and autonomy of the unified health funds. On the one hand, by taking control of the funds from the representatives of labor and business, the law shields the funds from corporatist interests and manipulations, although it also removes them further from their employment-based origins. On the other hand, by providing the general director of UNCAM a secure tenure of five years, the law shields him or her and UNCAM, to a degree, from government control. The extent to which UNCAM becomes an independent health authority depends, of course, on how its system of governance actually functions and evolves over time.

Fourth, with the institution of the High Health Authority and the aim to computerize the medical records of all patients, the law promises to catapult French medicine into the forefront of evidence-based, high quality care. Administrative centralization makes this more feasible in France than in more decentralized systems, if the costs of implementation do not prove too high and the resistance of physicians too great. Fifth, the law and the physicians' subsequent agreement with UNCAM permit them to retain their unequaled freedom of prescription, relying (with only limited supporting evidence), on their exercising self-restraint in the spirit of civic responsibility and evidence-based medicine.[53]

Sixth, in light of the continued slow growth of the French economy;

the unlikelihood that such measures as the "Raffarin euro," the monetary penalty for lack of referrals by the "treating physician," and the institution of computerized and accessible medical records will generate the hoped-for savings; and the absence of global budgets for private physicians, France still seems, in spite of the reforms, less able than neighbors like Germany and the United Kingdom to deal with the upward pressures on health care expenditures. Uncam will, therefore, need continued, if not increased, tax-based financing. In sum, the overall impact of the Douste-Blazy law is to make the French health care system both more Beveridgean and more French.

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4. New Cleavages in the French Health System: Crisis of the health professions

Jean de Kervasdoué

In its 2000 Annual Report, the World Health Organization declared that France had the best health care system in the world. This was a surprise to French specialists on the health care system, but reinforced popular opinion that France had an excellent, if not the best, health care system.[1] The French despise the inequitable American system and could not bear to think of anything like British waiting lists or, for that matter, any other overt method of rationing. Three years later, there is no public perception of a crisis in the health system. The deficit of French national health insurance (NHI), although abysmal—at least €10 billion—is a familiar political topic, a source of jokes rather than fear. If anything needs to be done, the population would rather increase taxes than reduce access or limit the unusual medical freedom they cherish.

The political failure to acknowledge a crisis is part of the health care crisis itself. Before presenting my view of its components, I begin with a review of French health policy since 1990.

French health policy from 1990-2003

Over this period, it is no exaggeration to say that there was an epidemic of health care reform across OECD nations. The managerial jargon among international health policy circles emphasized the benefits of competition and managed care tools. But in France, with the exception of an article in Prime Minister Juppé's law of 1996 allowing experimentation with "networks of coordinated care," it would be fair to say that health policy was out of the mainstream.[2] Four major trends characterize this period: socialization, centralization, bureaucratization and the defeat of reformers.

What I term 'socialization' of finance increased significantly over this period. This does not appear in the share of overall health care expenditures in the Gross Domestic Product. It refers rather to the share of general revenue taxation used to finance health and long-term care expenditures. In 1990, only 7 percent of health care expenditure was financed through general revenue taxes (93 percent came from mandatory payroll taxes). That figure is now over 40 percent due to the increases in the new general revenue tax *(contribution sociale généralisée – CSG)* and taxes on tobacco and alcohol. Since the extension of NHI to the remaining 1% who were uninsured *(couverture maladie universelle – CMU)* and older persons with disabilities *(allocation personnalisée à l'autonomie – APA)* are financed through general revenue taxes, the role of the central goverment in financing health and social service expenditures has grown massively. Beginning in April, 2000, the CMU provided coverage to every legal resident in France under NHI. In addition, it provided the equivalent of Medigap coverage (complementary insurance for

residual co-insurance to about 4,5 million people. The APA aims to support older persons with disabilities who are unable to manage without help. Still fragile, less generous than its German or Japanese counterpart, it is a development that will be difficult to constrain.

What I call "centralization," concerns the extension of even greater power to the central state in France. This trend—supported by the Right as well as the Left—contrasts sharply with what was tried in other OECD nations during the same period. It has several dimensions. The State has enlarged its control over public and private hospitals. The regional agencies for hospitalization (ARHs), small but powerful public entities, have full authority to decide not only on the distribution of hospital beds and capital expenditures for all hospitals in their regions, but also on their investment strategies and operating budgets. In reality, public hospitals have become subsidiaries of the AHRs, and private for-profit hospitals might be compared to farm laborers! In addition, the central state has assumed overall control over the market for prescription drugs, the fastest growing category among health care expenditures. The power of the national, regional and local health-insurance funds keeps decreasing: it only has partial control over the income of physicians in private practice and other health professions working outside of hospitals (21 percent of health expenditures).

Beyond the socialization of expenditure and the centralization of state authority, bureaucratization flourishes throughout the health care system. Every day, it results in new decrees and new rules in the name of patient safety, the precautionary principle and the quality of care. These are sometimes appropriate, but always costly. It appears the state is trying to organize every instant, every procedure of institutional and professional life. In public hospitals, 'internal democracy' is just a name for more unnecessary, costly and frustrating meetings. Physicians in private practice were obliged to buy computers, and love to use a complex system in order to allow their patients to be reimbursed under NHI. In principle, that system was promoted to improve the productivity

of the local health insurance funds. However, productivity did not improve and this raises the question of whether it was politically sound to tell individual physicians that they could serve as partial substitutes for low skilled bureaucrats. By making standards explicit, bureaucratization creates delinquency and increases the role of the courts in medical care. Although this has created new annoyances, the extent of litigation is still far from the levels reached in the United States.

At the end of the decade between 1993-2003, the reformers of private outpatient medical practice were defeated, once again. Nothing remains of the progressive ideas that were introduced to improve the quality of care and to limit the growth of health care expenditures. In 2003 the most conservative part of the medical profession was able to convince the Government to discard the obligations for compulsory continuing education and for following a limited number of medical guidelines. Some physicians who, in principle, had signed a binding financial contract with NHI Fund, unilaterally decide the fees they charge their patients. MG-France, the union of modernist general practitioners, has lost its influence. The contracts signed by some physicians and NHI Fund had by then been contested in court and the contestants won. As in a nightmare, we are back in the 1920s when the medical profession invented for itself the best of all possible worlds: freedom to determine their fees and new demands to promote private interests were cloaked in rhetoric defending the general interest.

French exceptionalism exists, not only because we socialize, centralize and bureaucratize when others try to decentralize and promote competition, but also because the public, the press and politicians demand so little accountability from hospitals and health professionals for their use of public money. The topic, itself of "health policy" seems almost to be taboo not only politically but even conceptually. The peculiar difficulty in treating the crisis of the French health care system arises from the fact that as yet there is no accepted conception of what is wrong. The status of a political problem has not been reached.

Although the term "crisis" is used with such regularity one might legitimately wonder if it is appropriate. Every observer of France knows that social unrest is not sufficient to presume a transformation of French society and new laws in Parliament are often passed to keep the privileges of a corporation or an institution. Since 1970, in every year but one, a new reform of health care was enacted, up to three in 2002! However, in health care, the only significant transformations were achieved through the passage of an "Ordinance," e.g. in 1945, 1958, 1967, and 1996. Obviously the French Governments during that long period was afraid of the influence of the medical lobby, and within their own majority, rightly so.

Today, in 2003, given the perceived political consequences of the Juppé Ordinances which were said to favor the victory of the Left in 1997 and the other topics on the political agenda, one can understand why the present Government takes its time. However I do not believe that it can avoid facing France's health crisis for long.

The symptoms of a real and deep crisis

There are four different dimensions to what I believe is a real health crisis in France: social, legal, economical and institutional.

The social dimension: Since the second half of 1999, every profession working in the health field either went on strike or, in imaginative ways, manifested its discontent. The results of these strikes were financially costly and substantively important, changing French health care in some basic ways. In 2000, 2001 and the first months of 2002 Martine Aubry and Elizabeth Guigou, Prime Minister Jospin's successive Ministers of Social Affairs, led what I have called a health policy through strikes.[3] When she was in the opposition in 1996, Martine Aubry, contrary to several members or experts in the Socialist Party, had strongly criticized

the Juppé Plan. When she was appointed Minister, she never announced her intentions with respect to the implementation of the Juppé Plan, often followed the general framework though not always as intended but neglected health policy issues for so long that health professionals finally decided to use their voice politically.[4]

A first general strike began in French public hospitals during February of 2000. It was quickly settled by Martine Aubry in March 2000 at a high cost (€800 million). It was followed by other successful (from the point of view of the organizers) strikes: midwives (March 2001), residents(April 2001), physicians in charge of emergency rooms (June 2001), obstetricians working in private hospitals (July 2001). All of these strikes were costly. On the third of September 2001 Elizabeth Guigou, the new Minister of Social Affairs, announced that 35 hours would be the legal working time applicable to all hospital personnel beginning in January, 2002. In addition, 40,000 jobs were to be created, giving salaried physicians grounds for concern. A public protest was organized in Paris on the 20th of September. An agreement was signed the 28th of September that called for the creation of 45,000 jobs and held that, starting in 2004, health workers on night shifts would only work 32 and a half hours a week. On the 5th of November 2001 the private hospitals started an "immediate and unlimited" strike and received a €300 million settlement the 8th of November. The residents, the "attachés" (part-time hospital attendings) also struck at that time and the Government backed off each time and paid up. The presidential elections were not far off, the Government bought social peace without much direct or indirect effect since the strikes continued in January and February of 2002.

The situation was different for physicians in private practice and most general practitioners who had, for a long time, asked the Government to increase their low fees ($16.50 per visit). Without any positive sign they decided, in November 2001, not to answer emergency calls at night or during the week-ends, systematically sending their patients to the nearest

hospital. Seven weeks later, on the 6th of January 2002, Elizabeth Guigou declared that their demand of €20 per visit was "excessive," and promised, in turn, to increase their fees to €18,5. She kept her promise but with no political success. Strikes went on. After the election and victory of Jacques Chirac, general practitioners obtained their demand of €20 per consultation. Nonetheless, since then, a growing number of physicians have set their own fees without any prosecution, specialists are demanding significant raises, the dissatisfaction of hospital personnel as well as their patients (de facto waiting lists) grows, and a new strike could start any day.

Although Jospin's Ministers of Social Affairs responded to the demands of hospital physicians and employees, they took some time just to consider the demands of physicians in private practice who were obviously not part of their political clientele. If Jospin's Ministers had a health policy—which is debatable—it seems they did not believe in it, because they responded to every pressure group. Strikes dominated the political agenda but with some unexpected consequences. One example is the discovery by many physicians in private practice that their quality of life was much better without any night or week-end duties, thus , strengthening their determination not to return to their previous situations. As a consequence, admissions to hospital emergency rooms are growing at an increasing pace.

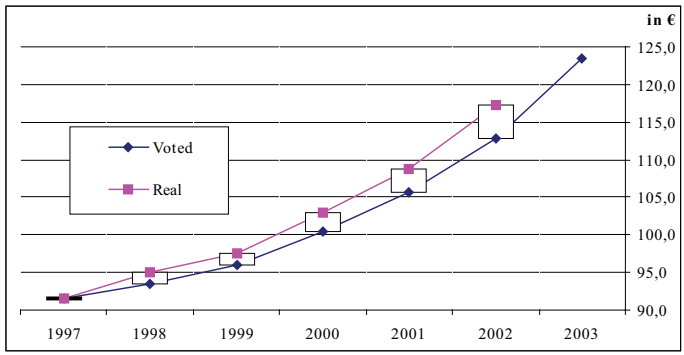
The legal dimension: The legal side of the crisis is simpler to present. For every health profession working outside the hospital (physicians, dentists, nurses, laboratory pathologists…) two 'representative' unions at least must sign a contract with the NHI Funds, which must be approved by the Government before it can be enforced. The contract has many aspects, but the most important have to do with fees, continuing education and medical guidelines that must be followed.

Since 1991 the *Conseil d'Etat* and the *Conseil Constitutionel* have invalidated every contract signed between the physician unions and the

NHI Funds. They were always, within the medical trade unions a dissatisfied group of physician that went to court and won. There are several reasons for this, the main one being the ambiguity of the system since a "contract" is both the equivalent of a private agreement and an act of public regulatory authority.[5] The main legal tools do not work, and have not done so for more than twelve years. The state can take minimal action, but why, one might ask, does the French Government continue to pretend that such measures will effectively succeed in managing the health system?

The economic dimension: The economic aspect of the crisis is the most obvious. Since 1997, the level of annual health care expenditures has always been higher that the one budgeted by the Government and voted by Parliament.

Table 1. Continuous Growth and Deficits of Health Care Expenditures



Voted and real expenditures since 1997

The NHI branch of the social security system has run a chronic deficit since 1985! That deficit has been covered largely by raising taxes. In more recent years, it has been financed by the surplus generated in the pensions and family allowances branches of social security, a surplus

arising from economic growth, lower than expected unemployment and, most of all, exceptional demographic factors. With the exception of 1916, 1917 and 1918, 1941 was the year with the lowest birthrate in France for the twentieth century, much lower than each year of the nineteen thirties. Very few people retired in 2001, 60 years latter, and the spending on new pensions was automatically limited. This situation is rapidly changing: in 2004, 650,000 persons will retire while there were only 480,000 retirees in 2001. In 2007 there will be around 830,000 new retirees, which is the real beginning of the retirement period for the baby-boom generation. Since, hopefully, they are not going to die all of a sudden, the effect will be cumulative and pension surpluses will not only be unable to compensate for health expenditure increases, but will have to change in order to decrease the already huge financial burden on the younger generations working at that time.

Table 2. Structural Deficit of Health Care Expenditures

Voted and real public health insurance expenditures	2000		2001		2002		2003 (p)
	Voted	Real	Voted	Real	Voted	Real	Voted
Outpatient total	2.0	8.1	3.0	7.1	3.0	7.6*	
Fees for physicians and dentists	2.0	4.4		3.8		10.6**	
Drugs	2.0	10.3	2.0	8.8	3.0	6.8*	
Financial compensations	2.0	7.9		8.4		10.4*	
Public hospitals	2.4	3.4	3.5	3.3	4.8	5.6*	
Private hospitals	2.2	3.2	3.3	2.0	4.8	11.4**	
Nursing homes	4.9	6.2	6.0	4.8	4.8	1.9**	
Total CNAMTS	2.5	5.9		5.9		7.5*	5.9
TOTAL Health Insurance	**2.5**	**6.3**	**3.5**	**4.7**	**3.8**	**7.0***	**4.0**

** Ajusted* *** Unajusted*

The strikes and generosity of recent governments, as well as the 35 hours work week law, are not only expensive—the main reason for the growth of hospital expenditures—but prescription drug expenditures

continue to increase rapidly, with no known means to control prescriptions. The officially expected deficit for 2003 (€10 billion), added to the 2002 deficit of 5 billion came close to one percent of GDP and remains a problem, in itself, but, most of all, it is the symptom of a crisis, the key characteristic of a system that remains totally unregulated in practice.

The institutional dimension: The first institutional aspect of the crisis was the departure of the national association of employers (MEDEF), which was supposed to manage, together with employee trade unions, the entire social security system, from the Board of Trustees of the NHI Fund and its local agencies. Before they returned to resume these responsibilities, in 2005, there was an interesting period during which nobody wanted to declare that the Prince was naked, so to speak! What an odd institution, whose legitimacy is based on the co-management of two entities, and which is able to survive the departure of one! That is not all. Since April of 2000, with the passage of the CMU, every legal resident in France is covered under NHI. Thus, since 2001, the level of reimbursement under NHI has been practically the same for all occupations, but the different health insurance funds continue to control eligibility rights that everybody has! We also face a very complex payment system. A little bit less than 100,000 persons perform administrative tasks every day for a plethora of not obviously useful tasks related to unnecessary or redundant control and payment mechanisms. Finally, due to its initial design and reinforced by the centralization of state functions under Jospin's Government, the NHI funds have very limited flexibility and control over health care expenditures—no more than 21 percent of health expenditures and even in these matters, the Government has significant regulatory authority. Thus, even though French NHI is still much more administratively efficient than the US system, it is nevertheless an expensive system.

A crisis clearly exists if by that we mean the incapacity of institutions to reach their goals. There is the incapacity of the state to implement

existing laws, the incapacity of trade-unions to represent their members, and the incapacity of hospitals to build an organization beyond the interests of each corporation. The crisis applies to each actor of the system but is also a crisis of their relationships. It is a crisis of the symbolic representation of medical care and collective solidarity as organized under the social security system established in 1945.

In operational terms, there are three different critical features: 1) the difficult relationship between the medical profession and French society; 2) the troubled state of the public hospitals; 3) the governance of the system, itself, more precisely, the chaotic relationships among the Government, social security and the medical profession.

Why the crisis?

Physicians' income

When one asks French physicians about the main reason for the present crisis, they answer, honestly, that their annual income has decreased and that society no longer respects their professional status. The financial component of that common answer can be tested and we did so.

Table 3. Evolution of the Mean Real Wage for Salaried health Professionals and Public Sector Employees (Base 100: 1985)

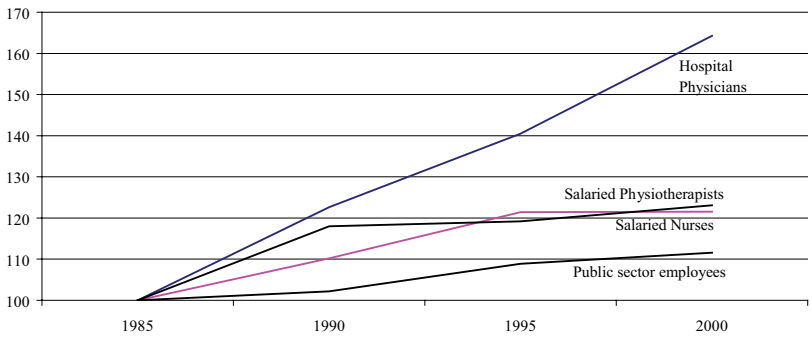
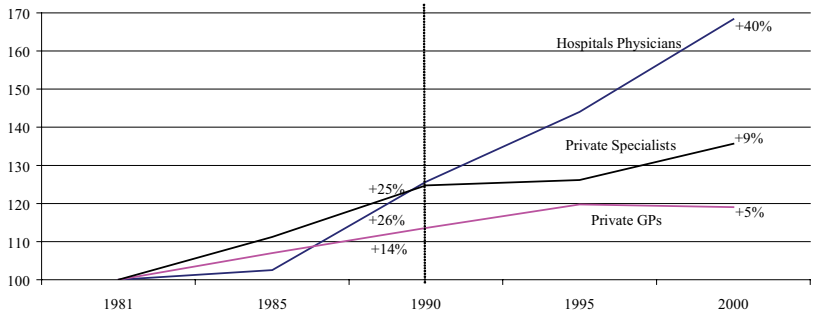


Table 4. Evolution of Physicians' Purchasing Power Since 1981 (Base 100:1981)

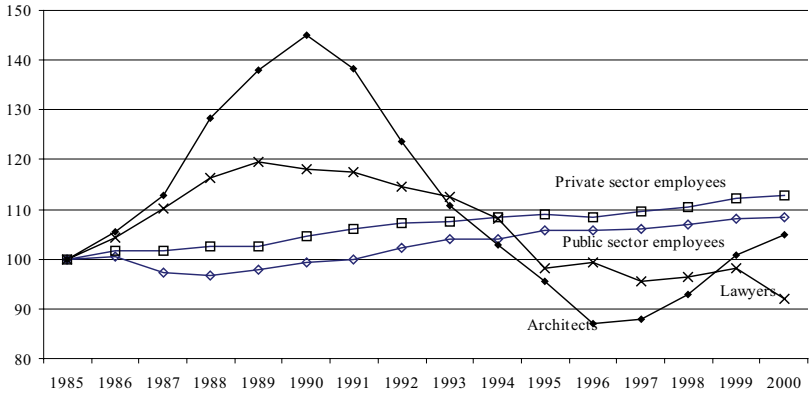


We found that this account has no economic basis. Philippe Ulmann demonstrates that, with the exception of nurses and physiotherapists working outside hospitals, medical and paramedical professions were not at all forgotten during the last twenty years (Table 3).[6] In fact, their incomes increased faster than the incomes of the average French worker in either the public or the private sector (Table 4). For specialists and hospital physicians, it increased much faster than for the rest of the population. Given the recent financial benefits of the strikes, the comparison would be even more favorable for the medical profession.

These figures represent averages. Some specialists, e.g. radiologists, were better off than pediatricians or psychiatrists. Overall, however, the trend is, hardly unfavorable especially when one considers that, during that period, the number of practicing physicians almost doubled (117,000 versus 200,000). The increased supply did not lead to a decrease in incomes, as one might expect. It is true that the fees slowly changed and even sometimes decreased in relative value (e.g. for surgeons), but physicians in fee for service private practice can adjust their revenues by increasing the volume of activity (consultations, diagnostic procedures, even surgical procedures) and, in some specialties such as cardiology,

prescribe tests that they perform themselves.[7] If their levels of income are adequate, that does not mean that the methods of payments should escape reform: they are archaic, crude and sometimes absurd. The complexity index used to compute the fees of most specialists has not been substantially changed since 1972 in spite of numerous reports calling for immediatet modifications.

Table 5. Evolution of Self-Employed Workers' Real Mean Profit and of Public and Private Sector Employees' Real Mean Wages (Base 100: 1985)



Medical demography

Three years ago France was still supposed to have an over-supply of physicians. It was a time when the Government, with social security, gave substantial financial subsidies to physicians who accepted early retirement. All of a sudden, while France never had more health professionals, a collective political perception emerged that France would face a shortage of nurses and physicians. For this reason, in 2003, the Government decided to raise the limit on medical students admitted to the second year of medical school *(the numerus clausus)*. Even without that decision, the number of physicians in 2020 would have been higher

than the number of physicians in 1984 when it was common to speak of an oversupply! Even taking into consideration the 35 hour work week, and the growing feminization of the medical profession (women doctors spend less time at work, on average, than men), the supply of working time of all health care professionals has substantially increased over the past twenty years. Obviously the sense of scarcity comes from the demand side, but that is quite another matter, especially when medical care is practically free and the demand for care potentially infinite.

Medical knowledge, division of labor and the inadequacy of medical ideology

As we have seen, the French crisis has many different causes. But for me the main one is the inadequacy of the still dominant medical ideology of la médecine libérale for the future organization of medical care.

As Patrick Hassenteufel has shown, in 1925, when the first law creating social security was passed in Parliament, the majority of French doctors accepted the principle of fixed and negotiated fees.[8] At that time, only a minority of physicians—those in large cities, mainly Paris—were paid on a fee-for-services basis. For the majority of physicians, around Christmas time they used to present their annual bill which was adapted to the income of their patients. Dissatisfied with the new law, the prestigious doctors invented, in 1927, the ideology of the *médecine libérale* "that common charter of the profession, that no law, decrees or contracts could question."[9] Quite a strong statement, indeed! The main points of that charter were (and remain): freedom of choice, absolute secrecy for any medical information, direct payment by the patient, therapeutic and clinical freedom. Such a set of principles have led physicians to argue that medical criteria should always dominate over any economic considerations, that fee-for-service payment is the preferred form of remuneration and that physicians should be accountable mainly to their professional organizations. They have worked—more or less—for 70 years even though physician reimbursement rates were universal and

defined at the national level only between 1971 and 1980.

Before trying to explain why today this ideological invention is unable to play a useful social function, let me underline a basic difference between the German and the French health systems which are often compared. In Germany, the medical profession co-manages the NHI system. It receives payment on behalf of its members and exercises some control. But French and German corporatism are of different. In France it is a protesting corporatism; in Germany, it is a participating one. In contrast to American HMOs, in France it is not the physicians who are controlled, but their patients!

The crisis is a direct consequence of the exponential development of medical knowledge, medical products and medical technology. The French health care system is not adapted to face the contemporary knowledge-induced crisis. Every month, there are more than 25,000 new articles published in peer-reviewed medical journals and referenced on "Medline."In France, a typical pharmacy offers, on average, 8,000 drugs. There are more than 800 different laboratory tests related to the practice of medicine, 1,500 imaging techniques and, depending on the level of precision, between 1,500 and 10,000 surgical procedures. That amount of information and *savoir-faire* is beyond any one human being's capacity. But in France still, in theory, general practitioners can prescribe anything, even when it is obvious that they cannot know everything.

The knowledge explosion has led to a double division of labor: a division of labor within the medical profession and a division of labor inside the other so-called paramedical and "other" health professions. French medical schools recognize 57 specialties, but in fact they already are more than 100. A university hospital recognizes more than 130 different occupations. Even if not all of them are directly related to health care, most of them are. The division of labor can be seen within the nursing profession as well as among physical therapists and other health professions. The nature and quality of care depend upon the quality of health professionals, which is not new, but also on their capacity

to coordinate their work in caring for patients and that is becoming more and more crucial. The liberal ideology, which assumes that each physician is totally independent, does not have to accept any constraint from anybody as far as the care delivered to a patient, produces anachronistic forms of medical care.

France is probably the only developed country where any citizen, rich or poor, can have direct access to any physician (general practitioner or specialist), any hospital (public or private) and be partly or totally reimbursed (most of the time totally). This has, at least, two major implications, given the division of labor. The first one is that the patient should always know which specialist his health condition requires; and the second is that the role of the GP should be precisely defined. The first is unrealistic and the second absent. Politicians send back to the physician the image of a rural doctor at the end of the nineteen fifties when the marvel of antibiotics was enough to generate faith in any health professional. At the end of the 1990s, NHI officials tried to promote the idea of a primary care physician *(médecin référent)* with whom a patient, if he so chose,, would register. The public accepted that idea (more than 60 percent were in favor), even though it was too quickly promoted without much in the way of evaluative studies. But the majority of the profession—led by its most important and conservative union, the CSMF—was able to prevent its implementation. In strike after strike GPs, which represent one-half of French doctors, ask what should be their role in a changing world. They complain that the fees for their consultation are 35 percent lower than thoset for specialists. Most GPs did not decide not to be specialists; they failed the exam enabling them to become one—surely not the best way to enhance professional pride! The boundaries between the medical profession and other health professions are also unstable both inside and outside the hospital, which is another factor that raises professional unease.

We return now to the problems sustained by the ideology of *la médecine*

libérale. In a private hospital physicians are not salaried; they contract with the hospital. In each contract, their complete clinical independence is specifically highlighted. In 1991 and 1996 the Government promoted some coordination mechanisms in these institutions. The reason was obvious: the simplest surgical procedure requires not only a surgeon, but also an anesthesiologist, a pathologist, a radiologist, several specialized nurses, and of course, an aseptic operating room. Moreover the quality of care depends on procedures as well as qualifications, but the new contracts still specify that these procedures cannot jeopardize *la médecine libérale:*"Evaluation of medical practices must respect ethical rules and the independence of practitioners in the use of their art."[10]

In public hospitals the story is somewhat different but the consequences are as dramatic. Since 1943, under the Vichy Government, hospitals are organized around service units (service) and service chiefs are appointed by the Minister of Health. Their power is an important application of the *führer princip!* Their independence is real, which led me to pretend twenty years ago, when I was in charge of French hospitals at the Ministry of health, that hospitals were more like a neighborhood street with its bakery, grocery store, butcher shop (e.g. surgical unit, cardiology unit,, neurological unit) rather than a modern organization with strong information system and coordination mechanism. When medical wards were big (90 beds and more in the early eighties), the necessary coordination was limited. It is not the case anymore: the average size for a ward is 30 beds. For example, there are still some hospitals with two, three or four different types of medical records which makes any de facto coordination impossible!

Robert Holcman notes that few tasks are properly organized in public hospitals: "The main difficulty comes from the fact any organization of work in medical wards requires that the schedules of the physicians be subject to the schedule of the rest of the team.[11] Hence there is a contradiction between the claimed autonomy in practicing medicine and the necessity to lead a team which is indispensable to

practice their art. The unorganized transmission of information and its permanent validation induce stress and exhaustion for the personnel. It is the lack of procedures which constraints the timetable… It is uncertainty which absorbs the energy of the team, mainly due to the archaic procedures set to collect and transmit information."

Of course power is also at stake in such hospital organizations. One way to keep professional power is to make uncertain your time table. When you are in a leadership position you can get away with it. In French hospitals, status rather than qualification prevails. Although numerous, the formal procedures appear as if organized so as to make sure that the different professions do not meet. French public hospitals employ civil servants whose status define their level of income, not their contribution to hospital performance.

Bureaucratization and the precautionary principle

Since the blood scandal (1983-1985) and its legal and political consequences (1990-2003), Ministers of Health know that this sector is potentially dangerous not only to their political career, but to them personally. For this reason, French officials have sought to expand their protection by creating several state agencies which assess policy risk, define standards and propose new regulations. The head of these agencies and their boards also want to protect themselves and therefore generate ever more standards, rules and regulations. Forty-three different kinds of regulation apply to hospitals. One of these might, for instance, be the fire regulation; another would be the rules governing public accounting and public markets for purchasing. Often, in applying the philosophically absurd "precautionary principle," it is strictly impossible, I believe, to apply all these rules simultaneously. It would stop hospitals from functioning. These rules do have some internal justification. Who, for example, would be opposed to fire protection? But nobody contests the fact that it is probably a thousand times more expensive to save a life by following these regulations rather than, for instance, inducing a

patient, his family and the staff to follow some basic procedures related to minimum standards of hygiene.

There is another dimension which I would describe as "bureaucratic incontinence:" the lack of confidence of the regulator who wants to control the most minute aspect of every worker's life in any hospital. This is related to the crisis of elites in contemporary French society. Ministers no longer defend physicians and hospital administrators when they are unjustly attacked by the press.[12] But they do try to restrain what remains of local autonomy. When Elizabeth Guigou negotiated with the workers' unions the implementation of the 35 hour work week in hospitals, both the Minister and the unions sought to obtain a precise agreement at the national level with little discretion for local managers in the 1,035 French public hospitals with some 800,000 employees. The working conditions are, in fact, far from being standard. But unions and politicians pooled their common weaknesses in order to try to control what remains of the republican elite: CEOs of hospitals, department unit chiefs and medical staff directors. I believe this will lead many professionals to opt out; indeed it has already begun among the youngest generation of public hospital administrators.

The institutional crisis

François Dubet suggests that the health crisis arises from discovering the contradictions between principles which had been thought to be compatible: "For a long time, the world of the hospital did not perceive any major contradiction between the development of science, the quality of care to the patients, the freedom of choice of the users and the physicians and broad economic balance."[13] Since they acted in the name of almost "sacred" principles (advancement of science, help to the sick) physicians did not understand why, all of a sudden, they had to justify what they did and how they did it. Who was there to ask? When in 1985, I introduced the DRG (diagnosis related groups) system in French hospitals, I faced strong resistance.[14] It was partly predictable,

since I was then conscious that DRGs would make physicians' activities more visible and understandable by outsiders and that would reduce professional authority. I missed the philosophical—the quasi religious—consequences of just asking doctors to justify the use of public money when they assume that they work for the betterment of mankind. The system, technically ready in the mid eighties, took almost 15 years to implement. "Actors are confronted with the contradictory logic of actions in several rationalities, that of culture, of production, of citizenship and of multiple identity."[15] For François Dubet, nurses are torn between three worlds: the subjective world of the human relation with the patient, the social world of the hospital as an organization and the technical world of specific medical know-how. "Relational techniques replace social rituals. Nurses values their relationship with the patient but in reality they do something else."

All this takes place within the following tensions: the values and the social references remain the same, but the organization changes greatly. Modern hospitals are increasingly dependent on their middle management, which is composed of experienced nurses with business training. But the social or public image of that role does not exist yet, even if middle managers are the ones who bear the contradictions between the medical, the organizational and the social roles of their institution.

It is interesting to note that Didier Sicard, a renowned French internist, President of the National Committee on Ethics, uses almost the same words as Dubet, a sociologist.[16] According to Sicard, the malaise of those who give care exists "…because they are cornered between economic constraints, demands that they often consider to be unrelated to medical, criteria, fear of going to Court, loss of their right to hesitation in the face of uncertainty, the imposition of medical guidelines permanently updated, and the feeling of lacking respect."

The political capacity of local managers to set priorities barely exists. The plethora of bureaucratic rules depletes the local capacity to adapt, reward or manage. As in other administrative contexts, and even

more, if that is possible, references to one's profession or a professional occupation are stronger than references to one's institution. It is not necessary to review all of the administrative details to understand that the institutional by-laws of a French public hospital are not structured to produce policies adapted to local needs. They are too numerous, too complex and they avoid any face to face discussions between physicians and other employees. A French hospital appears to be unlike that of any other modern organization. It has a board, but the board has no power; its departmental structure seems normal, but the chief of each department is appointed by the Ministry of Health; its chief medical officer has some real influence, but does not represent the institution: since the chief is elected by peers; it has committees for promoting employees, but most of the promotions are automatic and defined by rules set at the national level; it has a budget, but the budget, as well as the strategy, has to be approved by a public regional authority; it has employees' representatives who seem to take strong and definite positions, but they know that almost nothing can be solved at the local level and if they appear strong, and even tough, it is to send some of that noise and pressure to Paris.

The crisis of the French public hospital will not be solved without increasing local autonomy. The paradox of the present situation comes from the fact that more and more procedures are controlled, but the nature and the quality of the production is not.

A new demand

For about 96 percent of the French population, medical care is paid largely by NHI and complementary insurance. It is marginally free. Over thirty years in the field of health economics has led me to assume that when patients pay directly for their care, they limit, in some ways, the care they require, and when care is free, they receive some unnecessary treatments. Given the importance of information asymmetry in the health sector, money does not, by itself, adjust demand to what is medically

needed. The direct consequences of this empirical fact should have led French regulatory authorities to control medical practices, especially after huge local variations in medical practice were documented.[17] But HMOs do not exist in France, the NHI Fund is loosing the modest power it had in that domain and the former Minister of Health, Jean-François Mattei, a professor of medicine, believed that trust and information would be sufficient. But it won't.

As François Sicard puts it: "…faced with a medicine which permanently tries to broaden its territory in order to get more and more individuals to treat, the response of society is consumerist.[18] Little by little a dialogue among the deaf takes place between two contradictory claims: that of a medical culture which would like to address itself to patients but which addresses itself to healthy persons, and those who pretend to be sick in order to remain healthy." In addition, there are strong and powerful industries (not only the pharmaceutical sector but also food and cosmetics) that manipulate information and depend on our distresses to support the fastest growing market of the developed countries, "health."

A political desert

While writing this paper, I decided to visit once again, the Internet sites of the main French political parties to find out if they had anything new to say on health policy and, more specifically, any new idea on how to finance and limit the present abysmal deficit.[19] The search was interesting. The socialist party had a half page (no more) of criticisms and pretended that the Government wanted to privatize the health sector (which it obviously does not). UMP, the Majority party, would like to make us believe that payroll taxes won't increase (maybe not in 2003, but they have since then) and criticized the socialist party and the previous Government. Only the communist party has a functioning health commission that writes reports addressing certain aspects of these issues and making arguments—often unrealistic, but nevertheless arguments—to its members.

As Hassenteufel and Pierru put it, the same political philosophy crosses party lines.[20] There is a "soft consensus" within the political class. The same civil servants produce and reproduce the same tools to control the system: price controls for health professionals and prescription drugs, planning again and more planning, and budget targets progressively extended by the Left (1983 and 1991), and the Right (1996) with the same ineffectiveness. France is the country where prescription drug expenditures are the highest per inhabitant in spite of forty years of price control! Budget caps aimed at limiting overspending do not achieve their primary goal, but they nevertheless continue to be defended and implemented. Planning tools flourish as in the glorious years of the Soviet Gosplan. The former Ministry of Health, inspired by the CSMF, asked a commission to study how the Government could start from an assessment of French medical "needs,"and propose, on this basis a health care budget to Parliament. There are at least ten reasons why this question won't ever receive a satisfactory answer. Why it is absurd and even dangerous is worth emphasizing since implicitly this approach reduces medical care to its sole technical component.[21] But the question was asked and led to a report that produced enough mental gymnastics to pretend to have answered the question! It did not. Although the French administrative elite is not known for its depth in economic training, it would appear that even the most basic principles of that discipline have been completely forgotten in the health care field. The most liberal Minister of the past decade became an advocate of planning techniques that even a faithful communist would no longer defend. On one side, there is a medical perception of health policy; on the other, an archaic conception of regulation; and unfortunately little substantive debate between these two extremes.

In France, in contrast to Germany and, to some extent, the United Kingdom, there is no serious participation of the medical profession in the management of medical care. But this is not the only reason for France's health care crisis. Consider four other factors that contribute to the current disarray:

1. The feminization of the medical profession and the relative masculinization of the nursing profession: the simple world where doctors used to be male and nurses female is gone.[22]
2. The recruitment of the nursing profession has changed greatly: in 1980, 50 percent of practicing nurses did not have children, today 80 percent do and are thus more representative of the French population.[23]
3. The medical professional trade-unions are weak and get decreasing support from their base. Contracts negotiated by them are consequently not very strong.
4. The 35 hour week changed the conception and organization of work for many of the health professionals employed by hospitals.

But for me the most important explanations for the current crisis of the health professions in France go beyond these factors. They concern the inadequacy of the dominant medical ideology for shaping the future of modern medicine and medical care, the institutional issues described earlier and the absence of informed political discourse and relevant political debate about health care reform.

In summary, the financial crisis is just the symptom of the deeper political crisis. French physicians appear lost in a political fog and unable to describe its own malaise. They feel their patients have more and more rights, but do not have obligations. Everything seems to be free, but for how long? Payroll taxes increased again in 2004 and 2005 and direct patient contributions will continue to increase. But there is no problem since President Chirac has assured the population that "we have a good system which does not require any reform?"[24]

Acknowledgments

I thank Theodore Marmor and Victor G. Rodwin for assistance in editing this paper.

Notes

1. French specialists were right. The method used was far from perfect. Some of WHO's indicators were ill-conceived, especially the one for education. Moreover, the weighting criteria for "system responsiveness" was arbitrary since it was computed only from a poll of WHO's employees.
2. Claude Bébéar, who was then the President of AXA (an insurance industry concern and significant investor-owned player in the complementary insurance market); and a gang of health policy intellectuals (Launois R.J., Majnoni d'Intignano B., Rodwin V.G. and Stéphan J.C., "Les réseaux de soins coordonnés (RSC): propositions pour une réforme profonde du système de santé." *Revue Française des Affaires Sociales* (1) January March, 1985, all of whom tried to spread these ideas. They never found the support of a political party able to implement them.
3. de Kervasdoué J. *Le carnet de santé de la France 2000-2002.* Paris, Mutualité Française, Economica, 2002.
4. Hassenteufel P. "Le premier septennat du "plan Juppé": un non changement décisif."In de Kervasdoué J., *Le carnet de santé de la France 2000-2002.*
5. Pellet R. "Les relations juridiques (très peu) conventionnelles des médecins libéraux avec la sécurité sociale." In de Kervasdoué J., La crise des professions de santé. Paris: Dunod, 2003.
6. Ulmann P. "La crise des professions de santé a-t-elle une origine économique?" In de Kervasdoué J., *La crise des professions de santé.* Dunod, Paris 2003.
7. Letouzey J.-P. de Kervasdoué J. et al. *Cardiologie 2000 – Le livre blanc sur la prise en charge des maladies cardiovasculaires en France.* Paris, Sanesco, 1996.
8. Hassenteufel P. *Les médecins face à l'Etat.* Paris, Presses de Sciences Po.,1997.
9. Le Médecin Syndicaliste, January 1, 1928. pp. 37-39.
10. Article L. 1414-1, Code de la santé publique.
11. Holcman R. "Quelle spécificité de l'organisation du travail dans les services de soins? Tâches standardisées et tâches spécifiques par type d'agents," *Gestions hospitalières,* December, 2002.
12. In Strasbourg the police came to pick up the CEO of the university hospital on a Friday night and arrested him along with some of his assistants. The press headlines treated that topic for 48 hours non stop. Eight years later, the trial is not finished yet, but obviously, so far, there is no case. Last year the press attacked the head of an emergency room in Bourges for not sending an ambulance to a patient. In fact, the patient was dead and the physician was just doing his job: making sure that public money is used appropriately.
13. Dubet F. *Le déclin de l'institution.* Paris, Seuil, 2002.

14. DRGs classify patient stays in hospitals by economically homogeneous groups of medical conditions and thus reflect more precisely than per diem fees what is done and at what cost.
15. Dubet F. op cit. page 69.
16. Sicard D. *La médecine sans le corps – Une nouvelle réflexion éthique.* Plon, Paris 2002.
17. Trombert-Paviot B. Rodrigues J.-M. "Les variations géographiques des interventions chirurgicales: de nouveaux problèmes en politique de santé." In de Kervasdoué J., *Le carnet de santé de la France 2003.* Paris, Mutualité Française, Dunod, 2003.
18. Sicard F. op cit., page 100.
19. July 10th, 2003.
20. Hassenteufel P. and F. Pierru. "De la crise de représentation à la crise de la régulation de l'assurance maladie", in de Kervasdoué J., *Le carnet de santé de la France 2000-2002.*
21. de Kervasdoué J. "Pourquoi l'ONDAM ne peut pas être et ne sera donc jamais "médicalisée. " In *Le carnet de santé de la France 2000-2002*, p. 107.
22. As a woman recently said to me: we don't yet have an image of the grande patronnne! She was referring to a movie where Pierre Fresnay was playing the role of a prestigious doctor.
23. Acker F. "Les infirmières: une profession en crise?" In Jean de Kervasdoué, *Le carnet de santé de la France 2000-2002.*
24. Speech by President Chirac, 14 July, 2003.

Part II

Organization, Financing and Management of Health Care in France

5. The Health Care System under French National Health Insurance: Lessons for health reform in the United States

Victor G. Rodwin

The French health care system achieved sudden notoriety since it was ranked #1 by the World Health Organization in 2000.[1] Although the methodology used by this assessment has been criticized in this Journal and elsewhere,[2-5] indicators of overall satisfaction and health status support the view that France's health care system, while not the "best" along these criteria, is impressive and deserves attention by anyone interested in rekindling health care reform in the United States (Table 1). French politicians have defended their health system as an ideal synthesis of solidarity and liberalism (a term understood in much of Europe to mean market-based economic systems), lying between Britain's "nationalized" health service where there is too much rationing and the U.S.'s "competitive" system where too many people have no health insurance. This view, however, is tempered by more sober analysts who argue that excessive

centralization of decision-making and chronic deficits incurred by French national health insurance (NHI) require significant reform.[6-7]

Table 1. Health Status and Consumer Satisfaction Measures: France, United States, Germany, United Kingdom, Japan and Italy

	France	U.S.	Germany	U.K.	Japan	Italy
Health status						
Infant mortality (deaths/1,000 live births) 1999[1]	4.3	7.2*	4.6	5.8	3.4	5.1
LEB (female) 1998[1]	82.2	79.4	80.5	79.7	84.0	81.6**
LEB (male) 1998[1]	74.6	73.9	74.5	74.8	77.2	75.3**
LE at 65 (female) 1997[1]	20.8	19.2	18.9	18.5	21.8	20.2
LE at 65 (male) 1997[1]	16.3	15.9	15.2	15.0	17.0	15.8
Severe disability-free life expectancy (female) 1990/1991[2]	14.8	NA	NA	13.6	14.9	NA
Severe disability-free life expectancy (male) 1990/1991[2]	18.1	NA	NA	16.9	17.3	NA
Potential years of life lost (female) 1993[3]	2,262	3,222	2,713	2,642	1,914	2,136
Potential years of life lost (male) 1993[3]	5,832	6,522	5,752	4,688	4,003	4,873
Consumer satisfaction						
Only minor changes needed 1990[4]	41%	10%	41%	27%	29%	12%
Very satisfied 1996 [5]	10%	NA	12.8%	7.6%	NA	.08%
Fairly satisfied 1996 [5]	55.1%	NA	53.2%	40.5%	NA	15.5%

*1998; **1997

Sources:

1. OECD Health Data 1998, cited in *A Caring World: The New Social Policy Agenda.* Paris: OECD;1999: 27.
2. Defined as life expectancy with the ability "to perform those activities essential for everyday life without significant help." (Ibid, p. 27, 31).
3. OECD Health Data 1998, ibid.., p. 30.
4. Harvard-Louis Harris-ITF, 1990 Ten-Nation Survey, cited in Blendon, J. et al. Satisfaction with Health Systems in Ten Nations. *Health Affairs.* Summer 1990; 185-192.
5. Eurobarometer Survey, 1996, cited in Mossialos, E. Citizens' Views on Health Care Systems in the 15 Member States of the European Union. *Health Economics.* 1997; 6: 109-116.

Over the past three decades, successive governments have tinkered with health care reform; the most comprehensive plan was Prime Minister Juppé's in 1996.[8-9] Since then, whether governments were on the political left or right, they have pursued cost control policies without reforming the overall management and organization of the health system. This strategy has exacerbated tensions among the state, the NHI system and health care professionals (principally physicians), tensions which have long characterized the political evolution of French NHI.[10-12]

Although the French ideal is now subject to more critical scrutiny by

politicians, the system functions well and remains an important model for the U.S. After more than a half century of struggle, in January 2000 France covered the remaining one percent of its population that was uninsured and offered supplementary coverage to eight percent of its population below an income ceiling.[13] This extension of health insurance makes France an interesting case of how to assure universal coverage through incremental reform while maintaining a sustainable system that limits perceptions of health care rationing and restrictions on patient choice. Following an overview of the system, and an assessment of its achievements, problems and reform, this paper explores the lessons of French experience with NHI for the U.S.

Overview of the French health care system

The French health care system combines universal coverage with a public/private mix of hospital and ambulatory care, higher levels of resources (Table 2) and a higher volume of service provision (Table 3) than in the U.S.[14] There is wide access to comprehensive health services for a population that is, on average, older than that of the U.S.; yet France's health expenditures, in 2000, were equal to 9.5 percent of its gross domestic product (GDP) in comparison to 13.0 percent of GDP in the U.S.[15]

The health system in France is dominated by solo-based, fee-for-service private practice for ambulatory care and public hospitals for acute institutional care, among which patients are free to navigate and be reimbursed under NHI. All residents are automatically enrolled with an insurance fund based on their occupational status. In addition, most of the population—90 percent—subscribe to supplementary health insurance to cover other benefits not covered under NHI.[16] Another distinguishing feature of the French health system is its proprietary hospital sector, the largest in Europe, which is accessible to all insured patients. Finally, there are no gate-keepers regulating access to specialists and hospitals.

Table 2. Health Care Resources: France and United States, 1997-2000

Resources	France	U.S.
Active physicians per thousand	3.3[1] (1998)	2.8[1] (1999)
Active physicians in private, office-based practice per 1000 population	1.9[2] (2002)	1.7[3] (1999)
General/family practice, %	53.3%[2] (2002)	22.5%[3] (1999)
Obstetricians, pediatricians, and internists, %	7.5%[2] (2002)	35.6%[3] (1999)
Other specialists, %	39.2%[2] (2002)	41.0%[3] (1999)
Non-physician personnel per acute hospital bed*	1.9 (2001)[4]	5.7 (2000/01)[5]
Total inpatient hospital beds per thousand population** (1998)	8.5[1]	3.7[1]
Short-stay hospital beds per thousand population	4.0[6] (2000)	3.0[7] (1998)
Share of public beds, %	64.2%[6] (2000)	19.2%[7] (1999)
Share of private beds, %	35.8%[6] (2000)	80.8%[7] (1999)
Proprietary beds as percent of private (1999), %	56%[8]	12%[7]
Nonprofit beds as percent of private (1999), %	44%[8]	88%[7]
Share of proprietary beds, %	27%[9] (1998)	10.7%[7] (1999)

* Non-physician personnel include all hospital employees—administrative, technical, and clinical—excluding physicians. Among the category of physicians in the U.S. we included chiropractors and podiatrists.
**These differences reflect the use of long-term care beds in French hospitals—public and private nonprofit—as nursing homes.

Sources:

1. *OECD Health Data.* Paris: Organization for Economic Cooperation and Development; 2002.
2. Carnets statistiques n°108. Paris: Caisse Nationale de l'Assurance Maladie des Travailleurs Salariés (CNAMTS); 2002.
3. National Ambulatory Medical Care Survey. National Center for Health Statistics, Centers for Disease Control and Prevention; 1999. (Excludes: Federally-employed physicians; anesthesiologists, pathologists, and radiologists.)
4. *Eco-Santé 2001.* Paris: Centre de Recherche, d'Etude et de Documentation en Economie de la Santé (CREDES)
5. Acute care beds: *Hospital Statistics 2000.* Chicago: American Hospital Association; 2001. Non-physician personnel: National Industry Specific Occupational Employment and Wage Estimates, Specific Industry Code 806, Hospitals, US Department of Labor, Bureau of Labor Statistics (accessed online at www.bls.gov/oes/2000/oesi3_806.htm).
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8. Les établissements de santé en 1999. Paris: DREES; 2001.
9. *Annuaire des Statistiques Sanitaires et Sociales 1999.* Paris: DREES Collection Etudes et Statistiques; 2000.

Table 3. Use of Health Services: France and United States, 1997–2000

Use	France	U.S.
Physician office visits per capita* (1999)	6.0[1]	2.8[2]
Specialist visits per capita (1999)	1.9[1]	1.4[2]
Hospital days per capita (1999)	2.4[3]	0.9[3]
Short-stay hospital days per capita (1999)	1.1[3]	0.7[3]
Admission rate for short-stay hospital services per 1,000 population	170.1[4] (2000)	118.0[5] (1998)
Average length-of-stay for all inpatient hospital services (days) (1999)	10.6[1]	7.0[6]
Average length-of-stay in short-stay beds (days) (1999)	6.2[4]	5.9[1]
Per capita spending on pharmaceuticals ($PPP) (1999)**	$484[7]	$478[7]
MRIs per million population	2.5[7] (1997)	7.6[7] (1998)

*OECD Health Data has traditionally published a figure of around 6 physician consultations per capita for the U.S. According to the 2002 edition, this figure is based on the National Health Interview Survey, National Center for Health Statistics. This source, however, includes telephone contacts with physicians, as well as contacts with physicians in hospital outpatient departments and emergency rooms (ER). The French figure includes consultations with all physicians in private practice including health centers (5.4) and home visits by physicians (0.6) It excludes all telephone contacts, hospital outpatient and ER consultations. Thus, to obtain comparable data, the U.S. figure is taken from the National Ambulatory Medical Care Survey (NAMCS), a survey of visits to physicians' offices, hospital outpatient departments and ERs. According to the 1995 NAMCS, visits to physician offices account for 81% of ambulatory care utilization, and visits to emergency rooms and hospital outpatient departments account respectively for 11.2% and 7.8% of ambulatory care utilization. Taking these proportions into account, as well as the fact that patients are seen by physicians in only 71% of outpatient department visits, the 1999 per capita rate of physician visits would only increase to 3.04.

**These figures understate differences in the per capita volume of prescription drugs sold because increases in drug prices have been significantly higher in France than in the U.S. since 1980. When expenditure data on prescription drugs in France and the U.S. are adjusted by the OECD index of pharmaceutical price inflation in both nations, the volume of prescription drug purchases in France exceeds that in the U.S. by a factor of 2. Source: OECD Health Data 1999, cited in S. Chambaretaud. 2000. "La consommation de médicaments dans les principaux pays industrialisés." *Etudes et Résultats,* no. 47. Paris: Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques (DRESS).

Sources:

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3. *OECD Health Data, 2001.* Paris: OECD; 2001.
4. Programme de Médicalisation des Systèmes d'Information (PMSI), Ministry of Health and Social Affairs, France; 2000.
5. 1998 National Hospital Discharge Survey. National Center for Health Statistics, Centers for Disease Control and Prevention.
6. *Health in the United States.* National Center for Health Statistics, Centers for Disease Control and Prevention; 2001.
7. *OECD Health Data 2001,* cited in Reinhardt, U., Hussey, P., and G. Anderson. Cross National Comparisons of Health Systems Using 1999 OECD Data. *Health Affairs,* May/June 2002: 169-181.

French NHI evolved from a nineteenth century tradition of mutual aid societies to a post World War II system of local democratic management by "social partners"—trade unions and employer representatives—but it is increasingly controlled by the French state.[17] Although NHI consists of different plans for different occupational groups, they all operate within a common statutory framework.[18-20] Health insurance is compulsory; no one may opt out. Health insurance funds are not permitted to compete by lowering health insurance premiums or attempting to micro-manage health care. For ambulatory care, all health insurance plans operate on the traditional indemnity model—reimbursement for services rendered. For inpatient hospital services, there are budgetary allocations as well as *per diem* reimbursements. The French indemnity model allows for direct payment by patients to physicians, co-insurance, and balance-billing by roughly one-third of physicians.

Like Medicare in the U.S., French NHI provides a great degree of patient choice. Unlike Medicare, however, French NHI coverage increases as individual costs rise, there are no deductibles, and pharmaceutical benefits are extensive. In contrast to Medicaid, French NHI carries no stigma and provides better access. In summary, French NHI is more generous than what a "Medicare for all" system would be like in the U.S.; and it shares a range of characteristics with which Americans are well acquainted—fee-for-service practice, a public/private mix in the financing and organization of health care services, cost-sharing, and supplementary private insurance.

National Health Insurance

NHI evolved, in stages, in response to demands for extension of coverage. Following its original passage, in 1928, the NHI program covered salaried workers in industry and commerce whose wages were under a low ceiling.[21-22] In 1945, NHI was extended to all industrial and commercial workers and their families, irrespective of wage levels. The extension of coverage took the rest of the century to complete. In 1961, farmers and agricultural workers

were covered; in 1966, independent professionals were brought into the system; in 1974 another law proclaimed that NHI should be universal. Not until January 2000, was comprehensive first-dollar health insurance coverage granted to the remaining uninsured population on the basis of residence in France.[23]

NHI forms an integral part of France's Social Security system, which is typically depicted —following an agrarian metaphor— as a set of three sprouting branches: 1) pensions; 2) family allowances; and 3) health insurance and workplace accident coverage.[20] The first two are managed by a single national fund while branch #3 is run by three main NHI funds: for Salaried Workers (CNAMTS); for Farmers and Agricultural Workers (MSA); and for the Independent Professions (CANAM). In addition, there are eleven smaller funds for specific occupations and their dependents all of whom defend their "rightfully earned" entitlements.[24]

The CNAMTS covers 84 percent of legal residents in France which includes salaried workers, those who were recently brought into the system because they were uninsured, and the beneficiaries of seven of the smaller funds which are administered by CNAMTS.[16] The CANAM and MSA cover, respectively, 7 and 5 percent of the population with 4 percent covered by the remaining four funds.

All NHI funds are legally private organizations responsible for the provision of a public service. In practice, they are quasi-public organizations supervised by the government Ministry that oversees French Social Security. The main NHI funds have a network of local and regional funds that function somewhat like fiscal intermediaries in the management of Medicare. They cut reimbursement checks for health care providers, look out for fraud and abuse, and provide a range of customer services for their beneficiaries.

Coverage and Benefits

French NHI covers services ranging from hospital care, outpatient services, prescription drugs (including homeopathic products), thermal cures

in spas, nursing home care, cash benefits, and to a lesser extent, dental and vision care. Among the different NHI funds, there remain small differences in coverage. Smaller funds with older, higher-risk populations, e.g. farmers, agricultural workers and miners, are subsidized by the CNAMTS, as well as by the state, on grounds of what is termed "demographic compensation." Retirees and the unemployed are automatically covered by the funds corresponding to their occupational categories. The commitment to universal coverage, in France, is accepted by the principal political parties and justified on grounds of solidarity – the notion that there should be mutual aid and cooperation between sick and well, active and inactive, and that health insurance should be financed on the basis of ability to pay, not actuarial risk.[25]

Health care organization

The organization of health care in France is typically presented as being rooted in principles of liberalism and pluralism.[14,25] Liberalism is correctly invoked as underpinning the medical profession's attachment to cost-sharing and selected elements of *la médecine libérale* (private practice): selection of the physician by the patient, freedom for physicians to practice wherever they choose, clinical freedom for the doctor and professional confidentiality. It is wrongly invoked, however, in the case of fee-for-service payment with reimbursement under universal NHI; for such a system is more aptly characterized as a bilateral monopoly whereby physician associations accept the monopsony power of the NHI system in return for the state's sanctioning of their monopoly power. In the hospital sector, liberalism provides the rationale for the co-existence of public and proprietary hospitals, the latter accounting for 27 percent of acute beds in France in contrast to 10.7 percent in the U.S. (Table 2). Also, unit service chiefs in public hospitals have the right to use a small portion of their beds for private patients. The French tolerance for organizational diversity —whether it be complementary, competitive, or both – is typically justified on grounds of pluralism. For ambulatory care, although dominated

by office-based solo practice, there are also private group practices, health centers, occupational health services in large enterprises, and a strong public-sector program for maternal and child health care. Likewise, although hospital care is dominated by public hospitals, including teaching institutions with a quasi-monopoly on medical education and research, there are, nevertheless, opportunities for physicians in private practice who wish to have part-time hospital-staff privileges in public hospitals. The private hospital sector in France (both non-profit and proprietary hospitals) has 36 percent of acute beds, including 64 percent of all surgical beds, 32 percent of psychiatric beds and only 21 percent of medical beds.[26] The nonprofit sector, which operates only 9 percent of all beds, has over 44 percent of private long-term care beds.[26] Proprietary hospitals, typically smaller than public hospitals, have traditionally emphasized elective surgery and obstetrics, leaving more complex cases to the public sector. Over the past fifteen years, however, although there has been no change in its relative share of beds, the proprietary sector has consolidated, and many proprietary hospitals have developed a strong capacity for cardiac surgery and radiation therapy.

The number of *nonphysician* personnel per bed is higher in public hospitals than in private hospitals; in the aggregate, it is 67 percent lower than in U.S. hospitals (Table 2). This difference in hospital staffing may reflect a more technical and intense level of service in U.S. hospitals. It also reflects differences between a NHI system and the U.S. health system, characterized by large numbers of administrative and clerical personnel whose main tasks focus on billing many hundreds of payers, documenting all medical procedures performed and handling risk management and quality assurance activities.

Financing and provider reimbursement

In 2000, the lion's share of French NHI expenditures were financed by employer payroll taxes (51.1%) and a "general social contribution—GSC" (34.6%) levied by the French treasury on all earnings including investment

income.[27] The GSC, a supplementary income tax (5.5% of wages and all other earnings) raised specifically for NHI, was introduced in 1991 to make health care financing more progressive and to increase NHI revenues by enlarging the tax base. As a share of total personal health care expenditures, French NHI funds finance 75.5 percent, supplementary private insurance covers 12.4 percent (7.5 percent for the non-profit sector mutuelles and 4.9 percent for commerical insurers) and out-of-pocket expenditures represent 11.1 percent.[28]

Physicians in private practice (and in proprietary hospitals) are paid directly by patients on the basis of a national fee schedule. Patients are then reimbursed by their local health insurance funds. Proprietary hospitals are reimbursed on a negotiated *per diem* basis (with supplementary fees for specific services) and public hospitals (including private non-profit hospitals working in partnership with them) are paid on the basis of annual global budgets negotiated every year among hospitals, regional agencies, and the Ministry of Health. As for prescription drugs, unit prices allowable for reimbursement under NHI are set by a commission that includes representatives from the Ministries of Health, Finance and Industry.

In contrast to Medicare and private insurance in the U.S., where severe illness usually results in increasing out-of-pocket costs, in France when patients become very ill their health insurance coverage improves. For example, although co-insurance and direct payment is symbolically an important part of French NHI, patients are exempted from both when: 1) expenditures exceed approximately $100; 2) hospital stays exceed 30 days; 3) patients suffer from serious, debilitating or chronic illness; or 4) patient income is below a minimum ceiling thereby qualifying them for free supplementary coverage.

Charges for services provided by health professionals – whether in office-based practice, in outpatient services of public hospitals, or in private hospitals—are negotiated every year within the framework of national agreements concluded among representatives of the health professions, the three main health insurance funds, and the French state. Once negotiated,

fees must be respected by all physicians except those who have either chosen or earned the right to engage in extra-billing, typically specialists located in major cities. Indeed, in Paris, up to 80 percent of physicians in selected specialties engage in extra-billing in contrast to the national average among GPs (20%). In consulting these physicians, patients are reimbursed only the allowable rate by NHI; supplementary insurance schemes cover the remaining expenditures with different limits set by each plan.

Health care services, consumer perceptions, and health status

Existing data (Table 3) – whether they come from surveys or are byproducts of the administrative system – indicate consistently that the French, in comparison to Americans, consult their doctors more often, are admitted to the hospital more often and purchase more prescription drugs. Due to strict controls on capital expenditures in the health sector, France has fewer scanners and MRI units than in the U.S. But France stands out as having more radiation therapy equipment than the U.S., Japan and the rest of Europe.

In contrast to Great Britain and Canada, there is no public perception in France that health services are "rationed" to patients. In terms of consumer satisfaction (Table 1), a Louis Harris poll placed France above the UK, the U.S., Japan, and Sweden.[29] A more recent European study reports that two-thirds of the population are "fairly satisfied" with the system.[30]

France also ranks high on most measures of health status (Table 1). A recent OECD report, for example, indicates that France is well above the OECD average on a range of key indicators.[9] A more critical view would emphasize that France has high rates of premature mortality compared with the rest of Europe, but most analyses of this phenomenon suggest that it has less to do with health care services than with inadequate public health interventions to reduce alcoholism, violent deaths from suicides and road accidents, and the incidence of AIDS.[31-32]

Achievements, problems, and reform

The French health care system delivers a higher aggregate level of services and higher consumer satisfaction with a significantly lower level of health expenditures, as a share of GDP, than in the U.S. Add to this the enormous choice of health delivery options given to consumers, the low level of micro-management imposed on health care professionals, and the higher level of population health status achieved by the French, and some would argue that the French model is a worthy export product. Others, however, would emphasize the problems that accompany this model.

First, despite the achievement of universal coverage under NHI, there are still striking disparities in the geographic distribution of health resources and inequalities of health outcomes by social class.[31,33-34] In response to these problems, there is a consensus that these issues extend beyond health care financing and organization and require stronger public health interventions.[35]

Second, there is a newly perceived problem of uneven quality in the distribution of health services. In 1997 a reputable consumer publication issued a list of hospitals delivering low quality, even dangerous care.[36] Even before this consumer awareness, there has been a growing recognition that one aspect of quality problems, particularly with regard to chronic diseases and older persons, is the lack of coordination and case management services for patients. These problems are exacerbated by the anarchic character of the French health system—what might be called the darker side of *laisser-faire*.[37]

Third, although compared to the U.S., France appears to have controlled its health care expenditures, within Europe, France is still among the higher spenders. This has led the Ministry of Finance to circumscribe health spending since the early 1970s.[38] Much like the prospective payment system for Medicare in the U.S., France has imposed strong price control policies on the entire health sector. Greater cost containment has been achieved through such controls in France than in the U.S.[14]

Although the level of health services use is high in France (Table 3), prices per service unit are exceedingly low by U.S. standards, and this has led to increasing tensions (physicians' strikes and demonstrations) between physician associations and their negotiating partners – the NHI funds and the state. The allowable fee for an office visit to a general practitioner, for example, is only €20 and one-half of all French physicians are GPs. Physician specialists also receive low fees (€23) except for cardiologists (€46), psychiatrists (€36) and those who do not accept assignment. The average net annual income of French physicians—salaried hospital-based doctors as well as GPs and specialists in private practice ($55,000)—is barely one-third that of their U.S. counterparts ($194,000).[39-41] In addition to price controls, capital controls on the health system are stringent. They range from limits on the number of medical students admitted to the second year of medical school, to controls on hospital beds and medical technologies, to imposition (since 1984) of global budgets on hospital operating expenditures, to the more recent Juppé Plan that imposed annual expenditure targets for all NHI expenditures.

Prime Minister Juppé's Plan and more recent reforms have addressed the problems noted above; none of them, however, have been solved. The Juppé government established a slew of national public health agencies to strengthen disease surveillance and monitor food safety, drug safety, and the environment.[42] It organized a new national agency, l'Agence Nationale d'Accréditation et d'Evaluation en Santé (ANAES) to promote health care evaluation, prepare hospital accreditation procedures, and establish medical practice guidelines.[43,44] It also set up regional hospital agencies with new powers to coordinate public and private hospitals and allocate their budgets.[45]

In addition, the Juppé Plan included measures to modernize the French health care system by improving the coding and collection of information on all ambulatory care consultations and prescriptions and by allowing experiments to improve coordination of health services. This represents an emerging form of French-style managed care, i.e. a centrally-directed

attempt to rationalize the delivery of health services.[37] The institutional barriers to such reform are considerable but whatever transpires in the future, the French experience with NHI may be instructive for the U.S.

Lessons for health care reform in the United States

Perceptions of health systems abroad can become caricatures of what we wish to promote or avoid at home. It is thus a risky venture to derive lessons from the French experience for health care reform in the U.S. Nonetheless, I set forth five propositions to provoke further debate.

First, the French experience demonstrates that it is possible to achieve universal coverage without a "single payer" system. To do this, however, will still require a statutory framework and an active state that regulates NHI financing and provider reimbursement. Of course, French NHI was not designed from scratch as a pluralistic, multi-payer system providing universal coverage on the basis of occupational status. It is the outcome of socio-political struggles and clashes among trade-unions, employers, physicians associations, and the state. This suggests that NHI in the U.S. could similarly emerge from our patch work accumulation of federal, state, and employer-sponsored plans so long as we recognize the legitimate role of government in overseeing the rules and framework within which these actors operate.

Second, the evolution of French NHI demonstrates that it is possible to achieve universal coverage without a "big bang" reform, since this was accomplished in incremental stages beginning in 1928 with big extensions in 1945, 1961, 1966, 1978, and finally in 2000. Of course, the extension of health insurance involved political battles at every stage.[12,21] In the U.S., since it is unlikely that we will pass NHI with one sweeping reform, we may first have to reject what Fuchs calls the "extreme actuarial approach" of our private health insurance system[47] and then accept piecemeal efforts that extend social insurance coverage to categorical groups beyond current

beneficiaries of public programs.

Third, French experience demonstrates that universal coverage can be achieved without excluding private insurers from the supplementary insurance market. The thriving non-profit insurance sector *(mutuelles)* as well as commercial companies (e.g. Axa) are evidence in support of this proposition. Of course, it is easier to achieve this model before the emergence of a powerful commercial health insurance industry than in the U.S. today. Nevertheless, so long as NHI covers the insurance functions, why prevent the private insurance industry from providing useful services, on a contractual basis, under a NHI program?

Fourth, coverage of the remaining 1 percent of the uninsured in France suggests that national responsibility for entitlement is more equitable than delegating these decisions to local authorities. This lesson is consistent with the experience of Medicare versus Medicaid in the U.S., as exemplified by the differences among states and counties in dealing with the uninsured.

Finally, and perhaps most important for the U.S., the French experience suggests that it is possible to solve the problem of financing universal coverage before meeting the challenge of modernizing and reorganizing the health care system for 21st century. The Clintons' Plan attempted to do both and failed. France may be more prepared and willing to implement the Clintons' Plan than the U.S. The U.S. would do better to follow the French example in solving the tough entitlement issues before restructuring the entire health care system..

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6. The Changing Health System in France

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Introduction

In many respects, France has a health care system that other OECD countries might envy: the health status of the population ranks among the best in the industrialised countries; health spending is reimbursed generously; patients have a large freedom of choice amongst health care providers; patients generally do not have to queue for treatment; and a large amount of resources is allocated to health care by international standards (Exhibit 1). The system is expensive, however, and consumed a growing proportion of national income up until the mid-1990s (Exhibit 2). Upward pressure is exerted on spending by the use of expensive technology as well as by the freedom of choice enshrined in the French system that allows patients to consume as much as they want, and health

care professionals to prescribe freely. This freedom of action, in a context of partial budget constraints, has led to an allocation of resources that is probably not optimal. An economic assessment of the performance of the system is thus necessary. This analysis is all the more important because, in the future, population ageing will be accompanied with growing health care needs.

Efforts to slow the growth of health spending have intensified since the early 1990s (Annex I) as in other countries (Exhibit 13). In particular, a comprehensive programme has been under way since 1996 to bring spending under tighter control. Up to now these measures have had a real but limited impact on the overall rise in spending. Initiatives to modify incentives and behaviour have either been insufficient or slow in their implementation. A new impetus is needed to complete the efforts to date, while safeguarding the major strengths of the French system: quality of care, freedom of choice and equity of access.

This paper begins by discussing the key features of the French health care system. It then evaluates past reform efforts and, in particular, the effectiveness of the macroeconomic spending control measures that have been implemented. After analysing the microeconomic aspects of the system, and especially agents' behaviour, it concludes with a set of recommendations.

Main features

The French health care system can be characterised as a mixed system combining elements of private and public care, as well as publicly funded and private health insurance elements. Slightly less than half of care is provided by public hospitals and private clinics, the remainder by private service providers (ambulatory doctors, auxiliary medical staff, drugs) (Exhibit 3, Tables 1 and 2). Almost 80 per cent of total health spending is publicly funded, about 10 per cent is paid for by mutual insurers *(mutuelles)* and private insurers, and the remainder is paid for directly by patients (Exhibit 4).

A two-tier health insurance system

The health insurance system has two tiers: a basic mandatory public pillar, and supplementary insurance provided by private insurers and *mutuelles*. The basic scheme covers the entire resident population: workers and their families are affiliated with public health insurance funds, while solidarity arrangements ensure that persons who are excluded from normal cover, because they are not in stable employment or are in a transitional situation, are also covered.[2]

Doctors are paid directly by patients. Even though it is growing slowly, the direct payment to doctors by the health insurance funds (the so-called *"tiers payant"* system) concerns only a small fraction of health professionals. Patients generally receive a partial reimbursement of their expenditure by the health insurance funds, which leave a co payment to be paid out of their pocket *(ticket modérateur)*.

Supplementary insurance has expanded greatly over the past decades and now covers over 80 per cent of the population.[3] Supplementary insurance schemes generally refund the full ticket modérateur of the basic scheme, thus cancelling out its moderating effect on consumption. In addition, subsidiary mechanisms enable the public schemes to increase their cover to 100 per cent for some categories of patients and diseases (long-term disabling illness, invalidity pensioners, those with universal medical insurance). The combination of these arrangements means that, for most of the population, health care expenditure is largely refunded. This, together with a diversified supply of medical services—often on a fee-for-service basis—has been one of the factors responsible for the rapid increase in health spending.

Underneath these broad characteristics, the organisation of the system is relatively complex. The State has an important role in managing the system. Three-quarters of beds are in public hospitals, which account for two-thirds of hospital spending, and public hospital staff have the status of civil servants. To offset the demographic imbalances between funds, resources are transferred from the main scheme and the local authority scheme to those for farmers, the railways (SNCF) and the miners.

Various methods of financing

Public hospitals are funded out of global budget appropriations which are set annually by the authorities and allocated every month by the health insurance funds. Modest payments by patients top up these budget appropriations. Up to now, the appropriations have been set on the basis of the historic operating costs of hospitals, with a modest allowance made for their actual level of activity, the average case-mix, and specific costs of treating certain diseases or expensive drugs.

Private clinics are paid on a fee-for-service basis. Similarly, ambulatory care is provided primarily by doctors in private practice on a fee-for-service basis. The authorities set official schedules of reimbursement which in a number of cases correspond to the actual prices imposed on service providers.[4] The prices of reimbursable drugs and most other medical goods such as prostheses are set by the government after consulting committees of experts and in the light of the evaluations provided by private suppliers and pharmaceutical companies.

A plentiful supply of ambulatory care

The system of ambulatory care provides easy access to a specialist, in contrast with the situation in many other OECD countries, where a patient can consult a specialist only through an out-patient consultation in a hospital, often with long waiting lists. One of the consequences of this environment is competition between specialists and general practitioners as well as over-supply in some specialities. As a result, in practice, some specialists work as general practitioners, which adds additional necessary costs. Specialists with imaging equipment may also have an incentive to over-prescribe.

Efforts to ensure greater social and geographical equity

In order to ensure greater equity of access to health care, universal health insurance (*couverture médicale universelle* or CMU) is available since 1 January 2000 to the neediest members of society, a replacement of the former

medical allowance dispensed by local authorities (Exhibit 14). The first part of CMU provides basic cover to all those residing lawfully in France, irrespective of their employment situation or insurance contribution record. In practice, people formerly without health insurance, such as those not in stable employment or those facing complex administrative problems, as in the case of foreigners waiting to get official residency papers, are now covered. The second part—and the most important in quantitative terms—provides free supplementary cover to people whose income is under FF 3,500 per month per person.[5] The government estimates the ultimate possible number of beneficiaries at some six million, half of them being made up of recipients of the guaranteed minimum income (RMI) and members of their families.

Even so, inequalities remain (Exhibit 15). Households, whose incomes are too low to allow them to contribute to a supplementary insurance scheme, but too high for them to qualify them for universal health insurance, have to pay for a substantial part of their health care themselves, in particular services which are poorly refunded such as dental and optical care. And it can be a problem for them to have to put up the money in advance (Dourgnon and Grignon, 2000). Also, access to certain types of care is relatively expensive, given that a quarter of the medical profession in the ambulatory sector is free to charge the fees it wants and that the supplementary insurance schemes refund only a small part of the costs of private beds and treatment by hospital doctors.

There are also instances of inequity at the geographical level. Differing arrangements contribute to inequalities of care access between regions and even within regions. In a context of freedom of establishment, there are wide disparities in ambulatory care supply, doctor density being highest in Ile de France and the Mediterranean region. Where hospitals are concerned, despite centralised decision-making procedures, there are big differences in resource allocation between regions, in terms of beds, hospital medical staff, heavy equipment and budget funds. In some localities, waits for treatment are considered to be excessive. The authorities have therefore

embarked on a policy of progressive equalisation that should ultimately reduce these long-standing inequalities of allocation between regions and medical establishments. Furthermore, prior to the introduction of CMU, the arrangements applying to care access for the neediest (free medical assistance from the local authorities) gave rise to inequalities of treatment between *départements.* In this regard, CMU as an equitable nation-wide scheme represents a considerable step forward.

Advantages and drawbacks of the system

The population seems to be satisfied with the health care system. Surveys such as the Eurobarometer show that the opinion rating for the French system is relatively high, two-thirds of the population being fairly satisfied, compared with 40 per cent in the United Kingdom and 20 per cent in Italy (Mossialos, 1997). The population appears to be happy with a system that combines freedom of choice, no delay in service delivery and high quality of care delivered with a comparatively extensive use of modern medical technology and practice.[6]

France also ranks high among OECD countries in terms of health and mortality indicators (Exhibit 5). For example, in 1997 female life expectancy at birth was second (82.3) after Japan (83.8). Female life expectancy at age 65 was also second for women, while male life expectancy was fourth in 1996. Old-age disability is on a marked downward trend, particularly for men, in line with trends in the United States and Japan (Jacobzone *et al.*, 2000). The same is true for infantile mortality, which is very low, just above the very low levels in Scandinavian countries.

The high early mortality for men compared with the OECD average is nonetheless disquieting. Life expectancy at birth for men is, in consequence, relatively low. Reports on public health show, however, that this is due to factors which have little to do with the functioning of the

health system proper and is caused by the high number of violent deaths from suicides and road accidents and an incidence of AIDS well above the European average and comparable to that of other Mediterranean countries such as Spain and Italy (*Haut Comité de la Santé Publique,* 1998; Ministry for Employment and Solidarity, 2000). Another example is a specific association of high tobacco and alcohol consumption, with its attendant consequences of a higher rate of cancer of the lung and of the upper respiratory and digestive systems. This shows the need for a broad-based, coherent approach to public health, which is beginning to emerge in the French decision-making system (Exhibit 16).

A health care system with which the population is very satisfied and which delivers efficient outcomes does not come cheap. It is, thus, not surprising that the French system is relatively expensive by international standards. The share of health expenditure in GDP rose from 7.6 per cent in 1980 to 8.9 per cent in 1990 and 9.6 per cent in 1997 and 1998. On this indicator, France ranks fourth in the world, behind the United States, Germany and Switzerland (Exhibit 6). On average, working households spend 20 per cent of their gross income on health, including supplementary insurance contributions. Given the weight of social contributions in the cost of labour, modifications have been made to the method of health financing, with, in particular, the introduction of a more broadly-based contribution in 1991, the *contribution sociale généralisée,* and its gradual extension in order to finance the health insurance schemes.

Attempts to regulate a costly system

From covering deficits to the gradual introduction of a financial constraint

With health expenditure rising more steeply than receipts, the financial situation of the health insurance funds worsened steadily during the 1980s and the early 1990s. The gap between spending growth and the

resources available prompted governments to implement a series of stabilisation plans. Up to the mid-1990s, the reforms implemented in response to burgeoning expenditure relied largely on short-term consolidation measures to try and balance the health insurance accounts. What they had in common was that they sought to cover *ex post* the deficits of the health insurance funds by increasing revenue while raising patients' contributions in the form of higher co-payments. The only true economic constraint, until the early 1990s, was the global budget system for public hospitals introduced at the time of the budget tightening in 1983-84. In the ambulatory sector, the authorities curbed the growth of the fee schedule and drug prices, and reduced reimbursement rates.

These measures had, however, only a modest, short-term effect. Health professionals responded to the controls on their prices by increasing volume so as to prevent the erosion of their incomes. Despite their growing numbers, and against a background of economic restraint, general practitioners were able to maintain the level of their fee income in real terms between 1985 and 1995 (Beudaert, 1999). The lowering of reimbursement rates had little impact on patients' behaviour, most of the increase in co-payments being made up for by supplementary insurance. Lastly, the global budget for hospitals had increasingly adverse effects owing to the weight of the historic budget bases. As these measures had little effect on the growth of health expenditure, health insurance deficits continued to worsen (Exhibit 7) and insurance contributions to rise. In the 1990s, the health insurance branch of the general scheme (CNAMTS) experienced a serious financial crisis, accumulating a total deficit close to FF 200 billion. The financing requirements of the various branches of the social security were first covered by cash advances from the *Caisse des Dépôts et Consignations.* This debt was consolidated in a parastatal body set up in 1996, the CADES, and another contribution, the *cotisation pour le remboursement de la dette sociale* (CRDS) was introduced to pay it off.

The break introduced by the Juppé Plan

Given the deterioration in the financial situation of the public health insurance funds, the authorities became aware that purely budgetary and macroeconomic mechanisms were insufficient, and that more ambitious reforms would be necessary to achieve greater microeconomic efficiency. They also became aware that, given the large amount spent on health care, a periodic public debate was needed to set the general thrust of health care policy. This led to the enactment of a series of ordinances in 1996, the so-called Juppé Plan, which reformed the system of health care and health insurance, coupled with a revision of the Constitution.

The Juppé Plan continued the macroeconomic approach but introduced important structural measures. Unlike previous reforms, it was not confined to increasing social contributions or co-payments but introduced wide-ranging budgetary reforms through amendments to the Constitution. Changes made to the way the health insurance funds operate, through a number of ordinances, were the most important since those of 1967. Now, Parliament adopts every year, as part of the law on the financing of social security, a national health spending objective (ONDAM) which sets targets to the spending and reimbursements made by the mandatory basic schemes (Exhibit 12). The ONDAM comprises a spending target for ambulatory care (private fees, prescriptions, per diem sickness benefit), a target for public hospitals, a target for private clinics and a target for the medical-social sector (the elderly, maladjusted children, handicapped adults). The ONDAM is not a cap on reimbursements and thus does not have a compulsory character, since benefits are paid even if the target is exceeded. The aim is to take decisions and set priorities so that the government's financial objectives are achieved.

Assessment of recent reforms

Following the implementation of successive reforms, the growth of health care expenditure slowed during the second half of the 1990s. After having risen by 1 percentage point between 1990 and 1995, the share of

health spending in GDP fell slightly between 1995 and 1998. Although this trend is less pronounced than in other European countries (Denmark, the Netherlands, Sweden, Finland and Italy), it marks a reversal of developments in previous years. The introduction of quantified national targets—notably for clinics, biologists and independent nurses—in 1991-92, the first agreements with pharmaceutical laboratories in 1993, and the Juppé reform in 1996 thus succeeded in curbing the rising trend of health spending. However, this "pause" should not automatically be read as a lasting change in trend. Earlier plans to reform health insurance were also followed by a slowdown of expenditure, but then expenditure picked up again at the previous rate.

In fact, reimbursements for health treatment grew by nearly 4 per cent in 1998 and by 3 per cent in 1999, with inflation at under 1 per cent. Admittedly, this was partly due to cyclical factors. The purchasing power of households grew strongly during this period, and econometric estimates show a relatively high elasticity of health care consumption with respect to disposable income (Exhibit 8).[8] Nevertheless, purchasing power gains do not explain entirely the strength of health care consumption in 1998-99. The loss of credibility of the financial sanctions put in place by recent reforms also seems to have been a factor. Some provisions of the Juppé Plan have been called into question.[9] The application of across-the-board financial sanctions to private clinics and pharmaceutical laboratories has also run into legal difficulties.[10] Furthermore, the ONDAM set by Parliament has been exceeded for several years running despite reaction from the government. In the hospital area, budget discipline has been respected but little progress has been made in reorganising hospitals and in adapting them to changes in health care demand. The strikes in public hospitals show that spending is still not securely under control. Lastly, the fact that the health insurance scheme is back in balance is probably encouraging ambulatory care providers and consumers to revert to their previous habits of over-prescribing and over-consuming.[11] It is, thus, possible that the effect of the 1996 ordinances

and previous reforms is gradually wearing off and that the slowdown of expenditure in the second half of the 1990s was only temporary.

Several other factors will also contribute to the structural rise in health expenditure over the long term. One is the ageing of the population, as the generations that have been used to relatively easy access to health care reach an advanced age (Mahieu, 2000). The elderly will increasingly be people born after World War II, who have been relatively large consumers of health care. Due to the age structure of the population and increasing life expectancy, the number of people aged 75 and over—i.e. those who are usually large consumers of dependency-related health care—will increase from 4.2 million in 1990 to 6 million in 2020.[12] Furthermore, it is well established that a large proportion of health expenditure is concentrated on a small number of people, in particular the elderly and seriously ill. In 1995, these "big consumers" of health care represented 10 per cent of the population but accounted for 70 per cent of reimbursements (CREDES, 1999). Their average age was 51 (compared with an average age of 35 for the population as a whole) and a third of them were 65 and over. Given the demographic projections, the number of "big consumers," as well as their medical expenditure, will probably rise steeply in the next few years. For instance, the number of patients with Alzheimer's disease could, on the basis of simple assumptions, rise steeply in the medium term (DREES, 1999). Other factors will push up health expenditure, though their impact is difficult to quantify. Technological progress is an important factor in driving up expenditure (Newhouse, 1992) since it creates a demand for improved quality of life and increased life expectancy. The generosity of the French system, and especially universal health insurance, is also likely to push up expenditure, even though a better balance between ambulatory care and hospital care can be expected.

Health sector reform thus remains a priority. French experience shows that purely macroeconomic measures are insufficient. Reducing the rate of reimbursement of health expenditure—the customary method in

France has usually not had the anticipated effect since supplementary insurance and the *mutuelles* have made good the difference. The other thrust of recent reforms in France financial constraints on health care providers—has encountered fierce resistance from health care professionals, who have refused to be made accountable for the community's over-spending and have won their case in the courts. In contrast, international experience suggests that microeconomic reforms focusing on incentives to change agents' behaviour are indispensable tools in improving the functioning of the health care system (Exhibit 13). Consumption and prescription behaviour can be influenced by changing incentive mechanisms, though precautions need to be taken to ensure that this does not produce undesirable side effects. The microeconomic reforms implemented in other countries have been informed by basic principles of health care economics (Exhibit 17).

What else can be done?

To a large extent, the difficulties involved in regulating health care reflect the fact that the roles of the three main actors in the system—the health insurance funds, the representatives of health professionals and the State—are not clearly defined. This situation has been described as one of "co-irresponsibility"(Mougeot, 1999). Admittedly, the government has taken initiatives, but the role of the health insurance system in their implementation has been left vague, with a division of roles between the State and the CNAMTS that has led to a dilution of responsibilities. The insured have no direct control over the system and delegate their responsibilities to the social security, which in practice can only play a passive role. Trade unions, employers' representatives, the government, the elected representatives (who chair the boards of public hospitals), and health professionals, all exercise an influence over the system. Each group has its own objectives—preserving jobs, increasing

revenue, local development—which are often at odds with the objective of running the health system efficiently. This dilution of responsibilities has not been conducive to the efficient implementation of the reforms however well designed.

With a view to allocating responsibilities more effectively, the law on the financing of the social security for 2000 introduced a new division of roles. The State will concern itself exclusively with the public and private hospital sector and drugs. In the public hospital sector, the government intervenes both directly and *via* newly-created regional hospitalisation agencies (ARHs), to determine the global budgets allocated to each hospital.[13] The CNAMTS has the oversight of general ambulatory care, excluding drugs. It is thus responsible for containing the growth of fees of doctors in independent practice, and of other paramedical professions within the limits of the targets set by Parliament, and to report every four months to the government on actual expenditure in relation to targets. In the absence of agreements with professionals, it can propose remedial measures. While this new division of roles has the merit of clarifying institutional responsibilities, it will probably have little impact on the behaviour of health care consumers and providers. New institutional arrangements by themselves will not change the nature of the economic incentives that in the past encouraged over-consumption and over-prescription. Furthermore, such a division leads to a dual organisation of health care, with the hospital sector being treated in isolation from drugs, whereas a dynamic view of health care, which encompassed the effects of medical progress, should make it possible to replace major hospital treatment by lighter ambulatory care.

Institutional rigidities in the public hospital sector

The hospital sector is characterised by marked institutional rigidities. Whereas to a large extent private clinics come under private law—and, in a way, are like businesses—hospitals are run more like

public administrations. Private clinics respond rapidly to changes in financial and economic incentives, and underwent sweeping reorganisation during the 1990s.[14] In contrast, in public hospitals, a set of administrative rules constrains decision-making, making it difficult to take optimal decisions.

The first factor of rigidity is that the conditions of service of hospital staff are governed by general rules set for the entire civil service, including those that apply to recruitment, redundancies, promotion and wage-setting. Furthermore, mobility between hospitals is particularly low. Hospital doctors are appointed directly by the ministry to a particular hospital and specialisation, which in effect makes it difficult to move them in the event of a reorganisation. A second element of institutional rigidity is the fact that hospital boards are chaired by the local mayor. As a hospital is usually the main provider of jobs in the area in which it is situated, local authorities have a direct interest in keeping it there. Thirdly, the accounting procedures used by hospitals have shortcomings. While hospitals enjoy certain derogations from public accounting, such as the right to make depreciation allowances, their accounting procedures do not give them an exact picture of their activity from the point of view of assets. At the central level, it is difficult to obtain a precise picture even of the land area occupied by hospitals in France.

Inappropriate financial incentives

The financial incentives for health care institutions are inappropriate. Public hospitals receive global budgets, which, to a large extent, are still calculated on the basis of past levels of expenditure. It is still very difficult to relate these budgets to actual medical activity, as the tools for doing so can only be introduced gradually. There is little incentive to reward performance in a public hospital, and the professional assessment of doctors is done mainly on the basis of their research activity. Private clinics operate on a fee-for-service basis, but the fee schedules are

out-of-date. The price structure is still an administered one and lags behind gains in productivity.[15] This allows certain private providers to continue to earn high profits in areas where progress has been made in recent years, such as cardiosurgery, digestive endoscopy, and ophthalmology. Nothing was changed by the application of national budget caps to private clinics from 1993. Admittedly, this meant that fee increases had to be kept within the limits of those caps, but this new macroeconomic pressure only encouraged clinics to specialise in the most lucrative care in order to offset the tighter control over volume. Whereas previously private clinics could develop their activity whenever costs were below controlled prices, it is now in their interest to specialise in areas where relative margins are the highest.

The diversity of incentives has resulted in institutions specialising in particular types of care. Public hospitals have a virtual monopoly of emergency treatment and high-level research, and of psychiatric care due to their institutional prerogatives; also, in practice it is they who deal with elderly or socially-disadvantaged patients. The public sector also handles the bulk of major operations as well as life-threatening conditions. Private clinics are often smaller and handle the bulk of minor surgery, for which their market share can be as high as 80 per cent, especially in the area of digestive diseases, endoscopies and eye surgery (Mouquet *et al.*, 1999). The French health care system is thus a blend of an entirely public system like the British NHS, and a private sector, which operates on market principles as in the United States. This can lead to creaming-off, with private clinics implicitly selecting their patients. It is, thus, frequent for private-clinic patients with complications or life-threatening conditions to be transferred to public hospitals. The financial distortions in the system have resulted in a segmentation of supply by type of care but without any price competition. Consideration should therefore be given to the introduction of competitive mechanisms with a view to making the functioning of this market more efficient.

Shadow price competition

The introduction of market mechanisms requires that medical services compete on price. But it is particularly difficult to set prices that encourage the provision of high-quality care while at the same time promote efficiency, since health care institutions are also involved in the provision of public goods such as teaching and research. The idea of paying for health care on the basis of diagnosis-related groups (DRG) is starting to gain ground in France. The fact of reimbursing hospital stays on a DRG basis is tantamount to financing public hospitals on the basis of their actual activity, allowing for the structure of the services they provide, rather than on the basis of historic levels of expenditure. This will require a number of adjustments however. International studies on the subject have opened up some interesting avenues, drawing particularly on the US experience. The US approach consists in putting in place a number of offsetting mechanisms, mainly to cover the costs of teaching and research and exceptional stays. In France, the first task was to transpose this adjustment to a French context, notably by carrying out a national study of teaching and research costs (Pouvourville, 1997). The fact that public hospitals also have to cater for more disadvantaged social groups can also mean longer stays and more treatment because illnesses are treated later than for other groups. Studies show that the cost difference between disadvantaged and non-disadvantaged patients for identical homogenous groups of patients can be as high as 30 per cent (Mathy and Bensadon, 2000).

Direct implementation of DRG payments in the current context would penalise these non-quantified quality elements or could lead to cream-skimming, encouraging public hospitals to select their patients. In the United States, for example, the legislator recently increased payments to cover the share of exceptional costs so as to enable public hospitals to continue to treat the uninsured *via* cross-subsidisation. Despite the aforementioned technical difficulties, however, this seems the most promising avenue of development.

Alternative systems for the ambulatory care sector

All ambulatory care is on a fee-for-service basis.[16] The pricing system rests on a fee schedule established in 1972. Progressive revision, patterned on the work of Hsiao at the Harvard School of Public Health and commenced some years ago, is not yet complete (Aliès-Patin *et al.*, 2000). The aim is to establish a common classification of medical services to replace the present dual system (one fee schedule for hospital services, the other for ambulatory care).[17]

In an endeavour to curb consumption of ambulatory care, the authorities have so far applied cuts in reimbursement rates. But these have had little effect. For most people with health insurance the cuts are offset by reimbursements from supplementary insurance, while the segments of the population on the social fringe turn to hospital care which is provided free of charge but at greater total cost to the community. Finally, for the people benefiting from CMU the previous cuts in reimbursement are no longer applicable. In the absence of co payment, there is little restriction on the consumption of health care. Most individuals can consult a general practitioner or specialist as often as they want without any pecuniary consequences. It therefore seems necessary to give thought to the "moral hazard" inherent in the system. Any insurance plan that lacks adequate safeguards will encourage individuals to alter their behaviour and ask the insurer to bear the consequences of decisions they would probably not have made had there been no insurance. The traditional solution is to pass on a proportion of the cost to the insured party by way of co-payment. Another way to reduce the moral hazard is to set up a system of referral or "gate-keeping" by general practitioners, as in the United Kingdom. But existing studies show that the referring practitioner system itself generates extra costs, since a large share of consultations simply result in referral to a specialist (Kirman, 2000). The referral system is extensively used in the United States in the context of "managed care", but it introduces a loss of freedom in the choice of health provider, since the patient has to choose from a list of approved providers.

The *"médecin référent"* option proposed to practitioners in France is a first step toward this type of co-ordinated system. But the financial incentives are small, since the reimbursement rates remain the same for patients, who are simply exempted from putting the money up front. The practitioner receives a few additional payments for taking on a patient, but the medical profession's reluctance has so far prevented the introduction of capitation payment as such, even on a partial basis. The doctor has to undertake to prescribe a certain proportion of generic drugs, and patients lose the benefits of this system if they decide to consult specialists directly. Not surprisingly, few doctors are in this system, only about 10 per cent of general practitioners having joined in 1999.

Improved evaluation of the medical benefit of pharmaceuticals and development of generics

Pharmaceutical supply is regulated (Jacobzone, 1998) but demand is not, since co-payments are neutralised for a large share of the population. This is reflected in per capita consumption of pharmaceuticals: in 1996, France had the second highest level of drug consumption in the world after Japan and the highest in Europe (Exhibit 9). Supply is regulated through incentives offered to drug companies and pharmacists. An agreement was concluded between the government[18] and the pharmaceuticals industry in July 1999 covering the period 1999-2000, with a strong emphasis on administrative control and quantified targets for consumption in each therapeutic class. These targets were set so as to be consistent with the national targets for health insurance expenditure (ONDAM). The agreement has opened the way to arrangements between individual drug companies and the government. Each arrangement contains undertakings by the signatory laboratory as to the level of sales, refunds due in the event of target overruns, reduction of promotional expenditure, development of generic drugs and the move to self-medication. However, a policy of this kind is likely to lead to a tightly administered management of pharmaceuticals supply with no

possibility of allowing market mechanisms to operate.

An initial assessment of the medical benefit of marketed pharmaceuticals, covering about one-fourth of the total market, was published in the summer of 1999. Nearly 15 per cent of the 1,100 drugs examined were judged to be of insufficient medical benefit. However, these findings have had very little practical impact on cost reimbursement, and no decision has been taken as regards follow-up action. In many OECD countries, over the recent period, such products have been removed from the list of reimbursable medicines. France seems unwilling to use this approach and only a few slight price cuts have been imposed as yet. It is true that structural reforms of the drugs industry are liable to conflict with local development objectives, given the location of the pharmaceutical laboratories whose products might be taken off the list.

Incentives have been introduced to develop the generic drug market. Generic medicines accounted for about 8 per cent of drug sales by volume at end-1999, compared with nearly 70 per cent in the United Kingdom. French pharmacists are now entitled to an increased mark-up on generic medicines, but in return have to commit themselves to achieving a certain rate of substitution between brand and generic drugs, with a slight reduction of their remuneration if those rates are not achieved. However, there is no mechanism at the level of prescribers and consumers to encourage use of the less costly medicines, apart from the *médecin référent* system. Although it takes time to generate a supply of generic drugs and to establish the conditions for operation of a generics market, France has fallen way behind the countries that have applied policies of case-related reference pricing. To date the government has ruled out this possibility, although it has been developed in many European countries over the recent period. Admittedly, reference prices may be difficult to apply and suppliers may try to get around them. Also, the authorities fear possible anti-redistributive effects, certain studies showing that in France such a move might result in higher health costs for persons without supplementary insurance. But this does not allow for

the switch to less expensive products. The importance of the policies being applied elsewhere is that they influence personal behaviour and shift consumption to similar but less costly products, while protecting consumer well-being.

The CNAMTS's ability to perform an active role as the national paying agency has remained limited owing to its institutional environment. First, it is not responsible for the entire system, the State being in charge of the hospital and prescription medicine sectors. Second, it has only relative authority over all the regional and departmental funds, which remain distinct legal entities with their own governing boards. Furthermore, the CNAMTS is not empowered to withhold approval of a health service provider, and therefore has to accept all reimbursements whatever the conditions of local provision. The CNAMTS strategic plan published in 1999 (Annex I) mentions the procedures for a periodic reassessment of the credentials of the medical profession. This would constitute an upheaval in the modes of medical practice in France, and the measures leading to refusal of accreditation are very tricky to implement.

The CNAMTS's action is hampered by a very cumbersome set of rules, with nearly 15,000 statutory texts. Despite the introduction of CMU, the health insurance funds must continue to do a great deal of checking in order to decide how entitlements to the basic scheme are to be awarded. Certain procedures, such as those concerning agreement to provide cover prior to treatment, are very resource-intensive and of uncertain economic benefit. Thus, according to certain calculations, administrative management accounts for over 10 per cent of the expenditure actually managed by the funds.[19] The bulk of the management cost is attributable to the refund of endless small sums paid directly to doctors by their patients. This contrasts with the system applying in some Canadian provinces where doctors are paid directly by the public insurance scheme, which permits substantial savings.

Despite the possibilities offered by computerisation, there are still 129 insurance offices in metropolitan France for the general scheme,

with a combined staff of about 90,000.[20] The conditions for restructuring insurance fund activity raise the same problems as those encountered in the case of public hospitals, notably local opposition to the closure of local health-insurance-fund offices. Restructuring of those offices is even more difficult to envisage in the present period, with the double pressure created by the introduction of CMU and expectations regarding the 35-hour week. Sporadic social unrest affected some of the offices in 1999 and long delays in reimbursement have been recorded, amounting to as much as six months in the Paris area.

Evaluation and performance measurement

The health insurance funds have facilities for evaluating and measuring the performance of health care providers. They have a medical service comprising 11,000 doctors in all, who are required to monitor the activity of independent practitioners. The service is developing various surveys for this purpose. As yet, however, the funds have only limited authority as regards standards of care quality.

At hospital level, quality certification procedures have been developed as from the late 1990s. Care quality evaluation was made compulsory in 1991 and a special research fund was set up for the purpose. In 1990 the *Agence Nationale pour le Développement de l'Évaluation Médicale* (ANDEM) was established. Since the Juppé reform this agency, renamed *Agence Nationale d'Accréditation et d'Évaluation en Santé,* has seen its activities and resources enlarged. It is now, after AHRQ (Agency for Health Care Research and Quality) in the United States, one of the leading agencies of this type in the world. It takes part in the development of evidence-based medicine by way of close contacts with expert panels and medical journals. It also evaluates medical technologies and will soon take over the process of accreditation of hospital services. The *Références médicales opposables* (RMO), an official list of clinical guidelines, have contributed to these developments. But in spite of these innovations, which are part of the modernisation of France's health care system, no way has been found

to link performance evaluation with economic incentives, so as to make it possible to "buy" quality.

Conclusion and recommendations

The French health care system functions within a framework of macroeconomic regulatory mechanisms, of which the only one that appears to be effective is budgetary control of the public hospitals. But stabilisation of hospital expenditure is fragile, since it is achieved under the pressure of external budgetary constraints rather than on the basis of internal restructuring. Public hospitals are subjected to budgetary rules and thus have no incentive to optimise their services and their operating costs. The challenge here is to design, in a context of global budgets, reforms that will help the hospital sector to change and adapt to the needs of society. There is no miracle solution to the problem of the public hospital. What is needed is a reform package encompassing the remuneration of hospital services, the institutional framework, hospital staff regulations, and modes of governance.

- The method of remunerating hospital services should be reformed so as to establish an environment that encourages hospitals to provide high-quality services at optimal cost. For this purpose, diagnosis-related payment, with the necessary adjustments, could be introduced into hospital financing by the regional hospitalisation agencies (ARH).
- The role of the ARH should therefore be expanded and these agencies should be made more autonomous to enable them to act as care purchasers and to obtain affordable high-quality care for patients. Tendering could be introduced for the purchase of standardised care in order to promote competition between suppliers on the basis of a harmonised price structure.
- A new method of remuneration will have an impact only if the

hospitals themselves acquire more autonomy of management, allowing them to change. Greater flexibility of management might be achieved if hospitals were to become autonomous public corporations with a status based on that of the *établissements publics à caractère industriel et commercial* (EPIC), like other public services such the postal system and the SNCF (French railways). The tools of economic management also need to be modernised, notably cost accounting, valuation of invested capital and property in the annual accounts, and depreciation of fixed assets.

- Similarly, new personnel management methods are necessary to increase staff mobility between hospitals and to permit more flexible work organisation. Most importantly, there is a need for new modes of assigning medical staff to establishments that give the hospitals themselves more room for manoeuvre. The recent example of the postal system shows that it is possible in France to make extensive changes in a public service with a high use of labour and to maintain a guarantee of total employment without commitment to any particular establishment. Performance assessment of management staff and hospital doctors also needs to be strengthened so as to improve career management. Lastly, the inevitable introduction of the 35-hour week provides an opportunity to reorganise work in hospitals, with annualised work time arrangements and new methods of counting work hours. To facilitate mobility, financial incentives should be offered to doctors so as to put an end to private patient treatment and private beds in public hospitals.
- A new mode of governance is needed in order to clarify the respective roles of elected members of city councils, central government and hospital personnel. Hospital boards should doubtless be given increased powers, though this should also imply greater financial accountability and greater transparency in terms of medical performance. Boards opposed to restructuring measures

proposed by the ARH should, for example, be required to present alternative strategies and specify the necessary financing, as is done in relations between the SNCF and the regional councils.

Unlike the case with public hospitals, which are subjected to strict budgetary rules, independent medical practice and the activity of private clinics were until recently subject to only limited regulation since the financial sanctions prescribed by the Juppé Plan were disallowed by the courts. Similarly, demand for ambulatory medicine is subject to only limited restraints, given that the supplementary reimbursements by *mutuelles* offset in large part co-payments by their members, and CMU allows this medicine free of charge to low-income households. A number of changes might be made here.

- In creating the illusion that medical care comes free of charge, reimbursements by supplementary insurance schemes generate negative externalities. Since a very large proportion of their expenditure is refunded, insured persons tend to consume unreservedly without heed to the prices charged. Furthermore, the negative externalities generated by the basic scheme are not included in the calculation of the premiums for supplementary cover. Basic and supplementary insurers therefore need to engage in discussions with a view to devising more appropriate methods of financing health care, to redefining cover and to striking a better balance between prevention and curative care. These discussions could also address the definition of a basket of reimbursable care such as exists in the Netherlands or in the United States in Oregon's Medicaid system. Given the institutional features of the French health care, the introduction of such a basket should be considered with a view to facilitating the joint modernisation of basic and supplementary cover.
- Demand can also be regulated by means of screening access to certain specialists. The médecin référent system could be adjusted

so that the referring general practitioner would screen access to the categories of specialists in which flagrant over-use of care provision had been found. Choice of the referring physician should remain free, but incentives should be given so as to discourage frequent changes (e.g. annual subscription system), thus permitting better monitoring of patients and continuity of care. It would also be helpful to create specific care networks between health care professionals and institutionalised referral systems.

- In order to change the microeconomic incentives for agents, it is also necessary to modify the system of payment of doctors, by revising the links between activity and remuneration, with joint mechanisms to lessen the inflationary effects of the current system of payment per service. There is need for a new payments nomenclature specifying individual medical services, together with a continuous process of adjustment of the structure of specialists' remuneration to incorporate the effects of technical progress.
- Social security could set up a call centre to help users to decide whether they should consult a doctor or not and, if so, to choose between a general practitioner and a specialist, which would prevent unnecessary consultations.
- Given the demographic ageing of the physician population, a procedure of periodic re-accreditation could be introduced so as to ensure that doctors' skills remain at the required level, especially in those specialities subject to rapid technological change. Depending on the outcome of the re-accreditation assessment, mandatory further training or redeployment could be proposed.
- The impact of CMU on patient behaviour, and hence on social security expenditure, should be closely monitored. A periodic evaluation procedure should be implemented regularly and its findings presented to Parliament, as CMU may prove much more costly than expected. In addition, much uncertainty still surrounds the future behaviour of CMU beneficiaries following its introduction.

> Finally, pressure may be brought to bear on supplementary insurers so that they offer the same cover as CMU, which they do not do today.

As far as medicines are concerned, the process of reassessing the therapeutic value of drugs needs to be complemented by decisions on reimbursement policy in line with these findings. Drugs whose medical benefit is not proven should be taken off the list of reimbursable medicines. Administrative pricing of medicines should be avoided wherever possible. The freedom of public hospitals to negotiate prices of medicines and supplies in the context of tenders should be extended to private clinics, which should be allowed to recoup part of the gains generated by bargaining. Where administrative pricing cannot be avoided, continuous adjustment should be made to allow for technological progress. Finally, there needs to be more competition between pharmacies. New incentives are required in order to encourage the development of generic drugs. For instance, the reference price for a reimbursable drug could be the price of the generic drug where such drug exists. The market in over-the-counter drugs sold by a pharmacist should be developed; in particular, this would facilitate the revision of the list of reimbursable drugs.

With regard to management of the health insurance system, processing of the *feuilles de soins* (patients' claim forms) by a single paying agent, rather than CNAMTS plus supplementary insurer as at present, might be envisaged. Competition between supplementary insurers should be stimulated on a more transparent basis so as to facilitate comparison of their charges. A business plan for the CNAMTS, based on cost reduction targets, should be adopted. In parallel, increased computerisation of doctors' offices is desirable, both as an aid to prescription and to facilitate monitoring and audit of activity.

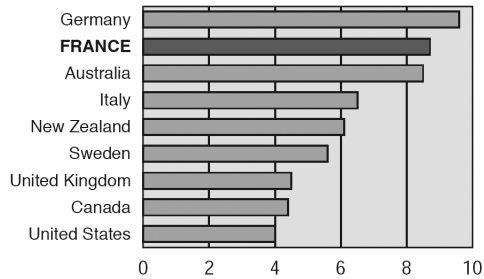
Finally, although some progress has been made recently, public health policy needs to be given greater prominence. In France too much weight is given to treatment of illnesses and not enough to their prevention.

The different policies concerning the population's health are poorly coordinated and insufficient resources are allocated to prevention (discouragement of smoking, cancer screening, frequent complete medical check-ups, and so on). France could follow the example of other OECD countries—like the Nordic countries, for instance—and establish procedures to gauge the performance of expenditure on treatment, as compared with prevention, and to better evaluate all the policies that have an impact on the population's health.

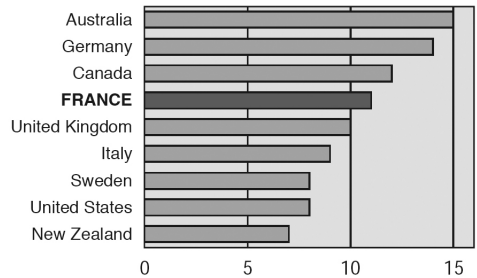
Exhibits

Exhibit 1. Use of Resources in the Health Sector, 1996[1]

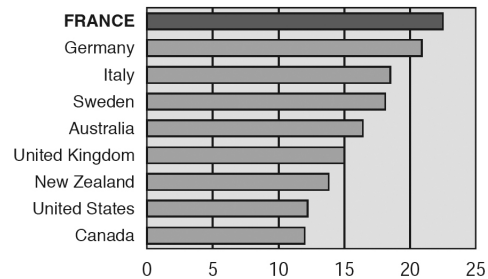
A. Hospital care[2]
Beds/1 000 inhabitants



B. Average length of hospital stays[2]
Days

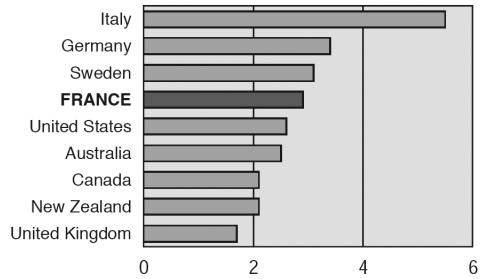


C. Hospital admissions[2, 3]
In per cent of the population



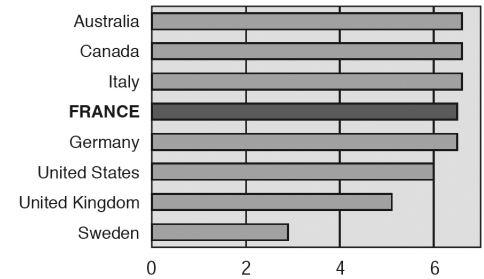
D. Practising doctors[4]

Density per 1 000 inhabitants



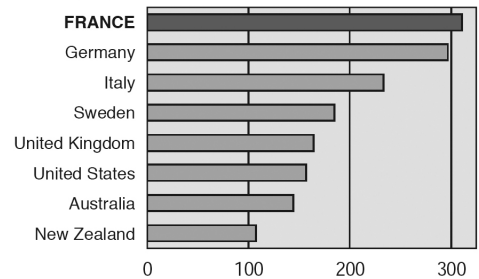
E. Doctors' consultations[5]

Number per capita



F. Total sales of pharmaceutical articles

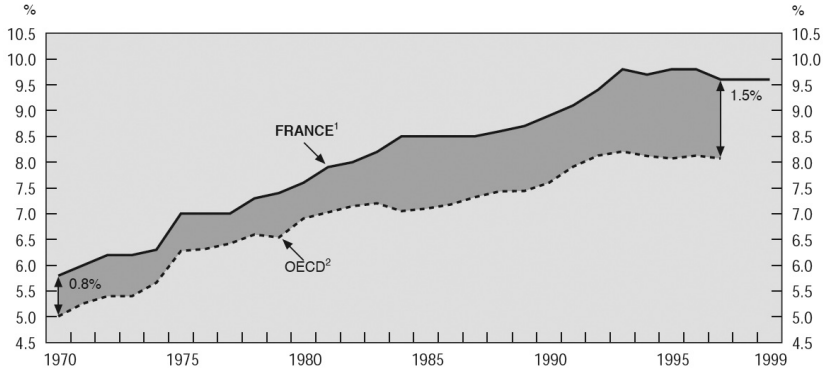
Per capita, in US$ PPA



1. Or latest available data.
2. Including other institutions providing health care or hospitalisation.
3. Data for the United Kingdom cover only England, and have been adjusted on an ad hoc basis to allow a better comparison with other OECD countries.
4. For most countries, including also doctors with non-medical activities such as research, teaching and administration.
5. Data for Sweden exclude post-natal consultations in clinics.

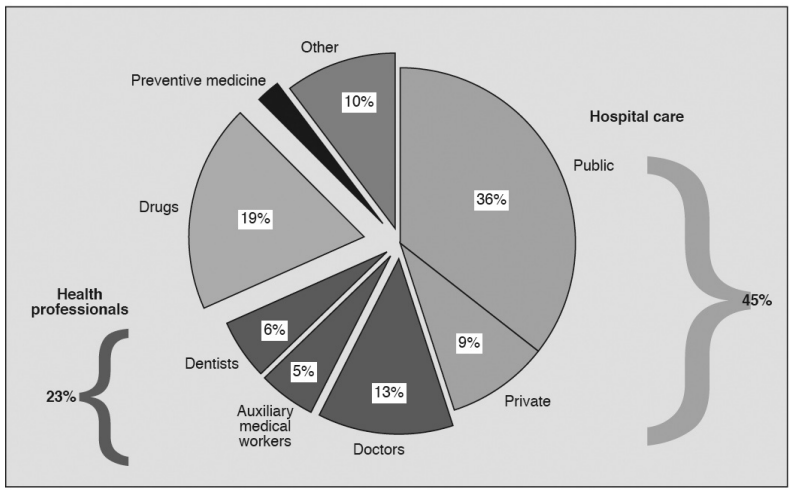
Source: OECD, Health Data 99.

Exhibit 2. Health Spending as Percent of GDP



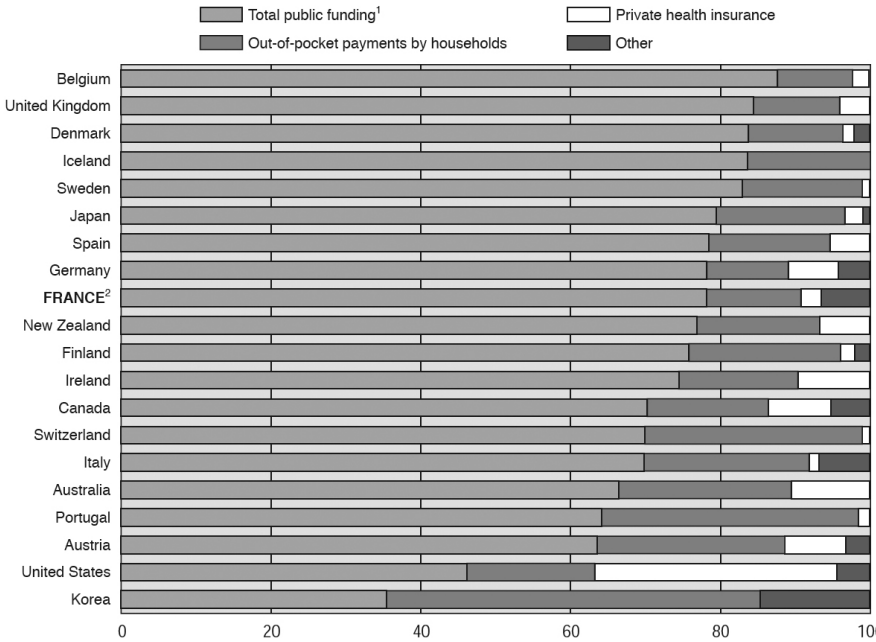
1. For 1998 and 1999, data have been updated by the OECD.
2. Simple average for all OECD countries, excluding Greece, Hungary, Mexico, Poland and the Czech Republic.
Source: OECD, *Health Data 99*.

Exhibit 3. Total Health Care Consumption, 1998



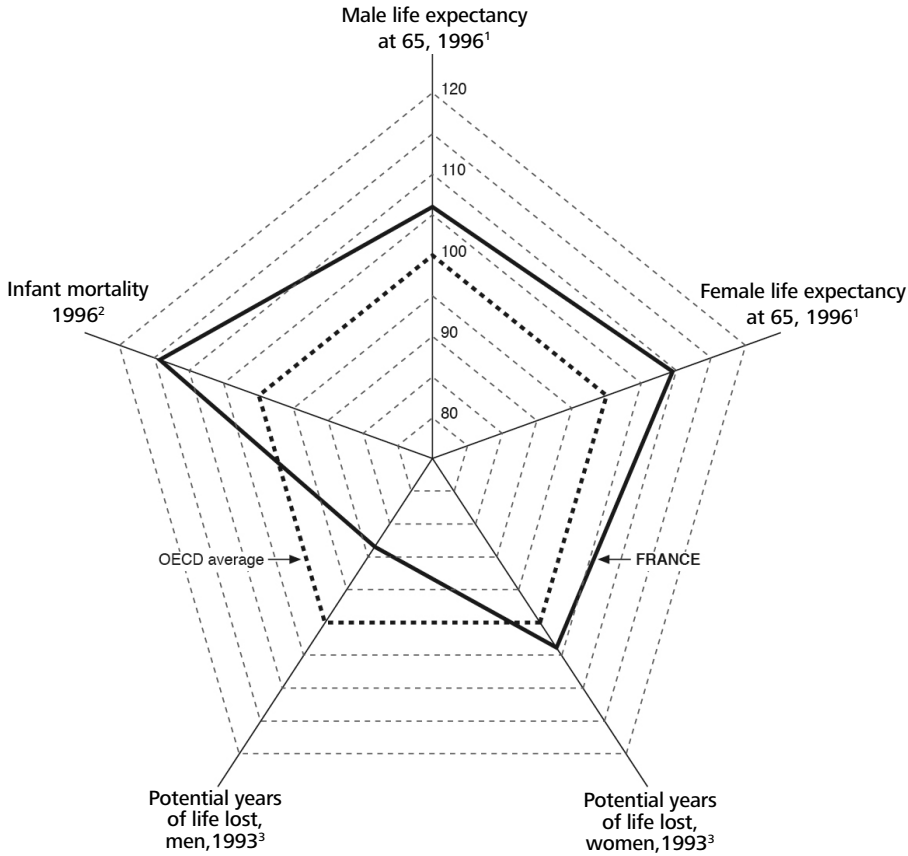
Source: Ministry of Employment and Solidarity, National health accounts.

Exhibit 4. Health Expenditure by Source of Funding, 1996



1. Central government, States and local authorities, and public social security schemes.
2. Expenditure reimbursed by mutual insurers is included in "other".
Source: OECD, Health Data 99. Partial estimates by the OECD for Belgium, Denmark, Ireland, Italy, the United Kingdom, Spain, Japan, Sweden and Switzerland.

Exhibit 5. Health Status Indicators

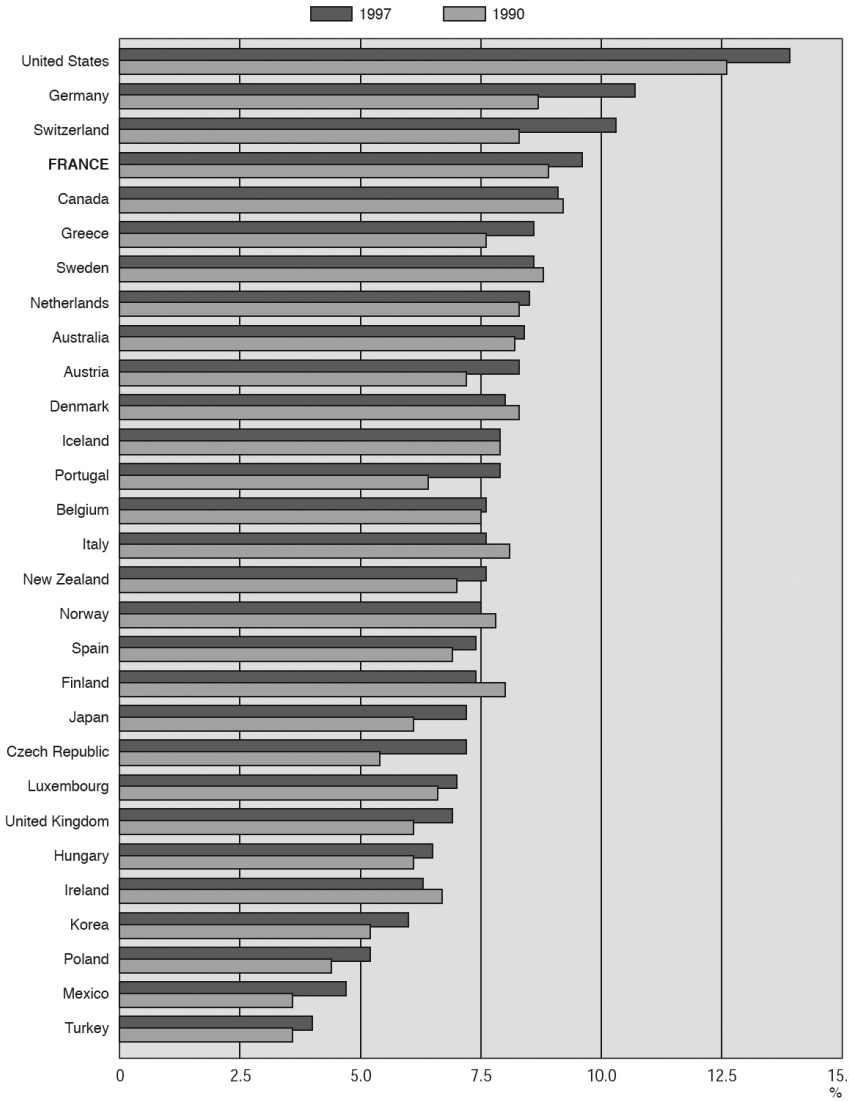


Note: An observation point higher than 100 for life expectancy means a higher life expectancy; an observation point higher than 100 for infant mortality means a lower mortality; an observation point higher than 100 for potential years of life lost means fewer years of life lost.

1. The OECD average does not include Korea, Ireland, Luxembourg and Turkey.
2. The OECD average does not include Korea, Mexico, Turkey, Hungary and Poland.
3. The OECD average does not include Belgium, Korea, Turkey, Mexico, Hungary and Poland.

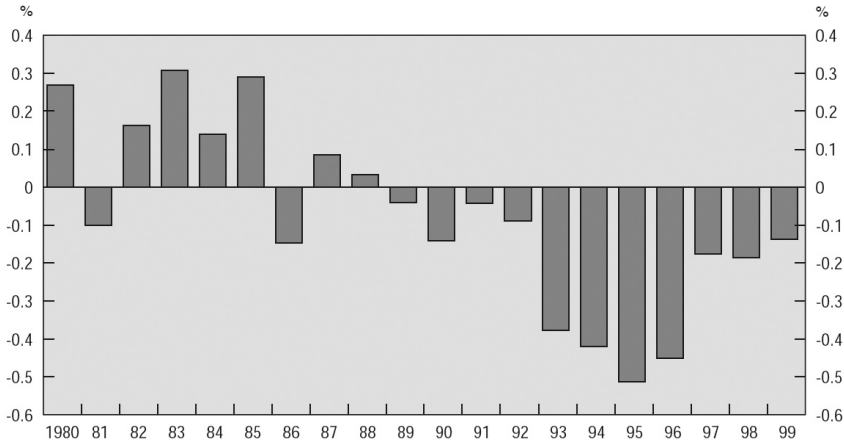
Source: OECD, *Health Data 99.*

Exhibit 6. Share of Health Expenditure in GDP



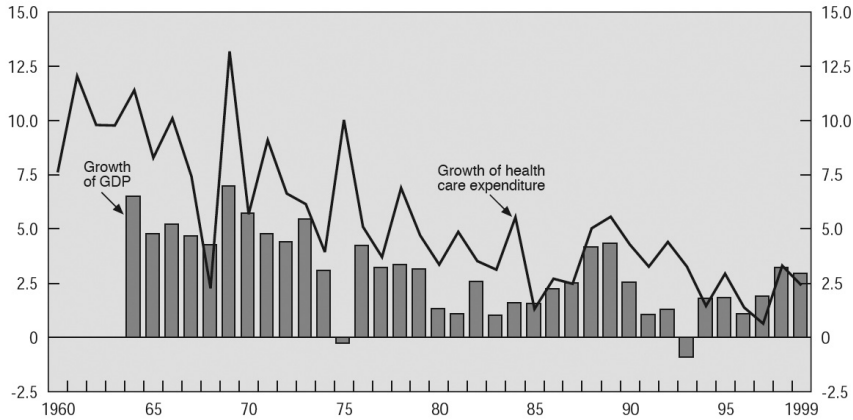
Source: OECD, *Health Data 99.*

Exhibit 7. General Health Insurance Scheme - Annual Balance in Percent of GDP



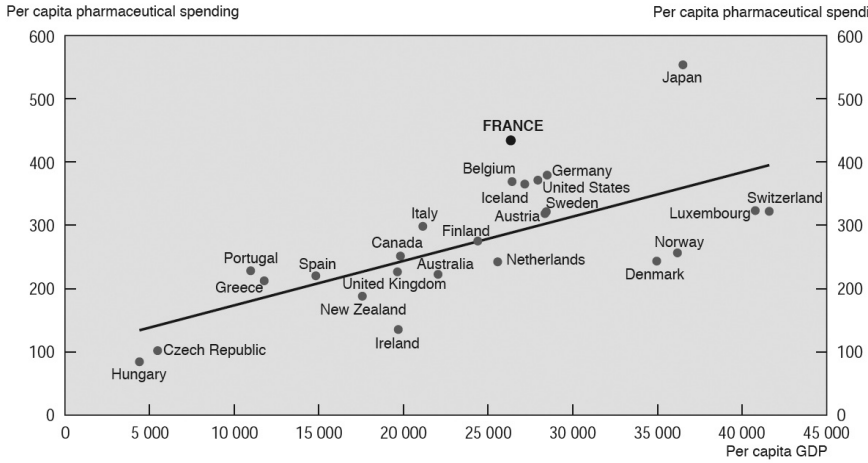
Source: Commission des Comptes of the Social Security.

Exhibit 8. Relative Trend of Health Care Expenditure and National Income in Constant Prices



Source: INSEE

Exhibit 9. Per Capita Pharmaceutical Spending and GDP (In US$, 1996 Exchange Rate)



Source: OECD, *National Accounts and Health Data 99.*

Exhibit 10. International Comparison of Density of Doctors

	Total density of doctors per 1 000 inhabitants		Average annual percentage change	Share of specialists in per cent
	1980	1997		1997
Italy[1]	2.6	5.8	4.8	35[4]
Germany	2.3	3.4	2.3	68
Belgium	2.3	3.4[3]	2.5	51[3]
France	2.0	3.0	2.4	50
United States	2.0	2.7	1.8	66
Netherlands	1.9	2.6	2.9	68[2]
Canada	1.8	2.1	0.9	49
Japan	1.3	1.8[2]	1.9	n.a.
United Kingdom	1.3	1.7[2]	1.6	n.a.

1. For these countries, the densities correspond to the number of doctors trained and not necessarily to the number of doctors practising.
2. 1996. 3. 1995. 4. 1994.
Source: OECD, *Health Data 99.*

Exhibit 11. Hospital Beds: International Comparison

	Number of beds[1] per 1000 inhabitants		Total occupancy rate		Short-stay beds per 1000 inhabitants		ALOS[2] Average length of stay, short-stay beds
	1980	1997	1980	1997	1980	1997	1997
United States	6.0	4.0	77.7	66.0[4]	4.4	3.3[3]	6[3]
Canada	6.7	4.2[3]	82.8	84.2[6]	4.6	3.6[6]	8[3]
United Kingdom	8.1	4.3	81.4	80.0[5]	2.9	2.0	5[3]
Belgium	9.4	7.2[3]	85.7	83.6[4]	5.5	5.3[4]	8[3]
Italy	9.7	6.5[3]	68.9	73.4[3]	7.6	5.5[3]	8[3]
France	11.1	8.5	81.1	81.9	6.2	4.3	6
Germany	11.5	9.4	84.9	76.2	7.7	6.6	10
Netherlands	12.3	11.5	90.9	87.7	5.2	3.8	9
Japan	13.8	16.4	83.3	83.9	n.a.	n.a.	n.a.

1. These data should be treated with caution. In some countries, a relatively large share of beds may in fact correspond to beds for institutionalised old people. Thus, the figures for Japan and, to a lesser extent, those for the Netherlands, are not entirely comparable with the other countries. A comparison of solely short-stay beds is more relevant but cannot be done for Japan.
2. ALOS = average length of stay (number of days).
3. 1996 data. 4. 1995 data. 5. 1994 data. 6. 1993 data.
Source: OECD, *Health Data 99.*

Exhibit 12. Health Insurance Spending Targets and Outturns Annual Percentage Changes

	1997			1998			1999			2000
	Target	Result	Diff.	Target	Result	Diff.	Target	Forecast	Diff.	Target
Ambulatory care	2.0	1.8	-0.2	2.4	5.8	+3.4	-0.5	4.2	+4.7	2.0
Disbursements to										
- public hospitals	-0.1	0.2	+0.3	2.0	1.7	-0.3	2.6	2.4	-0.2	2.4
- medical/social sector	2.3	2.8	+0.5	2.7	5.8	+3.1	2.1	4.0	+1.9	4.9
- private clinics	9.2	5.9	-3.0	1.7	3.0	+1.3	-1.8	3.3	+5.3	2.2
ONDAM	**1.7**	**1.5**	**-0.7**	**2.3**	**4.0**	**+1.7**	**1.0**	**3.1**	**+2.1**	**2.4**

Source: Cours des comptes and Assemblée Nationale.

Exhibit 13. Health Care Reforms in OECD Countries

Countries in the OECD area have reformed their health care systems in the last twenty years. Reviews of these reforms have been carried out across countries (see OECD, 1995) as well as for individual countries (see Girouard and Imai (2000), Koen (2000), and Orosz and Burns (2000) for recent examples). Obviously, countries have different types of health care systems, and therefore have different challenges to address. Nonetheless, there are common features in these reforms, which can be regrouped in three main categories.

- First, countries have aimed at bringing health care spending more into line with available resources. With economic growth slowing down in the 1980s and 1990s from the vigorous post second world-war expansion, health care spending had tended to "consume" a growing share of GDP. Countries have therefore taken steps to keep medical spending within reasonable limits, while continuing to provide the type of high quality services required by the population.
- The second goal of these reforms has been to make the health care systems more equitable. It is generally acknowledged that health care needs to be provided equally, and that there are positive externalities stemming from the provision of a minimum package of health care services to the entire population. For instance, maintaining minimum health standards for the entire population helps contain the risk of spreading contagion. Nonetheless, in some countries, access to health care remains unequal, which aggravates existing poverty problems.
- A third objective has been to improve both efficiency and quality of service provision through microeconomic reforms in the health care sector. Types of reform differ across countries. Where the lack of competition among health care providers is considered to be the source of inefficiency, measures have been taken to expose them to competitive pressures. On the other hand, where over provision of services is the problem, steps have been taken to alter incentives for providers, for example, by changing the payment method.

These reforms have had a varying degree of success. Although it is difficult to measure the performance of the health care sector, it is noteworthy that health indicators have generally improved in the OECD area. Remarkable progress has also been made in stabilising or lowering the share of health spending in GDP.

Health care reform is nonetheless an ongoing process. In some countries, a significant share of the population is still uninsured and therefore has a limited access to medical services. In other countries, overconstrained or inefficient delivery of healthcare services remains a major concern. There, services are rationed,

patients' choice of physicians is restricted, and the population is unhappy with the system. In yet other countries, equity is not a problem and patients' satisfaction is relatively high, but the system is perceived to be too costly. Finally, many of these problems can only be aggravated by the ageing of population. Overall, health care reforms remain very much on the policy agenda for the future.

Exhibit 14. Universal Health Insurance

The main features of universal health insurance (CMU) are:

- The *ticket modérateur* does not have to be paid by the patient, so that medical goods and care are completely free up to the limits set by the government. Certain types of expenditure (optical and dental care) are capped.
- Patients do not have to pay fees up front; this is the so-called third-party billing *("tiers payant")* system, whereby the health insurance funds pay health professionals and institutions directly.
- One-stop processing of benefits: in contrast with the previous system, under which beneficiaries and entitlements were determined by several offices, the CNAMTS offices now do it alone; entitlement is immediate once it has been determined.
- Automatic entitlement: the government decided that coverage cannot be refused because information is missing. Nearly 3 million people who used to receive free medical assistance from the local authorities *(départements)* or those who receive the guaranteed minimum income (RMI) are automatically entitled to CMU without having to apply for it.
- Free choice of the supplementary cover provider (health insurance fund, *mutuelle,* private insurer). The CNAMTS is still the institution of last resort. In case of an affiliation with a *mutuelle* or a private insurer, these receive a subsidy of FF 1,500 per year per affiliated person, to meet the costs of supplementary cover.

Exhibit 15. Is Health Care Equitable in France?

Ensuring an equitable access to health care is a key policy issue in most OECD countries. Equity relates to the access not only of low-income groups, but also of persons living in different parts of national territories. There is a large academic literature, mainly on the former (Van Doorslaer *et al.,* 1993). Nonetheless, improving access of low-income and isolated persons raises difficult implementation issues. Resolving these issues calls for clear statistical indicators, which are often unavailable. It also involves a change in resource allocation, which can be delicate politically. Thus, making health care equitable is an important policy objective, but one that requires continued attention.

Health and Income Levels

Despite some reductions in inequalities, key indicators show that health status in France remains uneven across income groups, as in other industrialised countries. For instance, low-skilled blue collar workers have a life expectancy of 8 to 35 years shorter than senior executives (Mormiche, 1997). Surveys also reveal wide differences in health care consumption by income and education groups. The lack of adequate health insurance, especially supplementary insurance, appears to restrict access to care for underprivileged groups. The introduction of the *Couverture Médicale Universelle* is a broad-brush attempt to reduce these constraints. Efforts have also been made to standardise contribution rates (with the CSG), which however remain far from uniform across schemes. A complex ex-post demographic compensation mechanism is used to adjust funding across health insurance schemes, which is not providing full risk equalisation. In addition, despite recent progress, copayments remain quite significant for ambulatory care. Beyond the standard doctor fee exists a wide array of above-standard fees *(Secteur II)* and unregulated fees *(dépassement permanent, honoraires libres, tarif non conventionné),* which makes access to quality care dependant on ability to pay. A similar phenomenon also occurs in public hospitals *(clientèles privées).*

An Unequal Distribution of Resources Across the National Territory

Despite centralised decision-making and planning procedures, the distribution of resources on the national territory remains relatively uneven. This applies to both public hospitals and the private ambulatory care. For instance, financial allocations to the *Centres Hospitaliers Universitaires* - CHU (university hospitals) range from FF 559 per inhabitant (Poitou-Charentes) to FF 2,208 (Île de France). Regional disparities are widest for heavy equipment, though they are narrowing as the activity using such equipment spreads. Disparities are also wide for medical personnel in both public hospitals and private care, but are comparatively modest for non-medical hospital staff and the number of hospital beds.

Regional differences have not been reduced in the public hospital sector until recently, and have actually increased in the case of private ambulatory care. For instance, recourse to cataract surgery, caesarean birth, interventional cardiology and endoscopy varies widely from region to region, irrespective of the health status of the populations concerned. Hence, a mismatch between resource availability and morbidity prevails. Broadly speaking, resources are most generously granted to the metropolitan area of Ile de France and to southern France, while morbidity is higher in the Northern regions, and to a lesser extent, Alsace, Lorraine and Brittany.[7]

Policies for improving regional distribution of health care resources are a subject of thorough, though complex, debate (Mougeot, 1999; Cour des Comptes, 1999). The authorities have sought to reduce regional disparities not only in resource endowment, but also in performance of care providers. However,

redistribution requires a shift in resources away from the most favoured regions, which may result in social tensions among affected personnel and pressures on elected local representatives. Efforts need to be continued nonetheless, and even broadened to include the ambulatory care sector.

Exhibit 16. Public Health Policy

Until lately French public health policy suffered from shortcomings that are only just starting to be addressed (Dab, 1997). This shortcoming has become more visible in recent years. There is a "burden of the past" in this area (Morelle, 1996). Public health has long occupied a minor place in the French decision-making and training system. A fully-fledged public health discipline during the internship part of medical studies was created only very recently. Teaching and research structures, though well developed, are still well behind those in Anglo-Saxon countries. A national body was set up in 1990 to co-ordinate public health policy (the Haut Comité de la Santé Publique). The role and functions of the École nationale de la Santé Publique have been expanded, but they are still very limited. Tools for monitoring public health have been strengthened, in particular by the creation of a disease monitoring centre (Institut de Veille sanitaire), which replaced the former National Public Health Network. Like the Atlanta Centre for Disease Control, this Institute makes it possible to keep an ongoing track of the epidemiological characteristics of diseases. Lastly, for the past ten years the government has been steadily creating independent agencies under the aegis of the Ministry of Health for drug evaluation, blood supply management, food safety, and medical accreditation and evaluation. Despite this progress, France still does not have an explicit health policy with global health objectives and measures to achieve a better balance between prevention and care.

Exhibit 17. Health Care Economics

Understanding what works and does not work in the health care sector is a major challenge for most economists. This is because this sector does not operate like a normal economic sector. First, equity of access is of more concern than for most other goods and services. Secondly, health care is one of the areas where market mechanism alone cannot guarantee a pattern of resource allocation which is considered by the authorities to be optimal. According to standard public economics textbooks, this is due to problems known as information asymmetry, moral hazard and adverse selection. Lacking the information necessary to make informed decisions, patients delegate most treatment decisions to medical service providers. Information asymmetry thus makes the demand curve dependent

on the supply curve. In this situation, if service providers are paid on a fee-for-service basis, and hence have an incentive to provide as much services as possible, the problem of demand inducement occurs. Moral hazard arises when people with generous health insurance spend more on medical care than necessary, and in particular more than people without health insurance. Because some people are healthier than others, sometimes from birth, private insurance markets are unable to guarantee access to health care in an equitable manner in the absence of government regulation. Private insurers tend to "cream off" the most healthy people (adverse selection), and leave the rest for the government (Hsiao, 2000). On the other extreme, provision of health care by the public sector is prone to government failure. Too much or too little may be spent on health care and public providers have earned a reputation for a lack of responsiveness to consumers. Health care policies thus have to navigate between the risks of both market failure and government failure.

A considerable literature has emerged regarding the design of appropriate health insurance schemes that would promote quality of services and cost effectiveness. Such a research is very relevant for France, because the government has taken responsibility for the management of the health insurance scheme. Studies in this area generally conclude that health insurance schemes are threatened by two major risks : moral hazard and demand inducement (Cutler and Zeckauser, 1999). In France, where the combined reimbursements by social security and private "mutuelles" can be very generous, the risk of moral hazard needs to be taken seriously. Without adequate safeguards, demand for medical consumption can be higher than necessary. As well, most physicians are paid on a fee-for-service basis and may therefore induce unnecessary demand to boost their incomes. In other words, in a generous health insurance system with a fee-for-service payment, patients and physicians have a joint interest in maximising the amount of reimbursement extracted from the insurer. For authorities in charge of public health insurance schemes, the main challenge is therefore to limit these risks. The literature suggests that demand-side measures have some impact (Newhouse, 1993). Traditionally, insurers have tried to contain the risk of moral hazard by shifting part of the cost to the insured. This can take the form of higher co-payments, coverage limits or deductibles. However, if demand for ambulatory care is partly elastic to cost-sharing, this is not the case for impatient care. In addition, cost-sharing has a negative equity implication as its impact would be greater the lower patients' income is. This leaves the supply side to work on to contain the risks associated with heath insurance. Governments and insurers have developed a range of tools to regulate the behaviour of providers in the health field. One key parameter is remuneration. On the one hand, doctors paid by fixed salaries will have no incentive to induce demand, but they will also have less incentive to see the patient quickly. Spending can be controlled by setting global budgets but responsiveness and quality as perceived by the patient may suffer. On the other

hand, doctors paid through fee-for-service will seek to maximise their income, subject to their leisure constraint. This will certainly lead to more responsiveness, but also to increased spending and sometimes waste.

Similar trade offs exist in financing hospitals, between global budgets and fee-for-service. More recently, schemes such as Diagnostic Related Group (DRG)—indemnity payments that are depending upon a mix of diagnostic and treatment, have been implemented, firstly in the United States and in a number of countries. In France, they have started to play a limited role in monitoring budget allocations.

Besides payment systems, several mechanisms can be implemented in order to reduce information asymmetries between providers of care and those paying them. These include peer review systems, publishing provider "performance indicators" for consumers and purchasers and introducing tighter contracts for providers, and a closer association between providers and payers through contracts and alliances, or even full integration. Managed care is a good example of this, and it is therefore not surprising that HMOs have expanded relatively fast in the United States. In France, doctors have traditionally been reluctant to contract alliances with the public health insurance scheme and to accept peer review by a third party, and managing ambulatory care spending has therefore been a persistent problem. Public hospitals, on the other hand, can been seen as providers directly managed by the insurer, and it is therefore not surprising that with the help of global budgets substantial progress has been made in curbing their expenses.

Annexe 1. Health Insurance Reforms

Reform Plans to Date

Plans	*Main reforms*
Plan Durafour (1975)	Ceiling on social insurance contributions removed; VAT on drugs lowered.
Plan Barre (1976)	Co-payment (ticket modérateur) increased.
Plan Veil (1977-78)	Contributions increased and rate of refund on certain non-essential medicaments reduced
Plan Bérégovoy (1982-83)	Introduction of the forfait hospitalier (the per diem fixed charge which the patient has to pay for a hospital stay), co-payment increased, contribution introduced on unemployment benefits.
1992	Introduction of global budgets for hospitals
Plan Séguin (1986-87)	Some drugs (vitamins) no longer reimbursed, revision of the list of illnesses giving exemption from co-payments, scope of exemption from co-payments limited, exceptional contributions.
Plan Rocard-Evin (1990-91)	Some drugs (anti-asthenics) no longer reimbursed, introduction of the CSG, tax on pharmaceutical advertising.
Plan Bianco (1991)	Contributions based on wages and the forfait hospitalier raised, some drugs no longer reimbursed
1984	Introduction of National Quantified Targets.
Plan Veil (1993)	Implementation of mandatory medical guidelines (RMOs), rules laid down regarding the patient's medical file, the first price-volume regulation agreements concluded with pharmaceutical companies. Forfait hospitalier increased, co-payment reduced by 5 points. CSG increased.

Plan Juppé (1996) - Ordinances of 24 April and organic law of 22 July 1996	Introduction of ONDAM (national health spending targets) and law on the financing of the social security. Personal medical record, care groups, computerisation, policy of penalising ambulatory doctors in the event of budget overruns. Parliamentary control introduced over the social security, supervisory agencies (ANAES), redeployment of hospitals, RDS levy and exceptional contribution for doctors.
Aubry measures (1998)	Pharmacists allowed to replace drugs prescribed by doctors, by generics; incentives for médécins référents; computerisation of doctors' offices; care networks; VITALE card; shifting employee health insurance contribution to the CSG.
Aubry measures (1999)	Hospitals managed by the State, ambulatory care by the CNAMTS. Regional hospitalisation agencies (ARH) responsible for relations with private hospital sector; diagnostic-related group payments encouraged; spending targets assigned to health insurance funds.

Annexe 2. The 1996 Juppé Plan

Objectives:
Achieve financial balance by 1997 through limits on expenditure and exceptional tax revenue measures; improve efficiency, effectiveness and quality of health care through a series of structural measures.

Legal basis:
A constitutional amendment gives Parliament legislative authority over health spending, *via* the law on the financing of the social security which is passed every year, like the budget law. The social partners continue to be involved in the management of the system but the key decisions are taken by Parliament and implemented by the government.

Macroeconomic regulation:
Each year Parliament sets a national health spending target (ONDAM) based on revenue estimates and the national health goals defined by the National Health Conference. The fact that the national spending target is voted by Parliament means that the nation's elected representatives make the desired amount of healthcare spending explicit for the first time.

Hospitals:
The main innovation in the hospital area is the creation of regional hospitalisation agencies (ARHs). The ARH are streamlined structures that deal with hospitals. They co-ordinate the regional offices of the social security, and the State regional health and social services. At first, they had financial responsibilities and overall oversight for the public health sector.[21] They are in charge not only of allocating global budgets to hospitals[22] but also of ensuring that their objectives and work are in line with the directives of the regional health conferences and also with regional health plans. To a certain extent they can behave like " purchasers" of health care, like district authorities in the United Kingdom.

Ambulatory care:
The targets voted by Parliament also apply to ambulatory sector spending. Rules were set in case of under- or over-spending. The role of mandatory medical guidelines (RMOs) was increased and a personal medical record *(carnet de santé)* enabling doctors to keep track of their patients' medical history more effectively and accurately was introduced. Subsidies were provided to help doctors computerise their offices to allow electronic transmission of claims forms *(feuille de soins),* and experiments were launched where the general practitioner plays a gate-keeper role; a policy of encouraging the use of generic drugs was launched, as well as costly early retirement measures for the medical profession.

Information tools:
The 1996 plan introduced, on a general basis, tools for measuring the performance and productivity of each hospital by comparing their relative costs by diagnosis-related groups (DRGs). The information system fixes the value of the point of a composite indicator of activity (ISA) on the basis of data in the *Programme de médicalisation des systèmes d'information* (PMSI). The value is calculated in francs for each hospital and each region, and is a key element in decisions regarding budget allocations. The value of the scale used to compile the composite index is calculated from a cost analysis of a sample of hospitals (thirty hospitals throughout the country).

Annexe 3. The CNAMTS's Strategic Plan

In July 1999, the CNAMTS published a strategic plan proposing a number of reforms in the way it operates. This plan does not call into question the principle of solidarity between those in good health and the sick, with everybody contributing according to their income and receiving care according to their needs. Nor does it seek to replace the system of refunding patients by one of financing health care supply directly. Lastly, it does not call into question the principle of the patient's freedom to choose a practitioner, nor the doctor's freedom to prescribe. What

it does stress is that this freedom must go hand in hand with the responsibility of each individual in the running of the system, so as to guarantee the quality of care, to ensure that needs are covered and that costs are kept under control.

The plan stems from a recognition that the CNAMTS has become a "passive payer" because the rules prevent it from being a selective buyer, choosing care according to quality, needs, utility and costs. The plan seeks to make the CNAMTS a more responsible and more thrifty buyer. It estimates possible savings after five years at FF 62 billion. Of the 35 measures proposed by the CNAMTS, the main ones are the following:

- ***Hospitals.*** The plan suggests that savings of FF 30 billion could be made by replacing the global budget by a system of payment on the basis of diagnosis-related groups (DRG). This figure was arrived at by comparing the costs of clinics and those of hospitals, after adjustment for the extra costs arising from the research and teaching activities of hospitals, and from the higher wage bill that results from hospital staff having civil servant status. It suggests that there is large scope for productivity gains in the hospital sector.
- ***The insured.*** The plan aims at involving the insured more closely by varying the rate of refund in return for the acceptance of certain constraints. The rate of refund will be higher for patients who sign up with a médécin référent and are part of a health care group (the rate of refund is ten points higher); conversely, for patients who refuse the personal medical record (carnet de santé), the rate of refund is ten points lower).
- ***Doctors and health professions.*** The plan calls into question the payment by the CNAMTS of the social contributions of all doctors -- at a cost of FF 8 billion a year. This arrangement had been introduced in 1960, at a time when there was a shortage of doctors. The plan proposes to replace it by a subsidy, the amount of which would be capped and vary according to the density of doctors and certain other conditions (continuity of care, prescription of generic drugs, electronic transmission of claims forms). The plan also provides for a system of collective regulation, with doctors having to reimburse budget overruns.
- ***Drugs.*** Drugs would be reimbursed on the basis of the cheapest drug in the given therapeutic class. The charges for certain forms of treatment (chemotherapy, dialysis) would be reviewed and hydrotherapy would be refunded at a lower rate.

Most of the proposals in the strategic plan require decisions by the government and legislation. For the moment, the authorities have not decided to implement them.

Notes

1. An earlier version of this paper served as input into the 2000 OECD Economic Survey of France which was published in July 2000 under the authority of the Economic and Development Review Committee. The authors would like to acknowledge the assistance of the French authorities, especially from the Direction de la Prévision and other directorates of the Ministry of Economy, Finance and Industry in the preparation of this paper. They also especially acknowledge the assistance from the Directorate for Research, Economic Studies, Evaluation and Statistics (DREES), the Directorate for Social Security (DSS) as well as numerous other officials from the Ministry of Employment and Solidarity, and various health and public sector bodies, including the national health insurance fund, (CNAMTS), the Cour des Comptes and CREDES. Special thanks go to Howard Oxley who provided generous support and insightful comments. Without implicating them, this paper benefited from comments of Andrew Dean, Andrew Devlin, Jorgen Elmeskov, Mike Feiner, Jeremy Hurst, Val Koromzay, Gaetan Lafortune and Peter Scherer. Special thanks go to Roselyne Jamin for technical assistance and to Nadine Dufour and Doris Schombs for secretarial assistance.

2. There are 18 basic health insurance funds. The main one, the Caisse Nationale d'Assurance Maladie des Travailleurs Salariés (CNAMTS) covers four-fifths of the population, mostly private sector employees and their families. Other important schemes are the Mutualité Sociale Agricole (for farmers) and the Caisse Nationale d'Assurance Maladie des Travailleurs Indépendants et Artisans (CANAM). There are also special statutory funds for certain public sector employees and for miners. These funds administer benefits. Health insurance contributions are paid by employers and employees (mainly via the contribution sociale généralisée) The contributions are collected by separate agencies in charge of collecting all social contributions.

3. Supplementary insurance is provided by *mutuelles* subject to a special code and taxation, and by traditional insurance companies. In the private sector, the bulk of this insurance is bought in the group insurance market by companies as part of job-related benefits.

4. About a quarter of ambulatory care doctors are allowed to charge more than the official schedules, normally because they have special qualifications. This so-called "sector II" was opened up at the start of the 1980s but the qualification requirements were tightened up considerably, and to a large extent the sector has been closed to further access by the 1990 agreement between the doctors and the authorities *(convention)*. Its relative share declined from 31 per cent in 1990 to 27 per cent in 1997, but the share for specialists is higher—34 per cent. Fees of sector II doctors, which are beyond the official fee schedules, are reimbursed only by the better supplementary insurance schemes, and then the amount varies quite widely from one scheme to another.

5. The income ceiling is degressive: FF 3,500 per month per person, FF 5,250 for two people, FF 6,300 for three people, FF 7,350 for four people, and FF 1,400 for each additional person after that. Some social benefits are not included in the calculation of resources (the allowance given at the start of the school year) while only a fixed part of other benefits received (family allowances, housing benefit) is taken into account.

6. For example, France has one of the highest rates of cardiac catheterization and angioplasty, close to those in Germany and Belgium at the European level (Jacobzone *et al.*, 1997).

7. Caution is needed in interpreting regional differences in morbidity, as factors extraneous to the health care system may play a key role. Epidemiological studies have shown that diet and the industrial context might play a role in explaining regional differences.

8. Simple econometric regressions suggest an elasticity of health care consumption with respect to income of over 1. However, this finding should be treated with caution since it is very difficult to measure the true elasticity of health care consumption with respect to income, other things being equal. International studies suggest that this elasticity is close to 0.8, once supply factors have been taken into account (Gerdtham and Jönsson, 1995).

9. The provisions of the Juppé Plan regulating independent medical practice were substantially cut by the *Conseil d'État* and the Constitutional Court, following appeals and referral by Parliament. In particular, an agreement of 1997 whereby doctors would be obliged to refund amounts in excess of the target for ambulatory care was voided in 1998, and there was no mechanism for controlling such expenditure in 1998 and 1999. In 1997, general practitioners respected their target but specialists did not. In 1998, the overrun was due in large part to ambulatory care, and especially to drug prescriptions by general practitioners.

10. The decision by the government in 1999 to lower the prices of private clinics by 1.95 per cent was cancelled by both the Conseil d'État and the Constitutional Court.

11. Admittedly, the government projects that the deficit on the health branch of the social security will be significantly reduced in 2000. However, it should not be concluded from this that the financial situation is now sound. Revenue was boosted in 1998 and 1999 by a steep increase in job creation and thus in the wage bill—the main component of the base on which social insurance contributions are calculated—while expenditure benefited from the slowing of inflation. The quasi-balance projected for 2000, at the peak of the cycle, could thus very well mask a structural deficit.

12. INSEE, *Projections de la population,* INSEE Résultats no. 361-362-363.

13. The ARHs are streamlined decentralised structures which co-ordinate the services of the regional health insurance funds in the hospital sector and the State

regional health and social services. At first, they had had financial responsibilities and overall oversight for the public hospital sector. They are in charge not only of allocating global budgets to hospitals but also of ensuring that their objectives and programmes are in line with the directives of the regional health conferences and with regional health organisation plans. They can, in principle, behave like "purchasers" of health care, like district authorities in the United Kingdom, but their limited autonomy vis-à-vis other institutional actors prevents them from playing this role in an active way.

14. Private clinics are very flexible: between 1992 and 1998, a total of 320 reorganisations were implemented, affecting 700 clinics.

15. For example, a splenectomy is a complex operation usually done in an emergency and priced at FF 1 570 including 20 days post-operative care, whereas a full coloscopy, four of which can be done in the same day, is priced at FF 1,000. A general anaesthetic is priced at FF 300 whereas an echocardiography costs FF 600 (*Cour des Comptes,* 1998). Clearly, it is in the interest of the most efficient clinics to avoid doing splenectomies and general anaesthetics and to do coloscopies and echocardiographies instead.

16. Consultation fees in constant francs rose by 22 per cent for general practitioners and 12 per cent for specialists between 1980 and 1996.

17. *La Nomenclature Générale des Actes Professionnels* (NGAP).

18. Represented by the Comité Économique du Médicament, now renamed *Comité Économique des Produits de Santé.* This body comprises representatives of the social affairs and finance and industry ministries and the health insurance authorities.

19. Ratio of administrative management expenditure plus medical verification, i.e. FF 32.5 billion, to benefits paid in metropolitan France excluding payments to public hospitals, i.e. FF 310 billion in 1999 *(Commission des Comptes de la Sécurité sociale)*. The ratio would be reduced to 5.8 per cent by including hospital grants, but excluding the contribution of State services to hospital management.

20. This figure should be treated with caution. The *Cour des comptes* has pointed out that it is difficult to gauge exactly the number of staff actually employed in agencies that are subsidiary to the national funds (*Cour des Comptes,* 1999*b*).

21. The law on the financing of the social security for 2000 extended their role to private clinics.

22. Except for the Île-de-France region, where the budget allocation for the Assistance Publique-Hôpitaux de Paris is set by ministerial decree. The Ministries of Social Affairs, Finance and the Interior sit on its governing board. In this region, the ARH oversees health planning (beds and equipment) but, in the budget area, its role is limited to other minor or peripheral public hospitals and to the private sector since the law on the financing of the social security for 2000.

7. Historical Background, Organizational Structure and Management

Simone Sandier, Valérie Paris and Dominique Polton

INTRODUCTION AND HISTORICAL BACKGROUND

Geography and demography

On 1 January 2001, the French population totalled 59 million inhabitants of metropolitan (mainland) France and 1.7 million inhabitants of the French overseas departments of Guadeloupe, French Guyana, Martinique and Réunion.

Metropolitan France covers an area of about 545 000 km², giving an average density of 107 people per km², which places it in ninth position in the European Union (EU), far behind the Netherlands, the United Kingdom and Germany. However, average density conceals considerable variations; half of all French people live on just over 10% of this territory, while large areas remain sparsely populated.

France became urbanized more slowly than other European countries, but since the 1950s there has been a rapid catching-up process. By 1999, 76% of the population was living in urban areas. In the last ten years or so, this urban growth has mainly taken place in outer suburbs and rural areas surrounding towns, rather than in centres.

As a result of decreasing rates of fertility and increasing life expectancy, France's population is ageing. Today, one in six French people is over 64 years old, compared to one in eight 30 years ago. Population ageing is set to continue as the 'baby boomers' born after the Second World War reach old age. According to demographic projections, from 2020 onwards those aged over 60 will outnumber those aged under 20 (accounting for 27% and 23% of the population, respectively). Table 1 shows the most recent demographic indicators.

Figure 1. Map of France[1]

Political context

France is a republic with institutions governed by the 1958 Constitution, which reinforced the role of the executive authorities (the President of the Republic and the government) in relation to the legislative authorities.

Table 1. Demographic and Health Indicators for Metropolitan France, 2000

Population on 1 January 2001	59 053 300
Distribution by age (%)	
– less than 20 years	25.4
– 20 to 64 years	58.5
– 65 years and over	16.1
Life expectancy at birth (years)	
– women	82.7
– men	75.2
Infant mortality (per 1000 births)	4.4
Mortality (per 1000 population)	9.1
Total fertility rate	1.9
Crude birth rate (per 1000 population)	13.2

Source: INSEE 2001, OECD 2001.

The President of the Republic is elected by direct universal suffrage. The President's term of office, until recently seven years, has now been reduced to five years. The government, led by the Prime Minister, who is nominated by the President of the Republic, determines and conducts policies. The Prime Minister is accountable to parliament, which exercises legislative power and is made up of the National Assembly and the Senate.

577 deputies elected by direct universal suffrage make up the National Assembly. Voting takes place on the basis of a single majority vote (that is, voting for one deputy only) in two rounds, within the framework of constituencies of variable size (one deputy for approximately

100 000 inhabitants). The National Assembly's session is five years, but it can be shortened if the President of the Republic decides to dissolve the National Assembly, as happened on 21 April 1997 for the fifth time since the inauguration of the Fifth Republic.

The Senate consists of 321 senators elected for nine years by indirect universal suffrage, through an electoral college consisting of elected persons in each department (see below). One third of its membership is renewed every three years. The method of polling, the senators' term of office, and the fact that the Senate cannot be dissolved give this assembly a high level of political stability.

In the past 20 years, the civil service, against the background of its long tradition of centralizing policies, has undergone substantial changes. There are three levels of administration: the municipality, the local authority (department) and the region. These three levels are both administrative constituencies of the state and decentralized local communities run by elected assemblies with their own areas of responsibility and a certain degree of autonomy in relation to the central authorities.

The 36,679 municipalities form the basic structure of France's administrative organization.[2] They are run by a Municipal Council elected for six years by direct universal suffrage. The mayor is both the elected authority of the municipality and the representative of the state in the territory of the municipality. Municipalities' areas of responsibility relate to local activities and are extensive in the economic and social sectors.

Departments, 96 of which are in metropolitan France and 4 overseas (Martinique, Guadeloupe, Réunion and French Guyana), are territorial communities with an elected assembly (the General Council) that has authority in the areas of health and social care and the financing and provision of lower secondary education (collèges). The préfet represents the state's authority in the department.

The 100 departments are grouped in 26 regions, 22 of which are in metropolitan France and 4 overseas (coinciding with the 4 overseas

departments). Created in 1955 to provide a structure for regional planning and development, the region became an administrative territorial community in 1982, with an elected assembly (the Regional Council). Its specificjurisdiction mainly covers planning, development, economic development, vocational training and upper secondary educational institutions (lycées).

Economic context

France's gross domestic product (GDP) has risen in 2000 to €1405 billion, which is an increase of 4% in value and 3.1% in volume in relation to 1999. These figures place France slightly below the EU average for per capita GDP. The budget deficit was 1.3% of GDP in 2000, as opposed to 1.6% in the preceding year.

In 2000, 26 million people were active in the labour market (that is, 45.3% of the population). Women represent 47% of the country's work force, and their participation in the labour market has increased dramatically in recent decades. The unemployment rate was 8.9% in July 2001, a decrease in relation to 1998. In the past 20 years, the structure of employment has moved away from agriculture (which today accounts for only 4% of the work force), manufacturing and construction (26% of the work force as opposed to 38% at the beginning of the 1970s), towards commercial activities and the services sector, which now involve 16 million people (69% of the work force).

Health status

Life expectancy increases regularly, by three months a year for men and by two months a year for women. The gap between male and female life expectancy remains high, although it is narrowing (Table 1).

The overall picture of the state of health in France contains apparent contradictions. On one hand, indicators such as life expectancy and life expectancy without disability show that the health of the population is good. In terms of international comparison, women live longer and old

people remain in better health. France also compares well with regard to cardiovascular diseases, while its relative position with respect to mortality caused by alcoholism, cirrhosis and cancer of the cervix is improving. On the other hand, France suffers from a high rate of premature male mortality due to smoking and accidents, and social and geographical inequalities in health remain substantial (Figure 2).

All indicators show higher mortality rates in the northern part of France (from Brittany in the west to Alsace in the east), and in regions located on an axis from the north east to Auvergne in the centre of the country. Along this axis, the higher rates of mortality concern all causes of death, whereas in the west (Brittany and Normandy) risk factors such as alcohol consumption explain some of the higher mortality. Alcohol and tobacco use are not independent of socioeconomic status and are often higher in poorer regions affected by high rates of unemployment, etc.

The main causes of death in France are cardiovascular disease (31.1 % of deaths), cancer (27.7%), accidents (8.3%) and diseases of the respiratory system (8.1%).

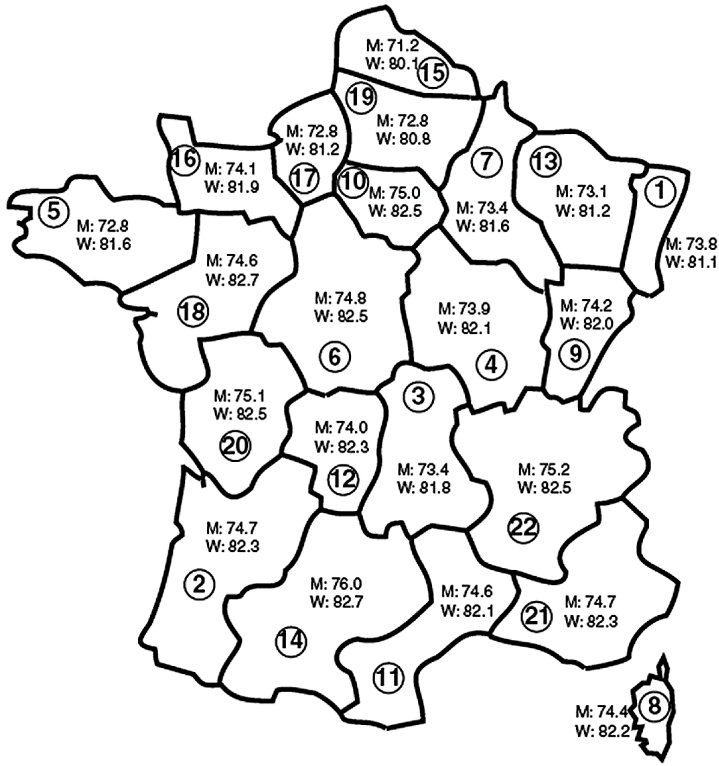
HISTORICAL BACKGROUND

From mutual benefit associations to the creation of social security and universal health coverage

The present system of social security, including statutory health insurance, was established in 1945, at the end of the Second World War.

Prior to this, the 19th century had been marked by the rapid rise of the mutual benefit movement, which is still an important force in French political life. By 1900, the number of mutual benefit associations had reached 13 000, with 2.5 million members. They continued to develop in the early decades of the 20th century and in 1940 these associations had nearly 10 million members.

Figure 2. Life Expectancy at Birth by Region, 1996



W = Women, M = Men

1. Alsace
2. Aquitaine
3. Auvergne
4. Burgundy
5. Brittany
6. Centre
7. Champagne-Ardenne
8. Corsica
9. France-Comté
10. Ile-de-France
11. Languedoc-Roussillon
12. Limousin
13. Lorraine
14. Midi-Pyrénées
15. Nord-Pas-de-Calais
16. Normandy (Basse)
17. Normandy (Haute)
18. Loire Valley
19. Picardy
20. Poitou-Charentes
21. Provence-Alpes-Côte d'Azur
22. Rhône-Alpes

Sources: INSEE 2001, CREDES/DREES 2001.

Table 2. Mortality by Cause of Death in 1998

	Number of deaths	% deaths	Rate per 100 000 population
All causes	534 003	100.0	914
Diseases of the circulatory system	166 299	31.1	285
Malignant neoplasms	147 681	27.7	253
External causes, poisoning	44 108	8.3	76
Diseases of the respiratory system	43 314	8.1	74
Undefined morbid conditions	33 776	6.3	58
Diseases of the digestive system	26 194	4.9	45
Endocrinal diseases	16 070	3.0	28
Disorders of the nervous system	15 531	2.9	27
Mental disorders	14 568	2.7	25
Infectious diseases/parasites	7 988	1.5	14
Diseases of the genital -urinary organs	7 361	1.4	13
Diseases of the blood or haematopoietic organs	2 981	0.6	5
Diseases of the osteo -articular system	2 856	0.5	5
Diseases of the skin, cutaneous tissue	2 481	0.5	4
Congenital abnormalities	1 458	0.3	2
Perinatal conditions	1 262	0.2	2

In the meantime, a Law Act on Social Insurance was passed in 1930, signalling the emergence of a statutory insurance system. This legislation created a system of compulsory protection for employees in industry and business whose earnings fell below a certain level. It provided insurance in five areas: illness, maternity, disability, old age and death. By the outbreak of the Second World War (in 1939), two thirds of the French population were covered for illness, with free choice of the organization providing coverage.

The social security system officially came into being with the Ordinance of 4 October 1945. In the early postwar days, priority was given to reconstruction, so the provision of social security was aimed primarily at workers and their families. The principle of expanding coverage to the whole population had been raised as early as 1945, but was only put into practice in stages. In fact, statutory health insurance was only extended to

farmers in 1961 and to self-employed non-agricultural workers in 1966.

This process of expanding coverage was recognized in the statutes of 1974, which established a system of personal insurance for those who did not fall into any of the categories already covered. In order to obtain this insurance, individuals had to pay a contribution, or if they had insufficient means, request the department to make a contribution on their behalf.[3] In practice, however, access to health insurance remained problematic for certain population groups.

In addition to expanding coverage, the founders of the social security system, largely inspired by the Beveridge report in the United Kingdom, aimed to create a single system guaranteeing uniform rights for all. However, this goal could not be achieved due to opposition from certain socio-professional groups who already benefited from insurance coverage that had more favourable terms, and who succeeded in maintaining their particular systems, which are still in existence today (civil servants, seamen, miners, railway-workers, employees of the national bank, etc.).

Today, three main health insurance schemes are dominant: 95% of the population is covered by the general health insurance scheme *(Régime Général),* which covers employees in commerce and industry and their families, by the agricultural scheme and by the national insurance fund for self-employed non-agricultural workers. Health insurance in France has, therefore, always been more concentrated and uniform than in other "Bismarckian" systems (such as the German system).

Another key difference is that the French health insurance funds have never really had the management responsibilities accorded to sickness funds in the German health care system. The state rapidly took responsibility for the financial and operational management of health insurance (for example, setting premium levels and the prices of goods and services, etc.).

Difficulties arose in the 1980s, with a growing number of unemployed being deprived of their right to health insurance because the

right was linked to professional activity. While the safety net of medical assistance for those with low incomes remained, the conditions under which it applied and the degree of generosity in its coverage depended on the resources and policies of the General Council in the individual's department. Successive rounds of legislation have therefore softened the conditions governing access to compulsory insurance coverage and have obliged the general councils to finance the individual insurance contributions of certain groups of the population (for example, since 1992, recipients of minimum welfare benefits).

An important reform recently took place in the form of the Universal Health Coverage Act (CMU), which was passed in June 1999 and came into force on 1 January 2000. This act, as its name suggests, establishes universal health coverage, opening up the right to statutory health insurance coverage on the basis of residence in France. Furthermore, those whose income is below a certain level (currently 1.8% of the population) are entitled to free coverage. The old system of individual insurance, with contributions that could be financed by the general councils (according to income scales that varied from one department to another), has now been replaced by a system based on the right to health insurance and the logic of social protection through insurance rather than state aid.

The CMU Act has further shifted the balance of the health insurance system away from a work-based system towards a system of universal health coverage. This evolution had already begun with the so-called 'Juppé reform' of 1996, named after the Prime Minister of the time, which introduced two important changes:

- first, in the method of funding health insurance, by substituting part of the contribution based on earned income (wages) with a contribution based on total income, which was more like a tax on income;
- secondly, in the institutions responsible for operating health insurance, by giving parliament, from 1997 onwards, a role in the definition of health care and financial targets.

Three key lines of evolution can therefore be observed in the French health insurance system:

- universal health coverage based on residence;
- the substitution of a tax on income for wage contributions in the funding of the system;
- a more active role for parliament in determining policy directions and expenditure targets.

The CMU Act also contains other provisions that represent a major development in the French social security system: in addition to universal health coverage, those with incomes below a certain level have the right to complementary voluntary health insurance (VHI) coverage.

The management of social security and the division of responsibilities between the state and the health insurance funds

The general social security system created in 1945 was associated with the idea of social democracy; it was made up of a network of health insurance funds headed by elected boards of directors comprising representatives of employees (a majority) and employers.

The first important reform of the organization of social security took place in 1967:

- first, establishing a separation into four branches: health insurance, pensions, family benefits, and insurance for work-related accidents and occupational illnesses;
- secondly, elections to the board of directors were discontinued and replaced by a system of appointment by trades unions, with parity between employers and employees, giving more weight to employers than previously.

In 1982, with the political left coming to power, the intention of restoring the original principles of 1945 was announced; that is, that there would be a return to elections and a majority of employees on the

boards. In practice, however, such elections only took place once, in 1983. The 1996 Juppé reform returned to the principles of 1967 by appointing board members rather than electing them and by reintroducing parity between employers and employers.

This succession of reforms reflects an important debate concerning the legitimacy of the so-called "social partners" in the management of health insurance funds and their role in the health care system, particularly with regard to the role of the state. The division of power between the state and the health insurance funds has always been problematic. Traditionally, the compromise was to organize a division along sector lines; the state handled policy concerning public hospitals and drugs, while the health insurance funds took charge of independent (private) medical practice (including the services provided by self-employed professionals and private for-profit hospitals) on the basis of negotiated agreements. Decisions concerning the financing of the health insurance funds (conditions and levels of social contributions) were clearly within the state's remit.

Over time, this balance has tended to shift towards increasing state intervention, particularly since the issue of balancing the public accounts, and thereby controlling public expenditure, has figured prominently on the political agenda. From the 1980s onwards, these conflicts and contradictions, arising from the complexity of the institutional structures, have become more and more visible. Since the beginning of the 1990s, experiments have been set up in certain sectors, with tripartite agreements between the state, the health insurance funds and the health care professions.

The 1996 Juppé reform involved a more radical reorganization of institutions and powers. To many, it was seen as giving the state control of the health care system, and it is true that some of its most significant measures explicitly increased the role of the state, for example the reinforcement of the role of parliament and the creation of regional hospital agencies (ARH). It also established an "agreement on targets and management" between the government and the largest health insurance fund, the National Insurance Fund for Employed Workers (CNAMTS),

which was intended to clarify the roles of each (see the section on *Organizational structure and management*).

A further attempt to clarify roles was made in 2000, with the Social Security Funding Act. According to the terms of this act, the whole hospital sector was to be the responsibility of the state (including private for-profit hospitals), but in return the government delegated to CNAMTS the dual responsibility of regulating the fees charged by all self-employed health care professionals and negotiating with them targets (ceilings) for expenditure. However, this reform was only applied in 2000 and was subsequently abandoned.

In spite of these attempts at clarification, the division of responsibilities remains unclear, and in recent years relations between state authorities and the health insurance funds have been marked by periods of open conflict, with the trend towards increased state control regularly denounced by the health insurance funds. This tension reached a critical point in September 2001, when employers withdrew from the boards of the health insurance funds. As a result, the institutional issue of who should be in charge of statutory health insurance.

Confrontation between health care professionals and the state

The implementation of statutory health insurance after the Second World War made it necessary to enter into negotiations with health care professionals in order to define a fee schedule. The medical unions were extremely hostile to negotiations concerning the fees they charged patients, which they viewed as an attack on one of the fundamental principles of independent medical practice—that of direct agreement with the patient on the fee to be charged. The negotiations were originally intended to take place between the regional health insurance funds and the local medical unions in each department, but the latter refused to take part. As a result, many departments were not able to finalize agreements and doctors continued to set their own fees. For their part, the health insurance funds reimbursed fees on the

basis of "official" rates, which were well below the rates being charged in practice.

This conflict was the first in a long series of conflicts that has punctuated relations between medical unions, health insurance funds and state authorities over the last 50 years. Unlike in Germany, where doctors have agreed to co-manage the system with the sickness funds, the majority of French medical unions have tended to maintain an attitude of dispute, if not opposition, towards the managers of the health insurance system. However, this has given rise to internal divisions within the medical profession, causing successive splits in their unions and resulting in some fragmentation of medical representation.

In 1960, the government put an end to the first phase of conflict, initiated in 1945, by imposing ceilings on charges and setting out the conditions under which these ceilings might be exceeded. Furthermore, although the possibility of negotiating collective agreements at the department level continued to exist, such agreements were now to follow a standard, nationally defined form. Importantly, doctors were offered the possibility of joining this national agreement on an individual basis, which considerably reduced the unions' power of veto.

The arrangements governing health service contracts with doctors were put on a national footing *(conventionnement)* in 1971. They applied to all doctors, except in cases of explicit refusal. In return, doctors were granted social and tax advantages and gained reaffirmation, in the agreement, of the principles of independent medical practice: free choice of doctor, freedom to prescribe, professional confidentiality and direct payment of fees by the patient.[4] National agreements *(conventions)* were subsequently signed in 1976, 1980, 1985, 1990, 1993 and 1997—1998.

Rising concern about keeping health care expenditure under control made its mark on the negotiation of these agreements, which proposed successive measures aimed at controlling the costs of health insurance, in addition to fixing fees for treatment. These measures included:

- individual monitoring of the work of doctors (1971);
- the establishment of a 'second sector' (Sector 2), within which doctors were authorized to exceed the ceiling on negotiated charges, but charges in excess of the ceiling would not be reimbursed by the health insurance funds (1980); doctors who chose this option lost their social and tax advantages;
- limiting the freedom to prescribe by introducing practice guidelines (RMOs), which doctors must respect or face sanctions (1993); however, this measure was partially annulled by the courts in 1999.

The 1996 Juppé reform introduced two major changes in relations between doctors and the health insurance funds. On one hand, the law aimed to delimit doctors' activity in terms of fees and prescriptions by setting an estimated target (ceiling) for expenditure, defined annually, with failure to respect this target giving rise to financial penalties. This "book-keeping control," as the most important medical union, the Confederation of French Medical Unions (CSMF), has called it, formed the focus for CSMF's strategy of opposition to agreements, and between 1996 and 2002 CSMF did not sign a single agreement.

On the other hand, the reform has opened up a new breach in the unity of the medical profession by allowing the signing of separate agreements with general practitioners and specialists. Thus, in 1997 the health insurance funds signed an agreement with MG-France, a general practitioners' union leaning more to the left than other unions and in favour of a specific re-evaluation of the status of general practitioners in relation to specialists. The specialists' agreement was only signed by one union representing a minority of health care professionals.

It should be noted that most of the agreements signed by the medical unions and the health insurance funds have been contested in law, and a number of them have had some of their provisions annulled. The 1997 agreements were no exception, and although a new agreement with the

general practitioners, signed in 1998, was a partial replacement, it has not been possible to reach any agreement with the specialists, to whom minimal contractual regulations, defined unilaterally by the government, have since applied. Until the beginning of 2002, the relationship between the medical profession on the one hand, and the government and the health insurance funds on the other, had consistently deteriorated. The arrival of a new government has facilitated further dialogue.

50 years of hospital development

An act passed in 1941, which took effect from 1945 onwards, signalled an important stage in the evolution of hospitals in France. Until then, public hospitals had been autonomous institutions attached to a geographical community, usually the municipality or department. Public hospitals had also been institutions that treated poor people, but since 1945 they have been opened up to all types of patient, and the links between the hospital and the local community have loosened somewhat. While hospitals' association with municipalities was preserved, with the mayor remaining president of the board of directors, new powers were given to the Minister of Health, including: approval of a general plan for hospital organization, foreshadowing current planning processes; fixing salary levels for a large section of hospital workers, who are now endowed with a unique status; a role in the appointment of hospital directors, who were assigned some of the responsibilities of the board of directors.

This important ministerial intervention marked the beginning of an increasingly centralist policy for hospital development, which has tended to remove public hospitals from the exclusive remit of the municipality and to reduce significantly their autonomy. The 1941 Act even modified the recruitment procedures for medical staff in hospitals, who had previously been co-opted locally, but were subsequently to be appointed by the prefect, following a competitive regional procedure.

In 1958, reform of the hospital sector reinforced the powers of the

Minister of Health, extending the Minister's control over hospital building programmes and the appointment of hospital directors, who became executive agents of the central authority, even though they remained subordinate to the boards of directors. Among the most important provisions of the legislation were:

- the establishment of teaching hospitals, by means of agreements negotiated between regional hospitals and faculties of medicine;
- the introduction of the principle of full-time employment of doctors in these university hospitals, and for certain specialties in all public hospitals; this integrated doctors with hospital organization, while excluding all external activity, and represented a genuine transformation of these institutions; to encourage doctors to abandon their external private practice, the possibility of private practice within the hospital was offered to certain categories of doctors, and this 'private sector' in public hospitals is a recurring source of controversy.

The 1958 reform also placed the private hospital sector under state supervision with regard to capacity and equipment. Hospital planning has become more stringent since 1970. Neither public nor private hospitals can increase bed numbers or equipment without prior authorization and until 2003, authorization could only be given if the proposed increases were in line with the 'medical map' *(carte sanitaire)*, which set out target capacities by geographical area.

The development of regulatory policies

The founding fathers of the social security system hoped that the access to health care provided by statutory health insurance would make it possible to maintain good health among the whole population, and that as a result, the need for treatment would diminish over time. In practice, the pattern of development has been quite different, with the concurrent dynamic of an increased supply of services and greater demand leading to unrelenting growth in expenditure on health care. The

onset of economic difficulties in the 1970s marked a turning point in policies towards the provision of health care, which became increasingly influenced by financial constraints.
In the past 25 years a succession of cost containment policies (both on the demand side and the supply side) has attempted to balance the accounts of the health insurance system. However, it has not been easy to implement cost control policies in a system characterized by fee-for-service payment of doctors, retrospective reimbursement and unrestricted freedom of choice for patients.

Measures to limit demand had been anticipated from the outset, with consumer responsibility fostered through cost sharing. The portion of the costs of treatment not reimbursed by the health insurance system was named *"ticket modérateur"* precisely because of its intended aim of moderating demand. Over the years, the patient's share of treatment costs has steadily increased, by means of progressive increments, the introduction of a daily charge in hospitals and authorizations for Sector 2 doctors and for certain services, such as dentures and artificial limbs, to exceed standard charges. The share of treatment costs reimbursed by health insurance diminished from the mid-1980s to the middle of the following decade, but has been stable since then.

Over and above the problems of equity and access to treatment posed by this financial burden on the patient, the theoretical effectiveness of this measure, in terms of reducing expenditure, has been severely impaired by the massive extension of complementary VHI coverage, which today applies to 85% of the population, not counting those covered by CMU. Two attempts, in 1967 and 1979, to limit the coverage of health care costs by the bodies responsible for complementary VHI, leaving 5% of the costs to be paid by the patient, met with strong resistance and were abandoned.

More recently, the debate has shifted towards steering demand and organizing channels of treatment to limit free choice. For example, general practitioners are provided with financial incentives to become

'referring doctors' (that is, a kind of gatekeeper, with voluntary registration of patients).

Policies relating to the supply of treatment have targeted capacity as well as professional practices and charges for goods and services. These policies have diversified over the last 30 years. Control of capacity was one of the first instruments introduced after 1970. Limiting supply rapidly came to be seen as an essential mechanism on the basis of the potential for "supplier-induced demand" in health care, where patients have a low level of information and do not have to bear the full cost of treatment.

This type of control has been exercised in two ways: by the medical map, which until 2003 made the provision of hospital beds and certain kinds of equipment subject to authorization and limited them on the basis of an agreed ratio of beds and equipment per head of population, and by the numerus clausus system, which regulates access to medical training.

The implementation of the medical map led to a 25% reduction in the number of acute beds between 1975 and 1998. Nevertheless, the policy of restricting the number of beds rapidly proved to be ineffective, from the point of view of controlling expenditure, because it only took account of the hospital-stay function and did not account for the dynamics of technical progress, which led to a greater number of staff and equipment per bed.

Introduced for medical studies in 1971, the *numérus clausus* system first began to make its effect felt on the number of graduates at the end of that decade. Since then, the growth in the number of doctors has slowed. However, the number of doctors almost trebled between 1975 and 2000, reaching a ratio of 3.3 doctors per 1000 inhabitants. Today, the total number of doctors is stabilizing and will decrease from 2010 onwards.

In order to reduce the number of doctors, a financial incentive to retire early was set up in 1988 and reinforced in 1996. Between 1996 and 1998 the incentive was fairly generous, but since 1988 the incentive has been much smaller.

Initially based on a quantitative framework, hospital sector planning

has evolved in the last ten years or so, with the establishment of regional strategic plans for organizing the provision of health care that are more qualitative in character.

Since the 1970s, measures have also been put in place to influence the behaviour of health care providers. The agreement of 1971 (see above) foresaw individual analysis of doctors' activity, based on statistical profiles. This rather crude instrument was intended more as a means of identifying cases of extreme individual behaviour than as a means of affecting the evolution of behaviour generally. More recently, developments in medical evaluation have made it possible to engage in a more qualitative approach involving the introduction of a system of guidelines for medical practice. Looking back, it is possible to note that these measures have had a significant and lasting impact on prescribing patterns, without, however, having a clear macro-economic impact.

There have been extensive attempts at price control through the negotiations held with health care professionals on the level of charges, and through administrative regulation of the price of reimbursable drugs. In terms of international comparisons, both payments to doctors and drug prices have been relatively low in France for a considerable period of time. The evolution of prices for medical services and goods has been moderate in relation to inflation in the long term; between 1978 and 2000 the consumer price index rose by 280% (210% for ambulatory treatment and 150% for pharmaceuticals). France's high volume of consumption, particularly where pharmaceuticals are concerned, may be linked to the relatively low level of prices.

As a possible solution to the price/volume dilemma, restrictive budgets were introduced in different sectors of the health care system in the 1980s and 1990s. From 1984/85 onwards, the system of funding public hospitals using a per diem rate was replaced by a system of global budgets. At the beginning of the 1990s, targets for limiting the expenditure of a whole sector were negotiated with laboratories, private for-profit hospitals and freelance nurses. In the event that these targets are

not met, corrective mechanisms, such as lowering levels of charges and claiming refunds (as penalties) from practitioners, may be applied.

Most health care professionals have remained fiercely opposed to both the principle and practice of a restrictive total framework for expenditure *ex ante*. The Juppé reform clearly included doctors among those subject to the principle of such restrictive budgets, with refunds in cases of non-compliance with budget targets. However, this latter provision has never been applied, and cases where targets have been exceeded have never given rise to refunds by doctors.

Organizational structure and management

Organizational structure of the health care system

Jurisdiction in terms of health policy and regulation of the health care system is divided between:

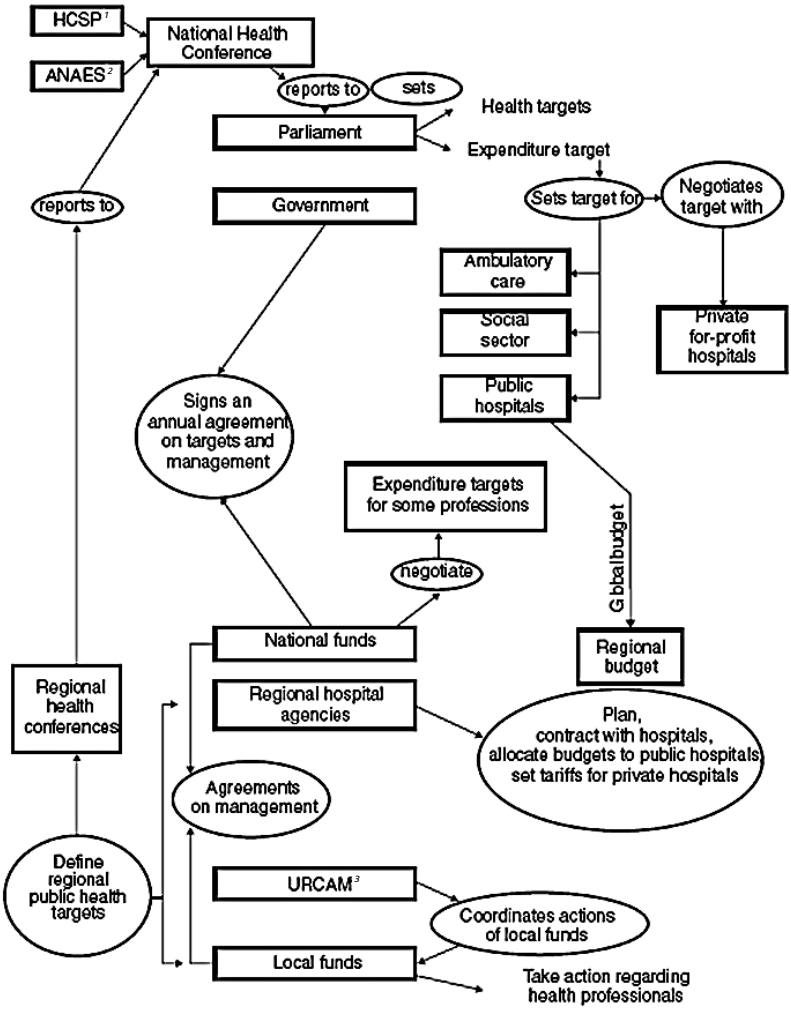
- the state: parliament, the government and various ministries
- the statutory health insurance funds
- to a lesser extent, local communities, particularly at the department level.

The institutional organization of the system was profoundly affected by the Juppé reform of 1996. In addition to introducing parliamentary control over the health care system and its resources, and attempting to clarify the respective roles of the state and the health insurance funds, the reform significantly reinforced the role of the regions, creating new institutions at the regional level (Figure 3).

The state: parliament and the government

Every year since 1996, the parliament has passed an Act on Social Security Funding based on the reports of the Accounts Commission *(Cour des Comptes)* and the National Health Conference (see below).[5]

Figure 3. Organization of the French Health Care System



1. High Level Committee on Public Health
2. National Agency for Accreditation and Evaluation of Health Care (Agence Nationale d'Accréditation et d'Evaluation en Santé)
3. Regional Unions of Insurance Funds (Unions Régionales des Caisses d'Assurance Maladie)

This act:

- sets a projected target (ceiling) for health insurance spending for the following year, known as the national ceiling for health insurance expenditure (ONDAM);
- approves a report on trends in policy for health and social security;
- contains new provisions concerning benefits and regulation.

For example, the 2001 Act improved the benefits provided by the health insurance scheme for self-employed people, aligning them with those provided by the health insurance scheme for salaried workers. It also set up specific funds for the modernization of hospitals and for developing pharmaceutical information (independently from pharmaceutical companies) for doctors. The 2002 Act has renewed an agreement between the health insurance funds and health care professionals' organizations.[6]

The Ministry of Health, which has recently been reorganized, includes the following structures:

- a general directorate of health, responsible for health policy;
- a directorate of hospital and health care, responsible for the management of resources; its scope, previously limited to hospitals, has been extended to the whole health care system;
- a directorate of social security, responsible for financial matters, and for supervising social security organizations (including the health insurance funds);
- a general directorate for social policy, which is responsible for the specifically social aspects of health care (such as care for disabled, elderly or vulnerable people).

The Ministry of Health also has external services at local level: directorates of health and social affairs in the regions and departments (DRASS and DDASS). Their operations will be described below.

The Ministry of Health controls a large part of the regulation of health

care expenditure, on the basis of the overall framework established by parliament. It is responsible for:

- dividing the budgeted expenditure between the different sectors and, where hospitals are concerned, between the different regions;
- deciding on the number of medical students to be admitted to medical school each year *(numérus clausus),* the number of hospital beds and the amount of equipment, including expensive medical technologies;
- approving the agreements signed between the health insurance funds and the unions representing self-employed health care professionals;
- setting the prices of specific medical procedures and drugs on the basis of proposals from *ad hoc* committees;
- establishing safety standards in hospitals;
- defining priority areas for national programmes; these currently include cancer, pain control and an anti-smoking campaign.

Expertise and independent authorities within the administration

During the past ten years the state has established a number of committees and agencies to fulfil specific functions.

Set up in 1991 and located within the Ministry of Health, the High Level Committee on Public Health *(Haut Comité de Santé Publique)* provides guidance and assists in decision-making regarding public health problems and issues related to the organization of health care. It undertakes regular overviews of the population's health status, prepares general analyses and forecasts of public health problems, contributes to the definition of public health objectives and makes proposals for strengthening preventive measures. It can also be consulted on specific questions concerning the organization of treatment, and in that context it can set up working groups to produce reports on issues and formulate proposals. Since the Juppé reform of 1996, the committee has prepared

an annual report for presentation to the National Health Conference and parliament.

With regard to medical safety, vigilance and warning systems, a new set of provisions has been put in place in the last few years, consisting of two agencies responsible for the safety of health products (AFSSAPS) and food products (AFSSA) and an Institute for Monitoring Public Health (InVS). Coordination of the activities of these three bodies is provided by a National Committee on Medical Safety, which brings together their respective directors under the chairmanship of the Minister of Health. More recently, in April 2001, the French Agency for Environmental and occupational Health and Safety (AFSSET) was added to this structure.

The National Agency for Accreditation and Evaluation of Health Care (ANAES) was created in 1997. Its functions are as follows:

- to elaborate and disseminate practice guidelines;
- to promote the development of clinical skills in hospitals and doctors' practices, by editing a guide and training professionals;
- to carry out an accreditation process for all hospitals (both public and private); this process is still in its infancy; by April 2002, 150 hospitals had been accredited;
- to provide guidance regarding the procedures that should be eligible for reimbursement by the health insurance funds; 381 procedures were examined when the fee schedule for physicians was recently re-organized.

ANAES is staffed by about 150 people (doctors, other health care professionals and economists etc). Its agenda is defined by a board of directors, taking into account requests from the Ministry of Health, the health insurance funds and the medical unions.

The Economic Committee for Medical Products (CEPS), an inter-ministerial committee, sets prices for drugs and medical appliances and monitors trends in spending on drugs in relation to the annual budget targets. It concludes long-term agreements with pharmaceutical firms,

incorporating provisions for controlling growth in expenditure (see the section on Pharmaceuticals).

A Technical Agency for Information on Hospital Care (ATIH) was recently set up to manage the information systematically collected from all hospital stays and used for hospital planning and financing.

A National Health Conference takes place once a year to propose priorities and suggest policy directions to the government and parliament. From 2002, the conference is also responsible for monitoring respect for patients' rights. The conference is made up of representatives from health care professionals' organizations and health care institutions. In future, patients' organizations will also be represented in the conference.

The statutory health insurance system

The three main health insurance schemes are as follows:

- The *General Scheme (Régime général)* covers employees in commerce and industry and their families (about 84% of the population) and CMU beneficiaries (estimated on 30 November 2001 to be 950 000 people or 1.6% of the population).
- The *Agricultural Scheme* (MSA) covers farmers and agricultural employees and their families (about 7.2% of the population).
- The *Scheme for the Non-Agricultural Self-Employed People* (CANAM) covers craftsmen and self-employed people, including self-employed professionals such as lawyers etc (about 5% of the population).

Other schemes cover certain categories of the population, also on a work-related basis. Several of these schemes are linked to the general scheme, as is the case for local and national civil servants, doctors working under state health agreements, students and military personnel. Others schemes (such as those for miners, employees of the national railway company, the clergy, seamen and the national bank) have their own particular form of organization and function autonomously.

Each of the three major health insurance schemes has a national health insurance fund and local structures corresponding to the degree of geographical distribution involved.

The general scheme includes:

- 129 local funds *(caisses primaires d'assurance maladie)* to affiliate members and reimburse the costs of treatment;
- 16 regional funds (covering areas that are wider than the administrative region), whose responsibilities are limited to accidents at work and work-related illnesses, and (in the area of work-related illnesses) to the control of hospitals and preventive measures;
- a national fund for the insurance of salaried employees/employed workers (CNAMTS).

Fund offices at different levels can make use of a medical service consisting of about 2500 doctors, pharmacists and dentists. This service individually monitors the insured and health care professionals to verify the validity of treatment on medical grounds; it also carries out public health programmes aimed at promoting efficient medical practice.

CNAMTS plays a supervisory role in relation to the general scheme's regional and local funds, although the latter have autonomy of management and their own boards of directors. The national, regional and local boards are made up of an equal number of representatives of employers and employees (appointed by the trade unions), between one and three representatives of the mutual insurance associations, and persons appointed by the Minister of Health.[7]

The health insurance schemes are under the supervision of the Social Security Directorate of the Ministry of Health and Social Affairs. Since 1996, they have carried out their function as managers of the statutory health insurance system within the framework of an agreement on targets and management drawn up with the state for a minimum period of three years. The national funds of the three main health insurance schemes enter into this agreement with the Ministry of Health and the

annual appendix to the agreement sets out the total target budget for the remuneration of self- employed health care professionals. The three national funds are responsible for managing this budget, known as the "allocated expenditure target" *(objectif de dépenses déléguées)*. Within this framework they negotiate with the relevant professionals to ensure that these expenditure targets are met. In practice, however, this system was only implemented for a year, in 2000. In 2001, the government and the health insurance funds did not reach an agreement on the target budget. In 2002 the target was not defined.

The national funds of the three main health insurance schemes also conclude agreements with self-employed health care professionals practising privately: general practitioners, specialists, dental surgeons, nurses, physiotherapists, biologists, midwives, speech therapists, orthoptists and ambulance personnel.[8] These agreements concern the conditions and level of charges for treatment. Currently, they apply to all the professions, with the exception of specialists, who have not been able to reach an agreement with the health insurance funds. In the meantime, minimal regulatory conditions set by the Ministry of Health apply to specialists.

The scheme for self-employed people consists of regional funds and professional funds, comprising 31 bodies in all. Individuals can choose to be insured with any body listed that has an agreement with the regional fund and is authorized to receive contributions and reimburse treatment.

Wage-earners and self-employed people within the agricultural sector are insured by the agricultural scheme, which is organized on the basis of fund offices in the different departments, although funds tend to be grouped together on a wider geographical basis.

Most of the bodies concerned with health insurance have the legal status of private enterprises.

Institutions at the regional level

A process of regionalizing the organization and management of the French health care system began in the early 1990s. In the first instance, this process was based on the directorates of health and social affairs in the regions (DRASS), which were given increasing responsibilities for hospital planning and budget allocations to hospitals. Later, in 1993 and 1996, new institutions were set up. Today, the regional structure is as follows:

The regional hospital agencies (ARH) are responsible for hospital planning (for both public and private hospitals), financial allocation to public hospitals and adjustment of tariffs for private for-profit hospitals (within the framework of national agreements). They bring together, at the regional level, the health services of the state and health insurance funds, which previously shared management of this sector. ARH directors are appointed by the Council of Ministers and are directly responsible to the Minister of Health.

The regional unions of the health insurance funds (URCAMs) bring together the three main health insurance schemes at the regional level. They coordinate the work of the funds and give impetus to a regional policy of risk management. In relation to the ARHs, whose role is operational, their function is more to influence and stimulate, and they do not have authority over the regional and local funds.

Regional unions of self-employed doctors (URMLs) carry out functions in the following areas: analyses and studies regarding the functioning of the health care system, private medical practice, epidemiology and the evaluation of health care needs; coordination with other health care professionals; providing information and training for doctors and patients. These unions engage in dialogue with the ARHs and the URCAMs.

The regional health conferences bring together all the regional actors—institutions, health care professionals and patients—and are responsible for assessing regional health needs and setting regional priorities for public health. They prepare a report for the national health

conference each year.

In principle, the regional level is now structured in such as way as to give it the capacity to direct the health care system in a strategic way and to manage it coherently. The 2001 Social Security Funding Act reinforced this trend by providing ARHs with a mandate to authorize experiments to set up networks of health care providers.

Institutions at the department level

At the department level, several health and social services come under the jurisdiction of the general councils.[9] These include:

- institutions and services for elderly people and disabled people; non-medical facilities come under the authority of the general councils, who supervise them and finance them through social assistance budgets; facilities combining social and medical services come under the joint supervision of the state and the general councils;
- social welfare and work programmes responsible for the financial support of low-income elderly and disabled people in institutions and for financing assistance in the home;
- protection of children, particularly through the management of maternal and child health centres, which offer consultations and free health care;
- prevention of certain diseases, such as tuberculosis, sexually transmitted diseases and cancer;
- municipalities also have a public health and hygiene role (environmental health, sanitation, etc.).

Professional organizations

There are two types of professional organizations:

Professional associations for doctors, pharmacists, dentists and midwives are concerned with medical ethics and the supervision of professional practice. *Trade unions* look after the interests of different professional groups. Union representation is very fragmented, not only due to the existence of

different professions, but also as a result of differences in status, for example between salaried and self-employed professionals. Furthermore, health care professionals can often choose from more than one union. There are six unions for self-employed doctors that are considered to be representative and competent to sign agreements with the health insurance funds. Several unions represent both general practitioners and specialists: the Confederation of French Medical Unions (CSMF), the Union of Self-Employed Doctors (SML) and the Federation of Doctors in France (FMF). Other unions are more specific, such as the Union of French Surgeons and Specialists (UCCSF) and the French Federation of General Practitioners (MG France). In spite of this diversity, only 29% of general practitioners are union members. Fragmentation of professional representation is not exclusive to doctors. The 4000 private laboratories that carry out analyses for outpatients have no fewer than four representative organizations, resulting mainly from divisions between representatives of large laboratories and the champions of small local units. The organizations representing self-employed professionals negotiate with the health insurance funds and the Ministry of Health on conditions of practice, particularly those conditions relating to payment.

Since 1994, the regional unions of self-employed doctors (URMLs), elected on the basis of union lists, have had the task of analyzing the functioning of the health care system, evaluating needs, coordinating training and providing information for doctors and health care users. These unions are funded by specific contributions from doctors.

Hospitals are represented by different organizations, depending on their status.

Finally, pharmaceutical manufacturers and producers of medical devices (equipment, artificial limbs, prostheses etc) each have their own unions.

Health care users

In recent years, the search for ways to take more account of health care

users' expectations has been an important issue of public debate. The activities of certain patients' associations have been a factor in this development. The AIDS epidemic was the source of a transformation in the types of action used by associations concerned with health care. Having achieved visibility through public interventions, these associations are no longer restricted to their traditional role (patient support, fund-raising to finance research), but seek to influence the direction of research and enforce the concept of the patient as an active agent in his or her own health care.

Alongside the strengthening of these patients' associations, there also has been a reinforcement of general-purpose organizations, such as consumers' associations.

Recently, associations related to health care have regrouped to form a collective unit (CISS), thereby increasing pressure to accommodate the interests of health care users. Legislation enacted in March 2002 reinforced the role of these associations.

PLANNING, REGULATION AND MANAGEMENT

Physical resources

Resource planning involves both human and material resources. The numbers of doctors, and to some extent their areas of specialization, are regulated by the *numérus clausus,* which controls access to the second year of study in medical schools. This *numérus clausus,* fixed at national level, is then applied at regional level, taking into account current inequalities in the geographical distribution of doctors (the density of doctors varies from 1 to 1.7) and attempting to correct any imbalance by adjusting the flow of training.

The distinction between specialists and general practitioners is determined by the number of posts open for the entrance examination for hospital work *(concours d'internat),* which provides access to

different areas of specialization. These posts are divided into the main branches (medicine, surgery, psychiatry, biology and public health), but until recently there was no system of regulation by specialty within medicine and surgery, so choice of specialty was dependent on vacant hospital training posts and students' preferences. In recent years, the lack of interest in certain specialties (anaesthesiology, intensive care, gynaecology and obstetrics and paediatrics) has led the government to reserve a number of places for these specialties in the entrance exams.

Today, the *numérus clausus* policy has resulted in an overall stabilization of the number of doctors, which will be followed by a notable decrease in numbers in the next few years. Regional disparities have diminished slightly over the last thirty years (the gap between regions has been reduced from 2.1 to 1.7). The ratio of specialists to general practitioners is the subject of much debate in France; in the past there has been a tendency towards increasing specialization. Self-employed doctors are free to work wherever they like, whereas hospital work is dependent on posts offered by institutions. There is also a *numérus clausus* limiting the number of students trained as other professionals, such as nurses, physiotherapists, etc.

Until 2003, hospital planning involved a combination of two tools: the medical map as a quantitative tool and the Regional Strategic Health Plan (SROS) as a more qualitative tool. The medical map divided each region into health care sectors and psychiatric sectors. No health care sector could have less than 200 000 inhabitants, unless it consisted of an entire department.

Within the health care sectors or groups of sectors, the director of the ARH decides on the quantitative norms, in terms of bed/population ratios, for each discipline: medicine, surgery, obstetrics, psychiatry, follow-up care and rehabilitation and long-term care. All proposals for establishing new beds or changing the use of existing ones, whether in public or in private hospitals, are subject to authorization by the ARH, granted until 2003 in accordance with the norms set out in the medical

map. In practice, today, most sectors are considered to be in excess of the targets set and authorizations essentially involve restructuring, conversions or mergers.

The medical map also applied to certain expensive diagnostic or treatment equipment, either in hospitals or elsewhere, such as dialysis apparatus, radiotherapy equipment, magnetic resonance imaging (MRI), scanners and lithotripters. In certain cases, norms for assessing needs had been specified, but in others authorizations were granted on the basis of a case-by-case evaluation of local needs.

For the past ten years or so, authorization from the Ministry of Health has also been required for certain very specialized types of care, such as organ transplantation, treatment of major burns, cardiac surgery, neurosurgery and medically assisted reproduction, or for more common procedures, such as the treatment of emergency cases, resuscitation and radiotherapy. The fact that authorization is now required not just for equipment, but also for certain treatment, indicates a change in hospital planning from quantitative quotas towards a more qualitative and medicalized approach to the organization of the supply of services.

In 2003 the government decided to abandon the medical map and to integrate all planning tools into the SROS, which can be considered as the instrument of a qualitative approach. It sets out the goals for the development of regional provision over a five-year period, in areas corresponding to national or regional priorities. The SROSs defined for the 1999-2004 period were all concerned with the provision of emergency care, perinatal care and cancer. The focus on these three areas illustrates a recent trend in hospital policy—to promote networks of hospitals within a region, in which each hospital cooperates to provide care at the level most appropriate to its technical capacity. Overall, the network will be able to provide a comprehensive range of care, but individual hospitals will be responsible for more or less serious cases.

For perinatal care, all hospitals are classified in four levels, from the

small local facility providing prenatal and postnatal consultations to highly specialized centres capable of providing intensive neonatal care.

For emergency care, only a few hospitals within each region have fully equipped emergency units. Smaller hospitals have basic emergency units. Hospitals enter into contracts with each other to enforce their cooperation (including, for example, the possibility of using a rotation of emergency staff in less busy locations).

Cancer treatment is another area in which cooperation between public and private hospitals is promoted as a means of ensuring that a full range of care is available to patients regardless of their point of entry into the system. Three levels are defined: proximity care, hospitals providing cancer treatment and referral centres.

Apart from these three areas, which are covered in all regions, each region has chosen specific issues, such as follow-up care and rehabilitation, palliative care, suicide, cardiovascular diseases, chronic renal failure and the development of outpatient or day care surgery.

The SROS for each health care area sets up objectives to improve the organization of care and proposes the development of activities, restructuring and cooperative measures.[10] It also provides the ARHs with a framework for granting authorizations, approving proposals submitted by institutions and negotiating the contracts that ARHs must enter into with every hospital in the region—whether public, private non-profit or private for-profit.

ARH contracts with public hospitals set out goals and commitments for the hospital for three to five years. Some commitments relate to the provision of medical services, which should be consistent with the SROS, but they may also concern the quality of care, information systems, management efficiency, etc. The contract determines the way in which hospital projects will be funded. If the hospital is not considered efficient enough, it will have to generate resources by increasing its productivity; if it is considered to be very efficient, it will be allocated additional resources by the ARH.

There are no national standards for these contracts and their content can vary. For example, in some regions the financial implications of the contract (such as the additional resources that will be made available for hospital projects) are clearly specified, whereas in other regions contracts contain only general indications. The contract process itself proceeds at a variable pace. In some regions, contracts have been concluded with all hospitals, while other regions had still not begun the process by June 2001.

The scope of the contracts with private for-profit hospitals is more limited; basically, these are standard contracts whose main objective is to fix tariffs.

Financial regulation and management

For a long time, financial regulation was restricted to the control of prices and tariffs, both those negotiated by agreement between professionals and health insurance funds in the framework of private practice and those determined administratively (such as drugs and per diem rates in hospitals). It has gradually been extended to include budget setting and budget targets (ceilings) to limit expenditure, at the level of the individual institution (public hospitals), the sector (private for-profit hospitals) or the wider interest group (fees of health care professionals working in private practice). Since 1996, these targets have been subordinate to the national ceiling for health insurance expenditure (ONDAM), voted each year by parliament.

Setting prices and charges

Regulation by setting prices and charges is linked to the forms of payment for different medical goods and services. At this level it is important to distinguish between the approved or official rates and the fees actually charged. The official rates provide a basis for reimbursement by the health insurance funds, whilst the fees actually charged may, in certain cases, be higher. Regulation affects the former.

Setting rates for treatment carried out by self-employed health care professionals relies on two instruments:

- official schedules *(nomenclatures)* organizing authorized procedures into a relative hierarchy and attributing to them a coefficient with respect to a unit of measurement, known as a "key letter;"
- setting the unit charge for key letters.

The technical services of CNAMTS prepare schedule revisions, but each revision has to be approved by the Minister of Health. The unit value of the key-letters is decided by agreements between the health insurance funds and the trade unions, which make provision for the terms and conditions of increases over a period of five years.

Rates charged by private for-profit hospitals—in addition to doctors' fees—are a national and regional matter:[11]

- at national level, an agreement between the state and the private hospitals' associations sets an average figure for increases in rates by group of specialties, both at national and regional level;
- the figures for increases are then adjusted for each hospital within the region, in accordance with an agreement negotiated between the regional hospital agencies and the hospitals' representatives at regional level (this adjustment takes place within the limits of a range determined at national level).

The daily hospitalization charges for public hospitals are the result of a balancing calculation made when the general hospital budget was fixed. They are not, strictly speaking, "set".

Overall financial framework

Each year since 1996, parliament has voted on a national ceiling for health insurance expenditure (ONDAM) for the year to come, in the context of the debate on the Social Security Funding Act. Although expenditure frameworks existed in different health care sectors before

the creation of the ONDAM, now they should be consistent with the ONDAM.

Within the ONDAM, a separate budget is defined for public hospitals. It is then divided between regions by the Ministry of Health, and the ARH allocates individual budgets to each hospital in the framework of regional resource allocation.

Expenditure in private for-profit hospitals is subject, at the national level, to an annual maximum target set by the Minister of Health (and no longer negotiated, as it was before 2000). In the event of overspending, the state and the private hospitals negotiate measures to redress the situation, usually by lowering rates. If agreement cannot be reached, the state takes unilateral decisions. These measures take effect at the national level, but since 2000 adjustments can be made at the regional level.

Finally, the ONDAM also concerns outpatient expenditure. Under this expenditure category, a sub-category encompassing the fees of self-employed health care professionals is, in theory, isolated under the heading 'allocated expenditure target' *(objectif de dépenses déléguées)* and managed by the health insurance funds. In practice, however, as noted above, this delegation of responsibility was only effective in 2000. Nevertheless, the fees charged by self-employed health care professionals are subject to a target ceiling for most of these professionals.

Regulation of professional practice and the quality of care

There are several bodies and levels of decision-making in the regulation of professional practice. Doctors, dental surgeons and pharmacists are self-regulating through their professional organizations at national and department level, in terms of professional ethics and the right to practise.

The Minister of Health stipulates norms for hospital care, while compliance is monitored by doctors at regional and department levels, and by the medical service of the health insurance funds.

Institutions and health care professionals can also be involved in the procedures for quality control recently set up by ANAES, including the (compulsory) accreditation of public or private hospitals and the (voluntary) audit of self-employed professionals.

ANAES also prepares practice guidelines that are issued to the entire medical profession, most of which are voluntary in nature (see the section on Health care delivery system).

Recently, two sets of recommendations (for diabetes and hypertension) were used by the medical service of the main health insurance scheme to establish a diagnostic on the quality of outpatient care for these two conditions and to undertake action to improve medical practice. However, there is no systematic evaluation at the level of the individual health care professional, and malpractice giving rise to patients' complaints are dealt with by professional associations and the courts.

Notes

1. The maps presented in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the European Observatory on Health Systems and Policies or its partners concerning the legal status of any country, territory, city or area or of its authorities or concerning the delimitations of its frontiers or boundaries.
2. This term is applied to all municipalities, irrespective of the size of their population (80% of them have fewer than 1000 inhabitants), which is why there are so many municipalities in France compared to many other European countries.
3 Based on an arrangement inherited from the principle of aid to the poor, which applied before the establishment of statutory health insurance.
4. For example, doctors' payroll contributions are paid by health insurance funds.
5. The Accounts Commission is an independent body responsible for monitoring state and social security bodies to ensure adequate control over and proper use of public funds.
6. This replaces an earlier agreement that was originally deemed illegal by the courts.
7. The CNAMTS' Board of Directors comprises 33 members: 13 representing employers, 13 representing salaried workers, 3 representing the mutual insurance associations and 4 people appointed by the Ministry of Health. For the regional offices, the respective figures are 8, 8, 1 and 4 and for local offices 8, 8, 2 and 4.
8. These professionals deal with visual rehabilitation.
9. General Councils are elected bodies funded through local taxes and subsidies from central government.
10. By the end of 2001, more than 300 actions aimed at merging or closing hospitals and hospital wards or reorienting them towards new activities (for example, from acute care to rehabilitation) had taken place across the country.
11. Unlike the unit rates applied to self-employed health care professionals, the rates applied to private for-profit hospitals are not uniform across the country. In fact, there are important variations resulting from a previous period of decentralized management by the regional health insurance funds (CRAMs). Regional variations have been progressively reduced by a policy of national harmonization, although they have not yet been eliminated.

8. Health Care under French National Health Insurance: A public-private mix, low prices and high volumes

Victor G. Rodwin and Simone Sandier

French national health insurance (NHI) provides universal coverage and high levels of service provision to a population that is, on average, older than that of the United States.[1] There are no queues for tertiary hospital services, no "patient dumping" arising from financial barriers to care and no public complaints about health care rationing. What is more, France spends 9.1 percent of its gross domestic product (GDP) on health care compared to 13.4 percent in the United States.[2] Despite these impressive features of French NHI, there are also flaws. But the French health system is a model no less worthy of study than the British, Canadian, or German systems.

Several salient features of the French health care system—the dominance of office-based private practice (*la médecine libérale*) for ambulatory care, the mix of public and private hospitals, the wide spread use of cost-sharing, the predominant practice of direct payment from patient

to doctor and the reliance upon financing derived from payroll taxes—resemble elements of the American health system. These points of convergence make French NHI especially relevant to Americans interested in learning from abroad. This is all the more true given the current prospects for health care reform and the interest in proposals for employer-financed NHI.

Overview of the French health care system

The French health care system is characterized by a powerful government role in assuring universal coverage and regulating the health system, *la médecine libérale* and cost sharing, and a public private mix in the financing, as well as in the provision of services. These distinguishing characteristics are grounded in three guiding principles: solidarity, liberalism and pluralism.[3] The commitment to universal coverage rests on the principle of solidarity—the notion that there should be mutual aid and cooperation between sick and well, active and inactive and that health insurance payroll taxes be calculated on the basis of ability to pay, not actuarial risk. In France, however, the commitment to universal coverage goes beyond the financing of NHI and includes the management of a national network of public hospitals, public health programs, and a small number of publicly financed health centers.

The attachment to *la médecine libérale* and to cost sharing rests on the principle of liberalism—the notion that there should be freedom of choice for physicians and patients and some direct responsibility for payment by patients. The enduring ideals behind *la médecine libérale,* first formulated in 1928 by the principal physician trade union, specified that physicians should be free to practice on a fee-for-service basis, that patients should be free to choose their physicians (and vice versa), that physicians should be assured clinical autonomy, that professional confidentiality should be respected and that there should be direct

payment between patients and doctors in private practice.

Finally, the public-private mix in the financing and provision of health care, in France, rests on the principle of pluralism—the tolerance of some organizational diversity, whether it be complementary, or competitive, or both. With respect to financing, pluralism justifies the co-existence of multiple statutory health insurance schemes, complementary private health insurance coverage and significant cost-sharing directly by patients. With respect to the provision of health services, pluralism justifies the co-existence of public and private hospitals, office-based private practice as well as public ambulatory care.

Medical Care Organization

The French have access to health services ranging from those of general practitioners in solo practice to the most sophisticated hi tech procedures in public teaching hospitals. In contrast to hospital services where the public sector is dominant, in ambulatory care, even more than in the United States, health services are organized around office-based fee-for-service practice.

Ambulatory Care: In France, there are more physicians than in the United States and they are less specialized (Exhibit 1). Although physicians in general and family practice, in the United States, represent only 16 percent of physicians in office-based private practice, in France they make up 53 percent.[4]

Aside from physicians, nurses, physical therapists, speech therapists and a range of other professionals contribute to the provision of ambulatory care, mostly upon referral and mostly in private practice. Also, in contrast to the United States where many simple laboratory tests are performed in the doctor's office, in France, laboratory tests ordered by all office-based private practitioners, and many hospital based physicians, are performed in independant laboratories. Pharmaceutical products other than those intended for hospital patients are purchased almost

exclusively in private pharmacies whose location and prices are regulated by the Ministry of Health.

Apart from the private sector in ambulatory care, there are health centers located mostly in large cities where general practitioners and specialists work on a part time basis for sessional fees.[5] Also, there is a network of centers for health check ups and occupational health services, in enterprises, that oversee roughly ten million salaried workers.[6]

Exhibit 1. Health Care Resources and Utilization: France and United States, 1989-1991

Resources	France	United States
Active physicians per thousand	2.6[a]	2.19[b]
Active physicians in private, office-based practice	1.89[a]	1.44[b]
General/family practice	52.9%	16.0%
Obstetricians, pediatricians, and internists	8.5	30.6
Other specialists	37.6	53.4
Total inpatient hospital beds	9.1[a]	4.9[b]
Short-stay hospital beds per thousand	5.1[a]	4.2[b]
Public beds	62.7%	24.8%
Private beds	37.3	75.2
Proprietary beds as percent of private	68.3	13.4
Nonprofit beds as percent of private	31.7	90.8
Utilization		
Physician visits per capita	8.3	5.5
Specialist visits per capita	3.4	3.85
Hospital days per capita	2.8	1.2
Short-stay hospital days per capita	1.4	0.8
Admission rate for all inpatient hospiral services	23.1%	13.4%
Admission rate for short-stay hospital services	20.8%	12.4%[c]
Average length-of-stay for all inpatient hospital services (days)	12.3	8.3
Average length-of-stay in short-stay beds (days)	7.0	6.4[c]

Sources: French data are from ECO-SANTE France, version 3 (Paris: CREDES. 1991): U.S. data are from Health, United States. 1991.
a 1991. b 1989. c 1991. National Center for Health Statistics, National Hospital Discharge Survey. Advance Data from Vital and Health Statistics (3 March 1993).

A noteworthy public health program, since 1945, is the French system of maternal and infant health services. About 10 percent of all prenatal consultations are actually provided through this public health program. But since French family allowances for each new pregnancy ($150 a month) are contingent on seven prenatal examinations, and payment begins in the fifth month of pregnancy, virtually all pregnant women consult a general practitioner or an obstetrician, most often in private practice (for 75 percent of the population) or in hospital based outpatient consultations (for 15 percent of the population).[7]

Hospital Care: French public and private hospitals differ along such dimensions as: mission, technical level of medical services, patient clientele, mode of reimbursement under NHI and managerial autonomy. For example, teaching and research are the domain of regional public hospitals (*Centres Hospitaliers Régionaux*-CHR) that are affiliated with medical schools. Public hospitals are obligated to accept all patients and to provide for emergency care. Although public and private hospitals serve a cross section of the population—rich and poor alike—the poor are more likely to receive care in public hospitals.

As with physicians, there are also more hospital beds, per capita, in France than in the United States.[8] In contrast to the United States where most short-stay hospital beds are in the private non-profit sector, in France most short-stay hospital beds are in public institutions and of the remaining beds in private hospitals most are in for-profit doctors' hospitals known as *cliniques* (Exhibit 1).[9]

Public hospitals include general and specialized hospitals of variable size ranging from 29 regional medical centers dedicated to medical education and research, which have a virtual monopoly over highly specialized "tertiary-level" hospitals, to smaller local hospitals. All of these hospitals are managed by a board of directors that includes the mayor and other local representatives. The director, however, is appointed by the Ministry of Health, in Paris, and appointment of all medical staff, as

well as all significant capital investments, are subject to strict ministerial supervision.[10]

The private sector, with 37.3 percent of all short-stay hospital beds, in France, has half of all surgical beds, 28 percent of all psychiatric beds and only 21 percent of all medical beds. The private non-profit sector has over two thirds of all private long term care beds. *Cliniques* are typically smaller than public hospitals.[11] They have traditionally emphasized elective surgery and obstetrics and left more complex cases to the public sector. With less than 20 percent of all acute beds—public and private combined—the *cliniques* are responsible for 31 percent of all admissions, of which one half are for surgery and 33 percent for obstetrics.[12] However, over the past five years, there have been a number of mergers and some *cliniques* have begun to develop a capacity for cardiac surgery and radiation therapy.[13]

The ratio of non physician personnel per bed is higher in public hospitals (1.8) than in private hospitals (1.2) and, in the aggregate, 40 percent less than in American hospitals (1.6 versus 2.7).[14] This striking difference in hospital staffing may reflect a more technical and intense level of servicing in American hospitals.[15] But largely it reflects differences between a NHI system and the American system of health care organization and financing, characterized by high levels of administrative and clerical personnel whose main tasks focus around billing multiple payers, documenting all medical procedures performed and handling risk management and quality assurance activities—functions that are only barely performed by most French hospital personnel.[16]

In summary, the number of physicians, hospital beds and hospital personnel is higher in France than in the United States. But the technical level appears higher in the United States where the proportion of specialists in ambulatory care and the density of staffing in hospitals are higher than in France.

National Health Insurance (NHI)

Evolution and Organization: French NHI has expanded from an initial program, enacted in 1928, to the Social Security Ordinance of 1945, which covered salaried workers in industry and commerce and called for universal coverage. The process of expansion, however, took thirty years to complete. [17] NHI was progressively expanded to include farmers in 1961, the self-employed in 1966-1970 and all remaining uncovered groups in 1978.[18]

In contrast to the United States, with its three principal public health insurance programs (Medicare, Medicaid and CHAMPUS), and over a thousand private insurers each following different underwriting, benefits and reimbursement policies, the French active population is covered by statutory, occupation-based, NHI schemes that are part of the social security system.[19] All dependents are automatically covered as are the unemployed and the retired. The NHI funds are organized into regional and local funds, all of which are, in French administrative law, private organizations charged with the provision of a public service. However, since their total annual expenditure exceeds that of the government's budget, the NHI funds are closely supervised by the Ministry of Social Affairs, as well as the Ministry of Finance, and are therefore, in practice, quasi public organizations. Health insurance premiums (payroll tax rates) are set by the government as are the range of benefits, which are, with minor exceptions, uniform across NHI schemes. In addition, the central government oversees a process of national negotiations between the three principal NHI funds and representatives of health care providers. It thereby assures that all providers are subject to uniform reimbursement policies irrespective of the schemes under which their patients are covered.

Eighty percent of the population—mostly salaried workers and their dependents—are covered under the General NHI Scheme which is managed by the principal NHI fund, the *Caisse Nationale d'Assurance Maladie des Travailleurs Salariés* (CNAMTS). Nine percent of the population—mostly farmers, their salaried workers, as well as

management and administrative personnel in agriculture and all of their dependents—are covered by two health insurance schemes, both managed by the *Mutualité Sociale Agricole* (MSA).[20] Six percent of the population—the self-employed—are covered by a fourth scheme managed by the *Caisse Nationale d'Assurance Maladie et Maternité des Travailleurs non Salariés des Professions non Agricoles* (CANAM). The remaining 5 percent of the insured population and their dependents—miners, railway workers, subway workers, notary publics, the clergy, artists and others—are covered under eleven smaller schemes, each with their inherited and well defended entitlements.

French NHI provides virtually universal coverage of the population and financial coverage for comprehensive services ranging from inpatient hospital care to outpatient care services, maternity care, prescription drugs (including homeopathic products), thermal cures in spas, long-term care, cash benefits, and to a lesser extent, dental and vision care. However, there remain small differences in benefits between occupational groups. The self employed pay higher copayments for ambulatory care and some of the smaller schemes, e.g. railway workers or miners, require lower copayments or provide services directly to their beneficiaries. The smaller funds with older, higher risk populations are subsidized by the CNAMTS as well as the government.[21]

Benefits Coverage and Patient Reimbursement: In France, there are no restrictions on provider choice—no preferred provider organizations (PPOs), no gate keeper functions for primary care physicians, and no limits to the quantity of services covered under NHI. As a general rule, patients, in France, pay the full fees directly to health care providers and subsequently obtain partial, or more rarely full reimbursement from their health insurance funds.[22] The amounts reimbursed to patients, under French NHI, are calculated on the basis of negotiated rates minus a copayment, depending on the kind of service.[23] The charges borne by the patient, however, may differ from the copayments. It is important

to emphasize that close to one third of French physicians have opted to charge fees in excess of the nationally negotiated charges. Also, there are exceptions to the rules both about direct payment and copayments.[24]

Health Care Financing: To finance the benefits under French NHI, for the eighty percent of the population covered by the CNAMTS, employers pay 12.8 percent of the wage bill and employees pay 6.9 percent of their full salary, bringing the total payroll tax for health insurance to 19.7 percent of all wages.[25]

The funds raised by mandatory payroll taxes finance 74 percent of personal health expenditures in France (Exhibit 2). The remainder is financed by the central government, by patient out-of-pocket payments

Exhibit 2. Personal Health Care Expenditures, by Type of Care and Source of Funds as a Percentage of Total Spending, France and United States, 1990

	France				United States		
Type of care	NHF[a]	Government	Private insurance	out of pocket	Government	Private insurance	out of pocket
Hospital care	89.2%	1.5%	1.9%	7.4%	54.6%	34.9%	5.0%
Physician services	62.1	1.0	8.6	28.3	34.1	46.3	18.7
Dental services	35.9	0.2	10.4	53.5	2.6	44.4	52.9
Pharmaceuticals	60.1	0.8	12.1	27.0	11.2	15.2	73.6
Total personal health care	74.0	1.1	6.1	18.8	41.3	31.8	23.3

Sources: French data are from ECO-SANTE France, version 3 (Paris: CREDES, 1991); U.S. data are from K. Levit et al., "National Health Expenditures, 1990," Health Care Financing Review (Fall 1991): 52.

Notes: Percentages do not always add to 100 since there are other minor sources of funds (for example, philanthropic sources) that are not displayed in the exhibit. "Government" includes state and local authorities; "private insurance" includes mutuelles, which are private, not-for-profit insurers. French out-of-pocket spending amounts include payments by private complementary insurers amounting to 2-3 percent of total personal health care expenditures, but the breakdown by type is not known. Thus, strictly speaking, direct out-of-pocket payments more likely represent 16 percent rather than 18.8 percent of total personal health care expenditures, while private insurance funding is closer to 9 percent of total personal health care expenditures.
a National health insurance.

and by an elaborate range of private insurance schemes offering complementary insurance coverage. Eighty-four percent of the French population have private complementary health insurance coverage by commercial or nonprofit (mutual aid society) insurers.[26] Paradoxically, despite universal coverage in France, although aggregate out of pocket payments are l6 percent in comparison to 23.3 percent in the United States, for specific categories, e.g. hospital and physicians' services, the percent of out of pocket payments is actually higher in France than in the United States (Exhibit 2).[27] But in contrast, for prescription drugs, the share of out-of-pocket payments in the United States far exceeds those in France.

Provider Payment: French physicians and other health professionals in private practice are paid directly by patients on a fee-for-service basis. *Cliniques* are still reimbursed on the basis of nationally negotiated daily fees and charges.[28] Public hospitals receive annual operating budgets, and unit prices for prescription drugs are set by an interministerial commission.

The charges for services provided by health professionals—whether in office-based private practice, in outpatient services of public hospitals or in private hospitals—are negotiated every year within the framework of national agreements concluded between representatives of the health professions—physicians, private duty nurses, dentists, physical therapists—and the three principal health insurance funds.[29] These agreements establish the terms of payment according to a fee schedule.[30] The process of updating the relative value scale (RVS) to account for new procedures, changing technologies and their effects on the costs of production is also the result of negotiations between the health professions, the NHI funds and the government. The assignment of values (in current prices) is the object of even more heated negotiations which have been at the center of the government's frustrated efforts to control the growth of health care expenditures.

Once negotiated, the charges must be respected by all physicians

except for the one-third who have either chosen or have earned the right to engage in extra billing.[31]

The payment of hospital care is different for private and public facilities. *Cliniques,* as well as private nonprofit hospitals are reimbursed directly by the NHI funds on the basis of a negotiated daily charge and a fee schedule for hospital-specific charges for such services as the use of an operating room. The remaining balance—a 20 percent copayment for the daily charge—is recovered directly by cliniques from patients. Physicians in *cliniques,* as in private practice, typically bill their patients directly, who are, in turn, reimbursed according to the charges of the national fee schedule.

Public hospitals, since l985, are paid for their operating expenditures, in monthly installments, on the basis of prospectively set operating budgets.[32] The amount of the budget is set by the Ministry of Health.[33] It is paid, however, by the NHI funds in proportion to the number of hospital bed days of their beneficiaries and, to a much smaller extent, by income derived from daily charges and copayments.[34] All physicians in public hospitals are compensated on the basis of salary payment and sessional fees.[35] In addition, for service chiefs, there is an option to engage in limited private practice within the public hospital.

The prices for prescription drugs allowable for reimbursement, under French NHI, are set by a National Commission that includes representatives from the Ministries of Health, Finance and Industry. The Commission sets prices for specific doses and unit packages taking into account analogous drugs already on the market. For truly innovative products, prices are set in relation to the costs of production, including research costs and an evaluation of therapeutic value.

Health Care Services: Prices, Utilization and Expenditures

Existing data—whether they come from surveys or are byproducts of the administrative system—consistently indicate that the French, in comparison to Americans, consult their doctors more often, are admitted

to the hospital more often and purchase more prescription drugs. Yet health expenditures, per capita, are lower in France since the average prices of physicians' services, prescription drugs and hospital services are significantly lower than in the United States.

Prices

Despite the difficulties of comparing prices for goods and services that are not identical, there is much evidence that the average prices of physicians' services, hospital services and prescription drugs are lower, in France, than in the United States.[36]

Since May of 1992, for example, the average charges for an office visit to a French general practitioner (GP) and specialist are $18 and $25, in contrast to the average price of $42 for an office visit to an American GP.[37] The comparison of physicians' incomes in France and the United States provides further supporting evidence to the relative lowness of French medical prices. In 1990, the average net income, before taxes, of French physicians in private practice ($69,300) was 42 percent of the equivalent figure for American physicians in private practice ($164,300).[38]

While the average per diem rate for community hospitals in the United States, in l988, was estimated at $590, in France the average would be closer to $172.[39] Likewise, despite the difficulties of making price comparisons, one can estimate that French pharmaceutical prices—the lowest of all European countries—are, on average, 50 percent lower than American prices.[40]

Utilization

As in the United States, in the course of a year, 78 percent of the French consult a physician at least once, but the number of physician visits, per capita, is significantly higher in France (8.3) than in the United States (5.5).[41]

The average number of hospital days per capita is also higher in

France than in the United States: 2.8 versus 1.8 in all hospitals and 1.5 versus 0.8 in short-stay hospitals. This difference derives from the higher admission rate per 100 population in France (21%) than in the United States (12.4%). The average length of stay in acute hospitals is only slightly higher in France (7 days) than in the United States (6.4 days).[42]

For drugs, the consumption disparities between France and the United States are even wider. One study indicated that, on average, the French consume twice as many drugs per capita as Americans. French physicians prescribe drugs more often (for 75 percent of their consultations) than American physicians (for 60 percent of their consultations) and order twice as many different drug products per prescription (an average of 3.2 versus 1.8).[43]

Expenditures

Despite their low average prices for medical goods and services, since the French are high users of physicians' services, hospitals and prescription drugs, they spend more for their health care than most of their European neighbors.[44] Yet comparative analysis of health expenditures among OECD nations indicates that per capita spending on personal health care, in France ($1,650), is 43 percent less than that in the United States ($2,867).[45]

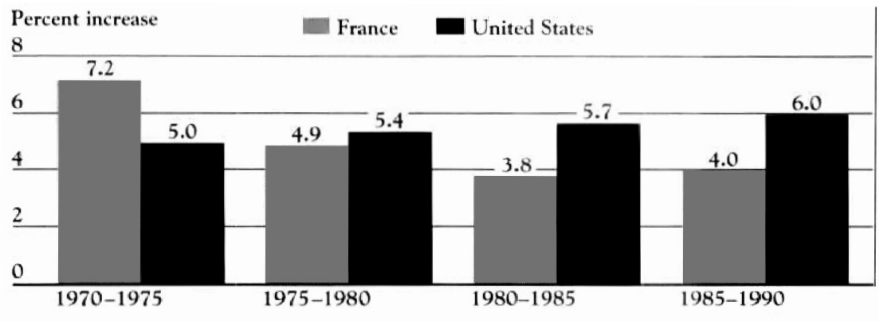
Assessment of the French model

The French model of health care organization and NHI has not spared French policymakers from tackling the problems faced by their American counterparts: cost control and inequalities in health. But in terms of basic outcome and performance criteria, the French model appears strong when compared to the United States.

Cost Control

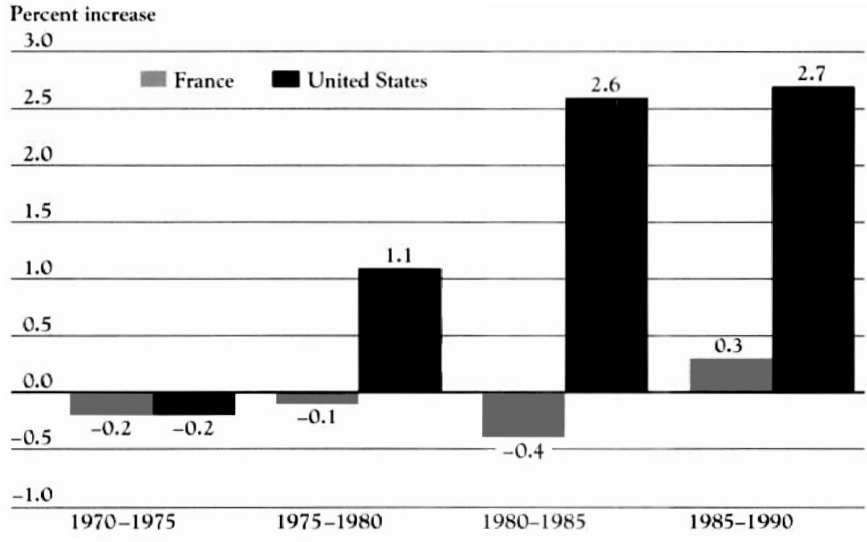
During the second half of the 1970s, the slow down in the general economy and the problems of financing NHI and the rest of the social security system led the government to impose stringent measures to contain the rate of increase of health care costs. These measures aimed to control the medium-term growth of NHI expenditures by influencing the supply as well as the demand for health services. Their probable effects may be examined by analyzing the evolution of health care expenditures between 1970-1990.

Exhibit 3. Average Annual Rates of Increase in Health Spending, Deflated by Consumer Price Index (CPI): France and United States, 1970-1990



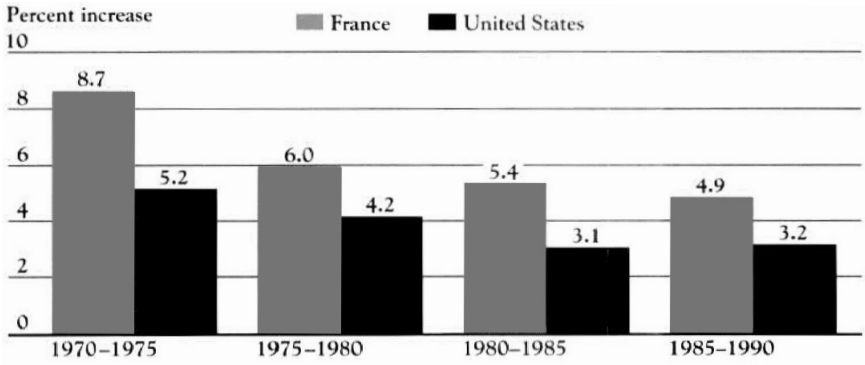
Source: Organization for Economic Cooperation and Development (OECD) Health Data, 1991.

Exhibit 4. Average Annual Rates of Increase in Medical-Specific Inflation: France and United States, 1970-1990



Source: Organization for Economic Cooperation and Development (OECD) Health Data, 1991.

Exhibit 5. Average Annual Rates of Increase in Volume of Health Services: France and United States, 1970-1990



Source: Organization for Economic Cooperation and Development (OECD) Health Data, 1991.

A decline in the growth of real health expenditures: In contrast to the experience of the United States, in France, the average annual rate of increase in health expenditures, deflated by the consumer price index (CPI), declined over the past two decades (Exhibit 3a). While the annual growth in real health expenditures was 7.2 percent, in France, between 1970 and 1975, it dropped to 4.0 percent between 1985 and 1990. In the United States, the equivalent rate rose from 5.0 to 6.0 percent.[46]

The control of medical inflation: The most striking contrast in the rate of health expenditure increase between France and the United States is the difference in the rates of medical specific inflation—the medical price index (MPI) deflated by the CPI (Exhibit 3b).[47] The national agreements negotiated between representatives of the medical profesion, the NHI funds and the government, in 1980 and 1985, appear to have been effective in maintaining low medical prices. The decrease in these rates, in France, between 1970 and 1985 and their low increase between 1985 and 1991 reveal the success of French NHI in keeping professional charges, daily fees and pharmaceutical prices low.

The deceleration of volume: When one examines the evolution of health expenditures deflated by the MPI (the volume of health services), there is also clear evidence of deceleration in France, although not as much as successive governments have attempted to achieve (Exhibit 3c). Despite the decelerating trend, the volume of health services, in France, has increased at higher average rates than in the United States (4.9 versus 3.2 percent between 1985 and 1990) and most other OECD countries.

As for the success of cost-control policies pursued in France, it is difficult to attribute the deceleration depicted in Exhibit 3c to the specific measures implemented because a slow but certain deceleration in volume has been documented since 1950.[48]

Policies to influence the supply of health services: One noteworthy measure to control the volume of health services, over the long run, was the imposition of a limit, since 1971, on the number of medical students admitted to the second year of medical school.[49]

The policy reflects the current climate of opinion, which assumes that there are too many physicians; yet it takes at least ten years for such a policy to have any effect. Thus, while the number of physicians, per capita, is increasing more slowly in the 1990s than in the 1980s (1.5% a year compared to 3.2%), the limit on the number of students admitted to the second year of medical school continues to decrease which may result in a physician shortage in the early years of the next century.

In the hospital sector there have been controls on construction and capital expenditures since the passage of the Hospital Law in 1970, which established hospital planning procedures and population-based service standards for the acquisition of new medical technologies. The most recent Hospital Law, passed in 1991, reinforces hospital planning and service standards to promote regionalization and controls over hospital investments.[50]

As for hospital operating expenditures, since 1979, the government reinforced its traditional price controls on daily fees in public hospitals by imposing a total expenditure ceiling for all public hospitals.

Policies to influence the demand for health services: Over the past decade, a number of measures were undertaken to increase patient out-of-pocket payments.[51] It is not possible to assess whether these measures actually contributed to restrain the use of medical care but there is no doubt that the share of patient out-of-pocket payments (including private insurance premiums) in total personal health expenditures rose from 15.6 percent in 1980 to 19.3 in 1991.[52]

Future directions in cost control: Beyond cost control measures aimed at influencing the supply and demand of health services, recent policy has aimed directly at extending the cap on public hospital expenditures to private hospitals and ambulatory care. In 1992, national agreements were concluded with representatives of cliniques, laboratories, nurses working in the private sector. These groups agreed to work within a nationally set expenditure target. As for physicians, after much handwringing

and acrimonious debate, for the first time in the history of their negotiations with the government and the NHI funds, all three physician associations have accepted the principle of an expenditure target as well as national practice guidelines that have yet to be defined!

Whether any of these agreements will actually be implemented and how remains to be seen. The concept, itself, of an expenditure target is ambiguous for physicians' services where patient out of pocket payments already finance 28.3 percent of health expenditures. Will the target apply to all health expenditures with the risk of jeopardizing access to care by all patients and restricting physicians' clinical autonomy or will it apply only to expenditures reimbursed under French NHI at the risk of reducing the level of benefits coverage and possibly increasing inequalities in access to medical care? In addition to such conceptual issues, the information requirements for identifying physicians who provide inappropriate services within the new expenditure targets, are seriously deficient in France, given the absence of reliable data on patient diagnoses and precise procedures performed.

Beyond these technical issues, there are also formidable political constraints to implementing cost control policies. Despite efforts to control the demand, as well as the supply of health services, French policymakers have encountered powerful resistance from the health professions as well as the population.

Some measures taken in the name of cost containment were subsequently retracted in response to political opposition. In 1986, for example, when Health Minister Seguin imposed copayments for high-cost illnesses that were previously exempt, the elderly were severely hit. This contributed to the fall of Prime Minister Chirac's government, in 1988, and the next government eliminated most of Seguin's measures.

Inequalities in Health

Although French NHI has effectively eliminated significant financial barriers to medical care, despite universal coverage of the population,

there remain wide disparities between social classes in patterns of medical care use and the distribution of health resources is also highly skewed in favor of urban areas and well to do regions. Moreover, as in other systems where health outcome indicators have been compared to measures of socioeconomic status, in France there are significant inequalities.[53]

With regard to patterns of use, the most well to do and educated population rely more on office-based private practice, particularly the services of specialists and dentists. The more disadvantaged groups, including laborers, make greater use of GPs and public hospitals.[54] Between 1960 and 1980, these disparities diminished but since 1980 they have become exacerbated.[55]

These increasing disparities in patterns of use are matched by equally flagrant disparities in life expectancy. For example, between 1980 and 1989 the life expectancy of an engineer at thirty five (45 years) was higher by 9 years (25 percent) than that of a manual worker (35.8 years).[56] Such differences in life expectancy reflect, of course, such factors as education, housing, working conditions and cannot be solely attributed to differential access to medical care. But it is important to note that the medical system has been unable to compensate for such inequalities.

Outcomes and Performance Criteria

On the basis of life expectancy and infant mortality indicators, France comes out ahead of the United States and relatively high in comparison to the rest of Europe.[57] A little girl born in 1991 could expect to live 81.1 years, in France, in comparison to 79.1 in the United States.[58]

As for infant mortality, in 1991 there were 7.3 deaths for 1000 live births in France in contrast to 8.9 in the United States.[59] These indicators are hardly complete enough to draw inferences on the relative health status of the French and American populations because they do not account for other dimensions of health such as functional autonomy and well being. But they are the only comparable data available.

In terms of patient satisfaction, although different polls in France have

found different results depending on the nature of the questions posed, a recent comparative survey, in 1990, suggests that France ranks high in comparison to the United States.[60] In the United States, 60 percent of the population felt that fundamental changes are needed; in France, 42 percent of the population shared this feeling.[61]

Concluding observations

There are two striking differences between the health systems in France and the United States: the universal coverage of the French population under a NHI program and the lower level of per capita health care expenditure in spite of higher outcome and performance indicators. Over the past five years, however, French policymakers have had less success than other nations, e.g. Britain, Canada and Germany, in containing their rising health care costs. Health care prices have effectively been kept low but the volume of services—whether measured in physical quantities (utilization of services), or in health expenditures deflated by the medical price index—remain high in comparison to the United States. Nevertheless, much like the Canadian experience, price controls in France have been stronger than the volume response which explains, in no small part, why health care expenditures, in France, are lower than in the United States and have grown more slowly over the past fifteen years.[62]

The French, in comparison to Americans, consult their doctors more often, are admitted to the hospital more often and purchase more prescription drugs. Despite wide disparities between social classes in mortality and in patterns of medical care use, when judged along basic outcome measures (life expectancy and infant mortality) and polls of consumer satisfaction, France comes out ahead of the United States.

French NHI allows for free choice of providers and clinical autonomy of physicians even more than in the United States. French physicians are never asked to play gate-keeper functions and are not subject to the kind

of utilization review and quality assurance bureaucracy that has transformed the working lives of American doctors. But this freedom has at least two consequences. First, for patients, direct payment for most ambulatory care, the growth of extra billing and out of pocket payments amounting to almost a fifth of personal health care expenditures are the *quid pro quo* for universal NHI with no restrictions on patient demanded services. Second, in exchange for more clinical autonomy than American providers now enjoy and a NHI system with universal coverage, French physicians and other providers have learned to live with lower prices and lower incomes than their American counterparts.

Health care reform, in France, is likely to strengthen expenditure targets and utilization controls. A recent law calls for national practice guidelines and routine collection of information on patient diagnoses and physicians' procedure codes.[63] The rapid growth of health expenditures and volume of services will, no doubt, continue to put pressure on French government officials to tolerate sector 2 physicians and rising copayments. Along with opportunities for the growth of *cliniques,* this will be justified in the name of liberalism and pluralism. On the other hand, the French commitment to solidarity will surely constrain these developments. It will keep prices low, keep limits on the percentage of sector 2 physicians, cap payroll tax rates for all NHI funds, and assure uniform payment rates to providers across all funds.

Notes

Unless otherwise indicated, the statistical data for France are from ECO SANTE France (ESF), a software package that is updated every year by the Centre de Recherche, d'Etudes et de Documentation en Economie de la Santé - CREDES). The sources include the most up-to-date, sometimes not yet published data from: Ministère de la Santé; CNAMTS; INSEE; INED. For the United States, the data are from Health United States (HUS) 1991.

1. Fourteen percent of the French population was older than 65 years compared to 12% in the United States. These figures are from the Organization for Economic Cooperation and Development (OECD): HEALTH DATA—A software package for international comparisons of health systems prepared under the direction of J.P. Poulier (OECD) and S. Sandier (CREDES), Paris, 1991.

2. OECD Health Data, 1991.

3. Rodwin V.G. The Marriage of National Health Insurance and *la Médecine Libérale* in France: A Costly Union. *Milbank Memorial Fund Q.* (59) 1, 1981; and Rodwin V.G. Management Without Objectives: The French Health Policy Gamble. In G. McLachlan and A. Maynard, eds. *The Public/Private Mix for Health.* London: The Nuffield Provincial Hospitals Trust, 1982. For other more recent papers on the French health care system, see General Accounting Office (GAO) *Health Care Spending Control: The Experience of France, Germany and Japan* (Washington D.C.: GAO/HRD 92-9, November, 1991); Godt P. Doctors and Deficits: Regulating the Medical Profession in France. *Public Administration* (63) Summer, 1985 and "Liberalism in the Dirigiste State: A Changing Public-Private Mix in French Medical Care," ch. 2 in Rosa J.J. and Launois R. eds. *Comparative Health Systems: The Future of National Health Systems and Economic Analysis.* Greenwich, Conn. JAI Press, 1990; Sandier S. Comparison of Health Expenditures in France and the United States. *Vital and Health Statistics,* Series 3 nº 21, (National Center for Health Statistics, June 1983); Sandier S. Private Medical Practice in France: Facts and Policies. *Advances in Health Economics and Health Services Research,* Vol. 4 (JAI Press, Inc., 1983); and Sandier S. Quelques aspects du financement des soins médicaux aux Etats-Unis - Notes de lecture: *Socio-Economie de la Santé,* (CREDES, Paris, 1989).

4. Even if one includes internal medicine, obstetrics and pediatrics in primary care, in the United States these physicians represent 47 percent in contrast to 62 percent in France. The U.S. figures are for 1989 (ESF and HUS, p.246).

5. Of the 600 health centers in France, sixty percent are in Paris. Also, there are 475 dental centers and 1,200 nursing stations. See Ceccaldi D., *Les Institutions Sanitaires et Sociales.* Paris: Foucher, 1989.

6. *Ibid,* p.28. For more detail on French occupational health, see Cassou B. and Pissaro B., Workers' Participation and Occupational Health: The French Experience.*International Journal of Health Services* (18)1, 1988; and Rochaix M. *La Médecine du Travail,* Conseil Economique et Social, Journal Officiel (12) 1988.

7. Figures on the site of prenatal exams are from Ceccaldi, *op. cit.,* p.174. As of March 1, 1992, the family allowance paid to all pregnant mothers, known as *Allocation Pour le Jeune Enfant* (APJE), beginning in the fifth month, was equal to 891 Francs per month. The contingent conditions and spacing of the prenatal visits are strict and failure to comply reduces and/or sometimes eliminates the family allowance during pregnancy (*Caisse Nationale d'Allocations Familiales.* Paris, 1992. For recent information in English on family and child policy in France, see Richardson G. and E. Marx, *A Welcome for Every Child.* New York: French-

American Foundation, 1989.

8. In France, there were 9.1 beds per 1000 population (1991), in contrast to 4.9 in the United States (1989, HUS, 1991). These figures are obviously not comparable. A large part of this disparity may be explained by the fact that French hospitals, more so than their American counterparts, sometimes provide long term care for the elderly. But even if one compares only short-stay beds, there are still more in France (5.1 per capita) than in the United States (4.2 per capita—ESF and HUS, 1991, p. 255 and 256. The U.S. data on beds are divided by the resident population of 248,239,000.

9. Two thirds of the private non-profit beds are in institutions that participate on a contractual basis, in the public hospital service.

10. de Pouvourville G. and M. Renaud. Hospital System Management in France and Canada: National Pluralism and Provincial Centralism, *Social Science and Medicine* (20)2: 153-66, 1985.

11. *Cliniques* have an average number of 80 beds. *Annuaire Statistique,* Ministère de la Santé, 1992.

12. Ibid.

13. Between 1985-1989, the rate of growth of high-tech equipment, e.g. scanners, magnetic resonance imaging (MRI) and lithotriptors, has been higher in the proprietary sector than in public hospitals. For example, the number of scanners tripled in *cliniques* and increased by only 60% in the public sector. Between 1987-1989, lithotripters in *cliniques* increased by 85%, MRIs by 40% whereas in the public sector they increased respectively by 32% and 20%. *Le Monde,* April 28, 1992, p.36.

14. OECD Health Data, *op. cit.*

15. Some evidence in support of this thesis may be found in a comparison of intensive care units in French and American hospitals. For a patient group with the same severity of illness, invasive monitoring was used less in French than in American patients. See Knauss W. *et. al.,* A Comparison of Intensive Care in the U.S.A. and France. *The Lancet,* September 18: 642-646, 1982.

16. For a case study comparison of a French and American hospital, see Rodwin V.G. *et. al.* A Comparison of Staffing at Coney Island and Louis Mourier Hospitals. In Rodwin V.G. C. Brecher, D. Jolly and R. Baxter, eds. *Public Hospitals in New York and Paris.* New York: New York University Press, 1992.

17. Dupéyroux J.J. *Droit de la sécurité sociale,* Paris: Dalloz, 1993; Dumont J.P., *La sécurité sociale, toujours en chantier.* Paris: Les Editions Ouvrières, 1981.

18. In 1991, 99.4 % of the resident population, in France, was covered under NHI leaving 300,000 to 400,000 people without coverage. These people are considered medically indigent. They are cared for in public facilities which are reimbursed from public funds. See Dupéyroux J.J., *op. cit.*

19. Social Security, in France, is comprised of an assortment of quasi-autonomous national funds ranging from pensions, to workers compensation, family benefits and health insurance.

20. For more detail on the MSA, see Mandersheid F. *Une Autre Sécurité Sociale: La Mutualité Sociale Agricole.* Paris, L'Harmattan, 1991.

21. For example, the MSA, covering farmers and agricultural workers, covers only 20 percent of its budget from payroll tax contributions of its employed beneficiaries. Forty percent comes from the General NHI Scheme for so-called "demographic compensation." Another 10 percent is a direct subsidy from the government budget and the remainder is raised through other taxes (on agricultural products), other contributions, as well as interest on capital. These figures are from the 1993 *Budget Annexe des Pres-tations Sociales Agricoles(BAPSA) Département Etudes Economiques et Financières,* MSA.

    Each of the eleven smaller health insurance schemes benefits from demographic compensation, all in the name of solidarity. For example, the payroll tax contributions of the employed clergy covered 60 percent of their their scheme's expendituresin 1991; the remainder was transferred by the General NHI Scheme. Figures are from *Les Comptes de la Sécurité Sociale, Commission des Comptes de la Sécurité Sociale,* July 1992.

22. To be eligible for reimbursement under NHI, medical goods and services must be registered on a national list of prescription drugs, appliances, prostheses or medical procedures. Also, all services and procedures must be performed or prescribed by a physician and all providers must be certified health professionals, medical facilities or pharmacies.

23. The copayment, in France, is known as a *ticket modérateur.* Under the general NHI scheme, the copayment is 25 percent for physicians' services, 35 percent for private nursing services and laboratory tests, and typically 30 percent for prescription drugs. Essential drugs are exempt from copayments but the copayment is set at 60 percent for so called "comfort drugs." In hospitals—public and private—patients are typically required to pay 20 percent of the per diem rates plus a daily fee (roughly $10) to cover meals. In *cliniques,* patients also pay copayments for all physicians' services, procedures and laboratory tests.

24. Public hospitals, most cliniques and health centers are generally exceptions to the practice of direct payment from patients to providers. Patients are exempted from copayments in the following cases:

    1) For major medical or surgical procedures: Such procedures are defined as being equal to or exceeding the approximate severity of an appendectomy, coded as KC-50 in the French RVS. As of January 1993, the value of KC was approximately 13 FF making the fee of K-50 equal to approximately $125.
    2) For maternity care and medical care resulting from accidents at work;
    3) For hospital stays exceeding 30 days; and
    4) For serious, debilitating or chronic illness: There are 30 illnesses (e.g.

cancer, diabetes, hypertension) for which all patients are exempt from copayments. The so-called 31st illness includes any degenerative condition not included among the 30 illnesses. The so-called 32nd illness refers to multiple conditions (co-morbidities) that make patients severely disabled. The exemption from copayments for the 31st and 32nd illness is granted only upon approval of physicians working for health insurance funds, so-called "medical controllers."

25. These rates have been in effect since January, 1992. For the population of salaried agricultural workers, and special occupations with their own health insurance schemes, similar rates apply. Farmers and the self-employed are taxed largely on the basis of their declared incomes. It is important to note that, in addition to health insurance benefits, the revenues raised under the General NHI Scheme cover cash benefits (salary continuation) as well as subsidies to the MSA and smaller health insurance funds with older, higher risk beneficiaries (see note nº 21).

26. Complementary health insurance coverage is generally linked to occupation. The most well to do tend to have the most complete coverage as well as the most supplementary benefits. Of the 84 percent of the population subscribing to complementary health insurance policies, 61 percent join mutual aid societies (mutuelles), 24 percent subscribe to private commercial insurance and 15% have a *caisse de prévoyance.* Bocognano A. N. Grandfils, Th. Lecomte, A. Mizrahi and A. Mizrahi, *Enquête sur la santé et la protection sociale en 1990. Premiers résultats.* Paris: CREDES, l991.

27. As noted at the bottom of Exhibit 2, the 16 percent figure for French out-of-pocket payments is derived by subtracting from 18.8 an estimate of payments by private complementary insurance (2%-3%).

28. The new agreement, in 1991, between *cliniques,* the NHI funds and the government called for the use of case mix criteria as well as expenditure targets in the determination of future per diem rates. See Stéphan J.C., *Séminaire d'Information de l'UHP.* Paris: Formamed, 1992.

29. The first national agreements concluded with physicians date from l960 and differed according to region. Since 1971, the agreements have lasted an average of five years. The negotiation process has most often been acrimonious, complicated and long, revealing the conflicts between the government's objectives of cost containment, the payers' concerns about access, and the profession's attachment to autonomy and purchasing power. For more detail on these negotiations, see Rodwin V.G. H. Grable and G. Thiel. Updating the Fee Schedule for Physician Reimbursement: A Comparative Analysis of France, Germany and Canada. *Quality Assurance and Utilization Review,* February 1990; and Wilsford D. *Doctors and the State: The Politics of Health Care in France and the United States,* Durham and London: Duke University Press, 1991.

30. The French fee schedule classifies all procedures eligible for reimbursement according to a relative value scale (RVS). The charge for each procedure is

calculated by multiplying its relative value by the negotiated rate (conversion factor). Thus, for example, the charge for an appendectomy or simple hernia operation, which is coded as KC-50, will be ten times the charge for the simple removal of an ingrown toenail which is coded as KC-10. The French relative value scale (RVS) is known as the Nomenclature Générale des Actes Professionnels (NGAP). Originally written in 1930 by a physician trade union, the Conféderation des Syndicats Médicaux Français, its procedures are classified around so-called key letters: C signifies a consultation with a general practitioner; Cs, a consultation with a specialist and V a home visit by a general practitioner. B signifies laboratory tests; Z signifies radiological procedures; K signifies diagnostic procedures and KC signifies surgical procedures. Since a letter followed by a coefficient usually corresponds to many different procedures, it is impossible for fund administrators to know exactly for what procedures they are paying.

31. Three groups of physicians have the right to engage in extra-billing: 1) those who have opted out of the system (less than 0.5 percent of French physicians) for whom the NHI funds will reimburse nothing to patients; 2) those who, before 1979, had earned the right to exceed negotiated charges due to their status and prestige in the medical community (roughly 6 percent of physicians); and 3) those who, since 1980, in exchange for giving up certain health benefits and tax write offs, choose to join the so called "sector 2" and thereby earn the right to exceed negotiated charges so long as they do so with "tact and measure" (roughly 26 percent of physicians).

    An increasing number of physicians have joined sector 2, particularly among specialists and particularly in large cities. Although "tact and measure" has never been defined, surveys indicate that extra billing represents approximately 10 percent of total physician income and that the average extra charge is 50 percent above the allowed fee. For example, in 1992, for an average charge of 93.6 FF (for a G.P. visit, patients paid an average fee of 138.8 FF for G.P.s in sector two. They were reimbursed 75% of 93.6 (70.2FF) and paid 68.6 FF (138 - 68.6) from complementary private insurance reimbursement or out-of-pocket payments. Thus, the official rate of reimbursement for GP visits under NHI (75%) is considerably higher than the actual rate of 49.4%.

    Patients who visit physicians in the second and third categories will be reimbursed the full amount of the charges less the copayments, thus leaving them to finance the remainder themselves from complementary insurance policies and/or out of pocket payments.

32. For a summary, in English, of French global budgeting and other reforms of the public hospital, see de Pouvourville G. Hospital Reforms in France under a Socialist Government, *Milbank Quarterly* (64)3, 1986.

33. For the time being, this amount is calculated largely on the basis of last year's budget, an analysis of hospital activities, and an allowable rate of increase. Meanwhile, hospitals are collecting case mix information which may eventually be used in the budget setting procedure.

34. For outpatient consultations, in public hospitals, the patient has the option of advancing only the amount of the copayment and the hospital recovers the rest directly from the patient's health insurance fund.

35. The sessional fees are the basis of payment largely to part time physicians working in private practice—attachés—who have an affiliation with specific service units in the public hospital to work a certain number of half day shifts, most often for outpatient consultations or procedures. These physicians, in France, are the closest equivalent to attending physicians in private hospitals in the United States.

36. We have been using the term, charges, to indicate negotiated payment rates for physicians' sevices. Physicians with the right to exceed these charges may bill patients for their fees. Average physicians' prices are therefore higher than charges as estimated in the following note. In converting French Francs to dollars, throughout this paper we have used the rate of 5.5 FF to $1.00.

37. The allowable charge for an office visit to a French general practitioner is 100 FF; to a specialist, 140 FF. Even if one adds the charges for simple laboratory tests, often performed in a doctor's office in the United States, but always referred to a private laboratory in France, the average French price for a GP office visit is still at least 27 percent lower. The average charge for general practitioners' services, in l991, was l37 Francs. To this we add 20 percent for laboratory services and 10 percent for extra billing bringing the figure to 183 Francs ($33 at an exchange rate of 5.5 Francs to the dollar).

38. The figure for the average income of American physicians is from the American Medical Association. Cited by the Washington Post, May 21, 1992. The average income of French physicians is 381,200 French Francs. Differences in national income between France and the United States explain only part of this disparity since the ratio of average physician income to average per capita income, in l990, was 4.4 in France and 7.9 in the United States. Data on per capita income (GDP per capita) in adjusted U.S. dollar purchasing power parities are from OECD Health Data: $15,568 for France; $20,774 for the U.S.

39. The average per diem costs (including physicians' salaries) were 1023 FF ($186) in l988 for all public community hospitals and 638 FF for private hospitals (not including physicians' salaries). Adding Sandier's estimate of 170 FF for physicians' fees in private hospitals, the equivalent per diem costs would be 808 FF. The weighted average comes to $172.

40. IMS, CREDES.

41. United States data are from the National Center for Health Statistics. Current estimates from the National Interview Survey, 1990. *Vital and Health Statistics,* Series 10, nº 181, December 1991. In France, GPs account for 59 percent of all visits to physicians; in the United States, only 30 percent (United States data are from Susan M. Schappert, *National Ambulatory Medical Care Survey: 1990 Summary, Advance Data,* (Washington D.C.: National Center for Health Statistics,

April 30, 1992. If physicians specialized in internal medicine, in the United States, are added, the proportion comes to 43.5.) This suggests that the French make only slightly less annual visits to specialists (3.4) than Americans (3.85). But home visits, which have practically disappeared in the United States, account for 17 percent of all physicians' services in France. In contrast, as a proportion of all physicians' visits, hospital outpatient consultations in France were only 5 percent compared with 13 percent in the United States (American data are from *Current Estimates from the National Health Interview Survey. Vital Health Statistics,* Series 10, nº 181: Washington D.C.: NCHS, p.114.).

42. U.S. data are from the National Center for Health Statistics, Advanced Data, (227), March 3, 1993.

43. The bulk of personal health expenditures, in France (48%), go to inpatient hospital care leaving 30 percent for ambulatory care and 21 percent for medical goods, largely drugs (18%) in contrast to 9.3% in the U.S.

44. OECD Health Data, 1991.

45. These figures are for 1991, OECD Health Data. The French figure is calculated in OECD's price purchasing parities. The cost difference is much greater than the disparity in GDP per capita between France ($18,219) and the United States ($21,400) and explains why French health care expenditures, in 1991, were 9.1% of GDP as compared to 13.4% in the United States. The GDP per capita figures are calculated by dividing the gross domestic product of each country by its population and adjusting the French figure by OECD's price purchasing parities.

46. OECD Health Data. In France, in 1991, real health expenditures increased by 3.8 percent.

47. The MPI includes a basket of goods and services in the health sector. Hospital prices have increased far more than pharmaceutical prices in France, as well as in the United States.

48. Mizrahi A. A. Mizrahi and S. Sandier. Le système de santé en France de 1950 à 1989. *Journal d'Economie Médicale* (9)8:379-405, 1991.

49. This limit, known as a numerus clausus, has been progressively decreased from 8,588 to 3,750 students, which now corresponds to 2.5 percent of physicians currently in practice.

50. The new Hospital Law (nº 91-748) was passed on July 31, 1991. Its planning procedures, known as the carte sanitaire, continue to suffer from the same problems as the old Law: they are not linked to reimbursement incentives under NHI. See Rodwin V.G. On the Separation of Health Planning and Provider Reimbursement: the U.S. and France. *Inquiry* (18)2:139-50, 1981.Summer, 1981.

51. Copayments were increased for laboratory procedures, selected prescription drugs and certain physical therapy services (e.g. massages). Also, the allowance of extra billing by sector 2 physicians contributed to decrease health insurance

coverage for expenditures on physicians' services. In addition, some prescription drugs were eliminated from the list of eligible drugs for reimbursement and the daily $10 fee for hospitals was imposed to cover a portion of food and lodging.

52. This is supported by the fact that NHI expenditures have increased at a lower rate than personal health care expenditures between 1980 and 1991.

53. Rodwin V.G. Inequalities in Private and Public Health Systems: The United States, France, Canada and Britain. In Van Horne W. ed. *Ethnicity and Health* (Milwaukee: University of Wisconsin System American Ethnic Studies, 1989).

54. A. Mizrahi and A. Mizrahi *Evolution récente des disparités de consommation médicales de soins de ville.* Paris: CREDES, May, 1991.

55. *Ibid*

56. There is a clear class gradient down from professors and engineers, to executives, liberal professions, mid leval managers, craftsmen and small business personnel to employees, laborers and salaried agricultural workers (Desplanques G. Les cadres vivent plus vieux, INSEE Première, nº 158, August, 1991. Also see his L'inégalité sociale devant la mort, *Economie et Statistique* (162), January, 1984.

57. United States data are from the National Center for Health Statistics (NCHS). The data for the rest of Europe are from OECD Health Data. The 1990-1991 unpublished U.S. data were communicated by Dr. Jack Feldman, NCHS.

58. Between 1981-1991, life expectancy for women increased 2.6 years, in France, versus 1.8 in the U.S.; for men, it increased 2.6 years versus 1.8 years (U.S. data are from the NCHS; data for 1990-1991 are provisional figures). For French men, the situtation is not as good. Their life expectancy surpassed that of American men beginning in 1984 but is only .8 year greater (73.0 versus 72.2). In both countries life expectancy has increased, but over the past ten years, the progression has been faster in France.

59. The data from the United States are from the National Center for Health Statistics.

60. Blendon R.J. R. Leitman, I. Morrison, and K. Donelan. Satisfaction with Health Systems in Ten Nations, *Health Affairs* (Summer):185-92, l990. This article is based on a collaborative study of seven countries (the Netherlands, Italy, West Germany, France, Sweden, Australia and Japan) by Louis Harris and Associates, the Harvard School of Public Health and the Institute for the Future.

61. In the United States, 29 percent of the population felt that we need to rebuild completely the system; in France only 10 percent felt this way.

62. Barer M. Evans R. and Labelle R, Fee controls as cost control: lessons from the frozen north, *Milbank Quarterly* 66:1-64, 1988.

63. The so-called "Loi Teulade" (No. 93-8, January 4, 1993).

Part III

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Selected Bibliography in English on the French Health Care System

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III. Web sites on the French Health System

OECD *http://www.oecd.org/health/*
The OECD issues a great number of reports, working papers and publications related to its operational and statistical work. A part of this work can be downloaded from the Web site. Books and electronic products can be purchased from the OECD Online Bookshop. The site can be read both in English and French. It is searchable and references to France and French health care system can be found.

Banque de Données en Santé Publique *http://www.bdsp.tm.fr/*
The BDSP has a searchable central database of publications on health care since 1980. Although the website is in French, you can search the bibliographic database in both French and English. A paid subscription is necessary to access the articles.

INSEE: Institut National de la Statistique et des Etudes Economiques *http://www.insee.fr/fr/home/home_page.asp*
INSEE collects and produces information on the French economy and society. There is a small subsection on health that provides access to a small selection of articles on French health care and some data. It is the process of being translated and will be available in both English and French.

Fédération Nationale des Observatoires Régionaux de Santé / SCORE Santé *http://www.fnors.org/score/accueil.htm*
Database of national, regional and local health indicators collected and analysed by major partners of healthcare and public health systems under the coordination of the National Federation of Regional Health Observatories.

Haut Comité de Santé Publique *http://www.hcsp.fr/*

Les Entreprises du Médicament *http://www.leem.org/*
This site provides information on medical drug industry and various aspects of pharmaceutical economics.

Ministère de la Santé et des Solidarités *http://www.sante.gouv/*
This site is run by the Direction Générale de Santé (DGS). It includes several public health agencies.

INED: Institut National d'Etudes Démographiques
http://www.ined.fr/
This site provides information on demography and in related disciplines of sociology, economics, family anthropology, history, geography, public health, and current population movements.

IFEN: Institut Français de l'Environnement *http://www.ifen.fr/*
This site offers statistical information on environmental issues.

INSERM: Institut National de la Santé et de la Recherche Médicale
http://www.inserm.fr/
The National Institute for Health and Medical Research is the French equivalent of the U.S. National Institute of Health.

InVS: Institut de Veille Sanitaire (National Institute for Public Health Surveillance) *http://www.invs-sante.fr/*
This site offers on-line publications on AIDS, tuberculosis, disease surveillance, environmental occupational health and weekly electronic epidemiological bulletins.

IRDES: Institut de Recherche et de Documentation en Economie de la Santé (ex CREDES) *www.irdes.fr*
This is a French only site that provides data and analyses of the French health care system.

STATISS 1998 *http://www.sante.gouv.fr/drees/statiss/frames/fr75.htm*
This site offers demographic and other statistics for specific departments in France.

Fondation Nationale de Gérontologie *http://www.geronto.com*
This site provides information on the rights of older persons.

La Retraite de Base des Salariés *http://www.cnav.fr*
This site offers information on retirement and retirement related issues.

World Health Report 2000 : World Health Systems
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Appendices

Appendices

A. Permissions

Chapter 2

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B. Contributors

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Stéphane Jacobzone is a senior economist at OECD. He graduated from the École Polytechnique (1987), and the Ecole Nationale de la Statistique et de l'Administration Economique (ENSAE). Jacobzone has coordinated a project supported by the National Institute on Aging on cross national differences in the treatment of aging-related diseases as well as studies of pharmaceutical regulation. Prior to joining OECD in 1997, he worked with the French Ministry of Finance, the French planning agency and the French National Institute for Statistics and Economic Studies. He also taught at the French *Institut d'Etudes Politiques,* the National School for Economics and Statistics, and has written a number of books and over 30 articles.

Jean de Kervasdoué is professor of health economics and management at the Conservatoire National des Arts et Métiers, the French university for adults, an institution created in 1793. He was trained as an engineer in France and a social scientist in the United States (Ph.D, Cornell University 1973). During his career, he has shared his

time between academia, politics and private business. His interests span the field of health policy and management. He has published over ten books and hundreds of articles for his peers but also for the general public. He was Director General of Hospitals in the French Ministry of Health for over five years. His most recent book, *The Hospital Viewed from the Bed* (Seuil, Paris, 2004) tells his story as a patient in a Paris public hospital.

Patrick Lenain is responsible for country studies at the Economics Department of OECD. He earned his doctoral degree in economics from the University of Paris-Dauphine. His current work is on the policy challenges faced by OECD member countries in achieving strong and sustainable medium-term growth and on the effects of structural policies on economic performance. Prior to joining OECD, Lenain worked as a staff member of the International Monetary Fund, the European Commission and the French Treasury.

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Victor G. Rodwin is professor of Health Policy and Management at the Robert F. Wagner Graduate School of Public Service, New York University (NYU). He received his MPH and his Ph.D. (city and regional planning) from the University of California–Berkeley. Professor Rodwin is the recipient of a Robert Wood Johnson Health Policy Investigator Award and he co-directs (with Michael K. Gusmano) the World Cities Project, a joint venture of the Wagner School, NYU, the International Longevity Center-USA, and the Mailman School, Columbia University. Professor Rodwin has written and edited numerous articles and books, including *The Health Planning Predicament: Québec, England, France and the U.S, The End of an Illusion: The Future of Health Policy in Western Industrialized Nations* (with Kimberly J. and de Kervasdoué J.), *Public Hospital Systems in New York City and Paris* (with Baxter R., Brecher C. and Jolly D.), *Japan's Universal and Affordable Health Care: Lessons for the U.S.?* and *Growing Older in World Cities: New York, London, Paris and Tokyo* (with Gusmano M.K.).

Simone Sandier is a founding member of ARGSES (Socio-Economic Arguments for Health) and a frequent participant in scientific commissions and national task forces in France. Trained in mathematics and statistics, she developed a career in the field of health economics and health services research. She has served as a consultant to nations in the European Economic Community in addition to collaborating with colleagues around the world. Sandier worked as a Research Director at the CREDES, now known as IRDES (French Institute of Research and Information on Health Economics), and has served as an expert for many international organizations (WHO, ILO and the World Bank). Her publications have focused on international comparisons of health systems, forecasting models and national health expenditure accounting. She is an honorary president of the French Association of Health Economists and a foreign associate of the Institute of Medicine in the United States.

Paul Clay Sorum was initially an historian of modern France (PhD, Harvard University, 1973) and wrote a book on Intellectuals and Decolonization in France (1977). He then turned to medicine (MD, University of North Carolina at Chapel Hill, 1980) and is currently professor of Internal Medicine and Pediatrics at Albany Medical College. He provides primary care to children and adults and teaches evidence-based medicine to medical students and residents. He has collaborated with psychologists and physicians in the United States and France on dozens of studies of health-related judgment and decision making. He has also written about the French health care system for the *Journal of the American Medical Association.*

C. Acronyms

ACOSS	Agence Centrale des Organismes de Sécurité Sociale
AHRQ	Agency for Health care Research and Quality
ANAES	Agence Nationale d'Accréditation et d'Evaluation en Santé (National Accredition and Evaluation Agency that preceded the Haute Autorité de Santé Publique)
ARH	Agence Régionale d'Hospitalisation
CADES	Caisse d'Amortissement de la Dette Sociale
CANAM	Caisse Nationale d'Assurance Maladie des Travailleurs Indépendants et Artisans
CMU	Couverture Médicale Universelle
CNAVTS	Caisse Nationale d'Assurance Vieillesse des Travailleurs Salariés
CNAMTS	Caisse Nationale d'Assurance Maladie des Travailleurs Salariés
CRDS	Cotisation pour le Remboursement de la Dette Sociale
DRG	Diagnosis-Related Group
EPIC	Etablissement Public Industriel et Commercial
LFSS	Loi de Financement de la Sécurité Sociale
MSA	Mutualité Sociale Agricole
NHI	National Health Insurance
NHS	National Health Service
OECD	Organization for Economic Cooperation and Development
ONDAM	Objectif National de Dépenses d'Assurance-Maladie
PMSI	Programme de Médicalisation des Systèmes d'Information
RMI	Revenu Mininum d'Insertion
RMO	Références Médicales Opposables
SNCF	Société Nationale des Chemins de Fer
UNCAM	Union Nationale des Caisses d'Assurance Maladie
URSSAF	Union de Recouvrement des Cotisations de Sécurité Sociale et d'Allocations Familiales

Universal Health Insurance in France

How Sustainable?

Essays on the French Health Care System

In France, American nostrums of unleashing market forces under the banner of "consumer-directed health care," and selective contracting by private health insurers, have gained little ground. That should not, however, lead one to conclude that the French health care system is irrelevant to the United States. The organization and financing of health care, in France, resembles, in many respects, that of the United States—more so, in fact, than do Britain's National Health Service or Canadian and German national health insurance (NHI). The French reliance on a public-private mix that includes a significant proprietary hospital sector, private fee-for-service medical practice, and enormous patient choice among a pluralistic organization of health care providers makes French NHI a model for what Senator Ted Kennedy and Congressman Pete Stark have called "Medicare for all."

Photo: Aaron H. Rodwin

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