The Health Care System Under French National Health Insurance: Lessons for Health Reform in the United States

The French health system combines universal coverage with a public–private mix of hospital and ambulatory care and a higher volume of service provision than in the United States. Although the system is far from perfect, its indicators of health status and consumer satisfaction are high; its expenditures, as a share of gross domestic product, are far lower than in the United States; and patients have an extraordinary degree of choice among providers.

Lessons for the United States include the importance of government's role in providing a statutory framework for universal health insurance; recognition that piecemeal reform can broaden a partial program (like Medicare) to cover, eventually, the entire population; and understanding that universal coverage can be achieved without excluding private insurers from the supplementary insurance market. (*Am J Public Health*. 2003;93:31–37)

Victor G. Rodwin, PhD, MPH

THE FRENCH HEALTH CARE system has achieved sudden notoriety since it was ranked No. 1 by the World Health Organization in 2000.[1] Although the methodology used by this assessment has been criticized in the 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 according to 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 United States' "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 decisionmaking and chronic deficits incurred by French national health insurance (NHI) require significant reform.[9,10]

Over the past 3 decades, successive governments have tinkered with health care reform; the most comprehensive plan was Prime Minister Juppé's in 1996.[11,12] 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 that have long characterized the political evolution of French NHI.[13–15]

Although the French ideal is now subject to more critical scrutiny by politicians, the system functions well and remains an important model for the United States. After more than a half century of struggle, in January 2000, France covered the remaining 1% of its population that was uninsured and offered supplementary coverage to 8% of its population below an income ceiling.[16] This extension of health insurance makes France an interesting case of how to ensure 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 article explores lessons for the United States of the French experience with NHI.

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 United States.[32] There is wide access to comprehensive health services for a population that is, on average, older than that of the United States, and yet France's health expenditures in 2000 were equal to 9.5% of its gross domestic product (GDP) compared with 13.0% of GDP in the United States.[17]

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, 90% of the population subscribes to supplementary health insurance to cover other benefits not covered under NHI.[33] 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 gatekeepers regulating access to specialists and hospitals.

French NHI evolved from a 19th-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.[34] Although NHI

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

	France	US	Germany	UK	Japan	Italy
Health status						
Infant mortality (deaths/1000 live births), 1999[a]	4.3	7.2[b]	4.6	5.8	3.4	5.1
LEB (female), 1998[a]	82.2	79.4	80.5	79.7	84.0	81.6[c]
LEB (male), 1998[a]	74.6	73.9	74.5	74.8	77.2	75.3[c]
LE at 65 (female), 1997[a]	20.8	19.2	18.9	18.5	21.8	20.2
LE at 65 (male), 1997[a]	16.3	15.9	15.2	15.0	17.0	15.8
Severe disability-free life expectancy (female), 1990/1991[d]	14.8	NA	NA	13.6	14.9	NA
Severe disability-free life expectancy (male), 1990/1991[d]	18.1	NA	NA	16.9	17.3	NA
Potential years of life lost per 100 000 population (female), 1993[e]	2262	3222	2713	2642	1914	2136
Potential years of life lost per 100 000 population (male), 1993[e]	5832	6522	5752	4688	4003	4873
Consumer satisfaction, %						
Only minor changes needed, 1990[f]	41	10	41	27	29	12
Very satisfied, 1996[g]	10	NA	12.8	7.6	NA	0.08
Fairly satisfied, 1996[g]	55.1	NA	53.2	40.5	NA	15.5

Note. US = United States; UK = United Kingdom; LEB = life expectancy at birth; LE = life expectancy; NA = not available.
[a]*Source.* Organization for Economic Cooperation and Development.[6(p27)]
[b]1998.
[c]1997.
[d]Defined as life expectancy with the ability "to perform those activities essential for everyday life without significant help."[6(p27,31)]
[e]*Source.* Organization for Economic Cooperation and Development.[6(p30)]
[f]*Source.* Harvard-Louis Harris Interactive 1990 Ten-Nation Survey, cited by Blendon et al.[7]
[g]*Source.* Eurobarometer Survey, 1996, cited in Mossialos.[8]

consists of different plans for different occupational groups, they all operate within a common statutory framework.[35–37] 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 micromanage 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, coinsurance, and balance billing by roughly one third of physicians.

Like Medicare in the United States, 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 United States, 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.[38,39] 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.[40]

NHI forms an integral part of France's social security system, which is typically depicted—following an agrarian metaphor—as a set of 3 sprouting branches: (1) pensions, (2) family allowances, and (3) health insurance and workplace accident coverage.[20] The first 2 are managed by a single national fund, while the third is run by 3 main NHI funds: those for salaried workers (Caisse Nationale d'Assurance Maladie des Travailleurs Salariés, or CNAMTS), for farmers and agricultural workers (Mutualité Sociale Agricole, or MSA), and for the independent professions (Caisse Nationale d'Assurance Maladie des Professions Indépendentes, or CANAM). In addition, there are 11 smaller funds for workers in specific occupations and their dependents, all of whom defend their "rightfully earned" entitlements.[41]

The CNAMTS covers 84% of legal residents in France, which includes salaried workers, those

TABLE 2—Health Care Resources: France and United States, 1997–2000

Resources	France	US
Active physicians per 1000 population	3.3[a] (1998)	2.8[a] (1999)
Active physicians in private, office-based practice per 1000 population	1.9[b] (2002)	1.7[c] (1999)
General/family practice, %	53.3[b] (2002)	22.5[c] (1999)
Obstetricians, pediatricians, and internists, %	7.5[b] (2002)	35.6[c] (1999)
Other specialists, %	39.2[b] (2002)	41.0[c] (1999)
Nonphysician personnel per acute hospital bed[d]	1.9 (2001)[e]	5.7 (2000/01)[f]
Total inpatient hospital beds per 1000 population[g] (1998)	8.5[a]	3.7[a]
Short-stay hospital beds per 1000 population	4.0[h] (2000)	3.0[i] (1998)
Share of public beds, %	64.2[h] (2000)	19.2[i] (1999)
Share of private beds, %	35.8[h] (2000)	80.8[i] (1999)
Proprietary beds as percentage of private beds (1999), %	56[j]	12[j]
Nonprofit beds as percentage of private beds (1999), %	44[j]	88[j]
Share of proprietary beds, %	27[k] (1998)	10.7[i] (1999)

[a]*Source.* Organization for Economic Cooperation and Development.[17]
[b]*Source.* CNAMTS.[18]
[c]*Source.* National Center for Health Statistics.[19] (These figures exclude federally employed physicians as well as all anesthesiologists, pathologists, and radiologists.)
[d]Nonphysician personnel include all hospital employees—administrative, technical, and clinical—excluding physicians. Among the category of physicians in the United States, we included chiropractors and podiatrists.
[e]*Source.* CREDES.[20]
[f]*Source.* Acute care beds: American Hospital Association[21]; nonphysician personnel: Bureau of Labor Statistics.[22]
[g]These differences reflect the use of long-term care beds in French hospitals—public and private nonprofit—as nursing homes.
[h]*Source.* DRESS.[23]
[i]*Source.* American Hospital Association.[21]
[j]Source: DRESS.[24]
[k]*Source.* DRESS.[25]

who were recently brought into the system because they were uninsured, and the beneficiaries of 7 of the smaller funds that are administered by the CNAMTS.[33] The CANAM and MSA cover, respectively, 7% and 5% of the population, with 4% covered by the remaining 4 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.

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. In France, the commitment to universal coverage is accepted by the principal political parties and justified on grounds of solidarity—the notion that there should be mutual aid and cooperation between the sick and the well, the active and the inactive, and that health insurance should be financed on the basis of ability to pay, not actuarial risk.[42]

ORGANIZATION OF HEALTH CARE

The organization of health care in France is typically presented as being rooted in principles of liberalism and pluralism.[32,42] 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 coexistence of public and proprietary hospitals, the latter accounting for 27% of acute beds in France in contrast to 10.7% in the United States (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. Although ambulatory care is 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.

TABLE 3—Use of Health Services: France and United States, 1997–2000

Use	France	US
Physician office visits per capita[a] (1999)	6.0[b]	2.8[c]
Specialist visits per capita (1999)	1.9[b]	1.4[c]
Hospital days per capita (1999)	2.4[d]	0.9[d]
Short-stay hospital days per capita (1999)	1.1[d]	0.7[d]
Admission rate for short-stay hospital services per 1000 population	170.1[e] (2000)	118.0[f] (1998)
Average length of stay for all inpatient hospital services (1999)	10.6[b]	7.0[d]
Average length of stay in short-stay beds (1999)	6.2[e]	5.9[f]
Per capita spending on pharmaceuticals, PPP, $ (1999)	484[h]	478[h]
MRIs per million population	2.5[i] (1997)	7.6[i] (1998)

Note. $PPP=purchasing power parity; MRI=magnetic resonance imaging unit.
[a]Organization for Economic Cooperation and Development (OECD) Health Data has traditionally published a figure of around 6 physician consultations per capita for the United States. According to the 2002 edition, this figure is based on the National Health Interview Survey of the 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 (ERs). 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 and hospital outpatient and ER consultations. Thus, to obtain comparable data, the US 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 use, and visits to emergency rooms and hospital outpatient departments account, respectively, for 11.2% and 7.8% of ambulatory care use. 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.
[b]*Source.* CREDES.[20]
[c]*Source.* National Center for Health Statistics.[19] (These figures exclude federally employed physicians as well as all anesthesiologists, pathologists, and radiologists.)
[d]*Source.* OECD.[27]
[e]*Source.* Ministry of Health and Social Affairs.[28]
[f]*Source.* National Center for Health Statistics.[29]
[g]*Source.* National Center for Health Statistics.[30]
[h]These figures, cited in Reinhardt et al,[31] 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 United States since 1980. When expenditure data on prescription drugs in France and the United States 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 United States by a factor of 2. Source: OECD Health Data 1999, cited in S. Chambaretaud.[26]
[i]*Source.* OECD Health Data 2001.

The private hospital sector in France (both nonprofit and proprietary hospitals) has 36% of acute beds, including 64% of all surgical beds, 32% of psychiatric beds, and only 21% of medical beds.[24] The nonprofit sector, which operates only 9% of all beds, has over 44% of private long-term care beds.[24] 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 15 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% lower than in US hospitals (Table 2). This difference in hospital staffing may reflect a more technical and intense level of service in US hospitals. It also reflects differences between an NHI system and the US health system, which is 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, roughly half of French NHI expenditures were financed by employer payroll taxes (51.1%) and a "general social contribution" (34.6%) levied by the French treasury on all earnings, including investment income.[43] (Remaining sources of financing for the CNAMTS and its affiliated health insurance funds included payroll taxes on employees [3.4%], special taxes on automobiles, tobacco and alcohol [3.3%], a specific tax on the pharmaceutical industry [0.8%], and subsidies from the state [4.9%].) The general social contribution, 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%, supplementary private insurance covers 12.4% (7.5% for the nonprofit sector *mutuelles* and 4.9% for commercial insurers), and out-of-pocket expenditures represent 11.1%.[44]

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 nonprofit hospitals working in partnership with them) are paid on the basis of annual global budgets negotiated every year between 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 United States, where severe illness usually results in increasing out-of-pocket costs, when patients become very ill in France their health insurance coverage improves. For example, although coinsurance 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 3 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% of physicians in selected specialties engage in extra billing, in contrast to the national average of 20% among general practitioners (GPs). 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.

SERVICES, PERCEPTIONS, AND HEALTH STATUS

Existing data (Table 3)—whether they come from surveys or are byproducts of the administrative system—indicate consistently that, compared with Americans, the French consult their doctors more often, are admitted to the hospital more often, and purchase more prescription drugs. Owing to strict controls on capital expenditures in the health sector, France has fewer scanners and magnetic resonance imaging units than the United States. But France stands out as having more radiation therapy equipment than the United States, 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 United Kingdom, the United States, Japan, and Sweden.[7] A more recent European study reports that two thirds of the population is "fairly satisfied" with the system.[8]

France also ranks high on most measures of health status (Table 1). A recent report by the Organization for Economic Cooperation and Development (OECD), for example, indicates that France is well above the OECD average on a range of key indicators.[12] 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.[45,46]

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 United States. Add to this the enormous choice of health delivery options given to consumers, the low level of micromanagement 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.[45,47,48] 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.[49]

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.[50] Even before this consumer awareness, there was 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 *laissez-faire*.[51]

Third, although, compared with the United States, 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.[52] Much like the prospective payment system for Medicare in the United States, 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 United States.[32]

Although the level of health services use is high in France (Table 3), prices per service unit are exceedingly low by US 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 GP, 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 $55 000 average net annual income of French physicians—salaried hospital-based doctors as well as GPs and specialists in private practice—is barely one third that of their US counterparts ($194 000)[53,54] (C. LePen and E. Piriou, written communication, August 2002). In addition to price controls, capital controls on the health system are stringent. They include limits on the number of medical students admitted to the second year of medical school, controls on hospital beds and medical technologies, imposition (since 1984) of global budgets on hospital operating expenditures, and 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.[55] It organized a new national agency, the Agence National d'Accréditation et d'Évaluation en Santé, to promote health care evaluation, prepare hospital accreditation procedures, and establish medical practice guidelines.[56,57] It also set up regional hospital agencies with new powers to coordinate public and private hospitals and allocate their budgets.[58]

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 the coordination of health services. This represents an emerging form of French-style managed care—a centrally directed attempt to rationalize the delivery of health services.[51] The institutional barriers to such reform are considerable, but whatever transpires in the future, the French experience with NHI may be instructive for the United States.

LESSONS FOR 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 United States. Nonetheless, I set forth 5 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, multipayer system providing universal coverage on the basis of occupational status. It is the outcome of sociopolitical struggles and clashes among trade unions, employers, physicians associations, and the state. This suggests that NHI in the United States could similarly emerge from our patchwork 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.[13,38] In the United States, 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[60] 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 nonprofit 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 such as exists in the United States 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% 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 United States, as exemplified by the differences among states and counties in dealing with the uninsured.

Finally, and perhaps most important for the United States, 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 the 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 United States. The United States would do better to follow the French example in solving the tough entitlement issues before restructuring the entire health care system. ■

About the Author

Victor G. Rodwin is with the Wagner School, New York University, New York, NY, and the World Cities Project, New York, a joint venture of NYU Wagner and the International Longevity Center-USA.

Requests for reprints should be sent to Victor G. Rodwin, PhD, MPH, 4 Washington Sq North, New York, NY 10003 (e-mail: victor.rodwin@nyu.edu).

This article was accepted September 10, 2002.

Note. *A bibliography in English on the French health care system is available on the author's Web site at http://www.nyu.edu/projects/rodwin/main.html.*

Acknowledgments

I thank the R.W. Johnson Foundation for a Health Policy Investigator Award that enabled me to explore this topic and others.

I am grateful to Dr Robert Butler, president and CEO, ILC-USA, and to my colleagues in the New York Group on Rekindling Health Care Reform for sponsoring the seminars and lecture on which this article is based and for helpful discussion during its preparation. I thank Claude LePen, William Glaser, Michael Gusmano, and Marc Duriez for their insights; Birgit Bogler, Gabriel Montero, and Eric Piriou for precious research assistance; and 3 anonymous French reviewers for provocative and thoughtful comments.

References

1. World Health Report 2000. Available at: http://www.who.int/whr/2001/archives/2000/en/index.htm. Accessed October 18, 2002.

2. Coyne JS, Hilsenrath P. The World Health Report 2000: can health care systems be compared using a single measure of performance? *Am J Public Health.* 2002;92:30, 32–33.

3. Navarro V. The World Health Report 2000: can health care systems be compared using a single measure of performance? *Am J Public Health.* 2002; 92:31, 33–34.

4. Murray C, Frenk J. World Health Report 2000: a step towards evidence-based health policy. *Lancet.* 2001;357: 1698–1700.

5. Navarro V. World Health Report 2000: a response to Murray and Frenk. *Lancet.* 2001;357:1701–1702.

6. *A Caring World: The New Social Policy Agenda.* Paris: Organization for Economic Cooperation and Development; 1999:27.

7. Blendon R, Leitman R, Morrison I, Donelan K. Satisfaction with health systems in ten nations. *Health Aff(Millwood).* 1990;9(2):185–192.

8. Mossialos E. Citizens' views on health care systems in the 15 member states of the European Union. *Health Econ.* 1997;6:109–116.

9. de Kervasdoué J. *Pour une Révolution sans Réforme.* Paris, France: Gallimard; 1999.

10. Le Pen C. *Les Habits Neufs d'Hippocrate.* Paris, France: Calmann-Lévy; 1999.

11. Sorum P. Striking against managed care: the last gasp of la médecine libérale? *JAMA.* 1998;280:659–664.

12. Imai Y, Jacobzone S, Lenain P. *The Changing Health System in France.* Paris, France: Economics Department, Organization for Economic Cooperation and Development; November 2000. Working Paper 268.

13. Hatzfeld H. *Le Grand Tournant de la Médecine Libérale.* Paris, France: Editions Ouvrières; 1963.

14. Wilsford D. *Doctors and the State: The Politics of Health Care in France and the United States.* Durham, NC: Duke University Press; 1991.

15. Immergut E. *Health Politics: Interests and Institutions in Western Europe.* Cambridge, England: Cambridge University Press; 1992:chap 3.

16. Grignon M. Quel filet de sécurité pour la santé? Une approache économique et organisationelle de la couverture maladie universelle. *Revue Française des Affaires Sociales.* 2002;2: 145–176.

17. *OECD Health Data, 2002.* Paris, France: Organization for Economic Cooperation and Development; 2002.

18. *Carnets Statistiques no. 108.* Paris, France: Caisse Nationale de l'Assurance Maladie des Travailleurs Salariés (CNAMTS); 2002.

19. *1999 National Ambulatory Medical Care Survey.* Washington, DC: National Center for Health Statistics, Centers for Disease Control and Prevention; 1999.

20. *Eco-Santé 2001.* Paris, France: Centre de Recherche, d'Étude et de Documentation en Economie de la Santé (CREDES); 2001.

21. *Hospital Statistics 2000.* Chicago, Ill: American Hospital Association; 2001.

22. National industry specific occupational employment and wage estimates, specific industry code 806, hospitals, US Dept of Labor, Bureau of Labor Statistics. Available at: www.bls.gov/oes/2000/oesi3_806.htm. Accessed October 29, 2002.

23. *L'activité des Établissements de Santé en 2000.* Paris, France: Direction de la Recherche, des Études, de l'Évaluation et des Statistiques (DRESS); 2002. Études et Résultats no. 177.

24. *Les Établissements de Santé en 1999.* Paris, France: Direction de la Recherche, des Études de l'Évaluation et des Statistiques (DRESS), Ministère de l'Emploi et de la Solidarité; 2001.

25. *Annuaire des Statistiques Sanitaires et Sociales 1999.* Paris, France: DRESS Collection Études et Statistiques; 2000.

26. Chambaretaud S. 2000. *La Consommation de Médicaments dans les Principaux Pays Industrialisés.* Paris, France: Direction de la Recherche, des Etudes, de l'Évaluation et des Statistiques (DRESS); 2000. Études et Résultats no. 47.

27. *OECD Health Data, 2001.* Paris, France: Organization for Economic Cooperation and Development; 2001.

28. *Programme de Médicalisation des Systèmes d'Information.* Paris, France: Ministry of Health and Social Affairs; 2000.

29. *1998 National Hospital Discharge Survey.* Washington, DC: National Center for Health Statistics, Centers for Disease Control and Prevention; 1999.

30. *Health in the United States.* Washington, DC: National Center for Health Statistics, Centers for Disease Control and Prevention; 2001.

31. Reinhardt U, Hussey P, Anderson G. Cross national comparisons of health systems using 1999 OECD data. *Health Aff (Millwood).* 2002;21(3):169–181.

32. Rodwin V, Sandier S. Health care under French national health insurance. *Health Aff (Millwood).* 1993;12(3): 113–131.

33. Sandier S, Polton D, Paris V, Thompson S. France. In: Dixon A, Mossialos E, eds. *Health Care Systems in Eight Countries: Trends and Challenges.* London, England: London School of Economics and Political Science; 2002: 30–45.

34. Catrice-Lorrey A. *Dynamique Interne de la Sécurité Sociale.* Paris, France: Economica; 1982.

35. White J. *Competing Solutions: American Health Care Proposals and International Experience.* Washington, DC: Brookings Institute; 1995:chap 4 and 5.

36. Glaser W. *Health Insurance in Practice.* San Francisco, Calif: Josey Bass; 1992.

37. Dupéyroux JJ. *Sécurité Sociale.* Paris, France: Dalloz; 1997

38. Galant H. *Histoire Politique de la Sécurité Sociale Française.* Paris, France: Armand Colin; 1955.

39. Duriez M, Lancry JP, Lequet-Slama D, Sandier S. *Le Système de Santé en France.* Paris, France: Presses Universitaires de France; 1996.

40. Boisguerin B. *La CMU au 31 Mars 2002.* Paris, France: Direction de la Recherche, des Études de l'Évaluation et des Statistiques (DRESS); July 2002. Études et Résultats no. 179.

41. *La Population Protégée par les Régimes de Sécurité Sociale: Répartition Géographique par Département et par Circonscription de Caisse au 31 Décembre 1999.* Paris, France: Caisse Nationale d'Assurance Maladie des Travailleurs Salaries (CNAMT); May 2001. Dossier Études et Statistiques no. 48.

42. Rodwin V. The marriage of national health insurance and la médecine libérale: a costly union. *Milbank Mem Fund Q Health Soc.* 1981;59:16–43.

43. *Rapport de la Commission des Comptes Nationaux de la Santé, 2000.* Paris, France: Direction de la Recherche, des Études de l'Évaluation et des Statistiques (DRESS); 2001.

44. *Commission des Comptes de la Sécurité Sociale.* Paris, France: Direction de la Recherche, des Études de l'Évaluation et des Statistiques (DRESS); 2002.

45. Haut Comité de la Santé Publique. *La Santé des Français.* Paris, France: La Découverte; 1999.

46. Rodrigue JM, Garros B. Regards sur la Santé des Français. In: de Kervasdoué J, ed. *Le Carnet de Santé de la France en 2000.* Paris, France: Mutualité Française; 2000,

47. Salem G, Stephane R, Jougla E. *Les Causes de Décès.* London, England: John Libbey Eurotext; 1999. *Atlas de la Santé en France;* vol 1.

48. Leclerc A, Fassin D, Grandjean H, Kaminski M, Lang T, eds. *Les Inégalités Sociales de Santé.* Paris, France: La Découverte/INSERM; 2000.

49. Got C. *Risquer Sa Peau.* Paris, France: Bayard; 2001.

50. *La Liste Noir des Hôpitaux.* Paris, France: Sciences et Avenir; October 1997.

51. Rodwin V. The rise of managed care in the United States: lessons for French health policy. In: Altenstetter C, Bjorkman JW, eds. *Health Policy Reform, National Variations, and Globalization.* New York, NY: St Martin's Press; 1997: 39–58.

52. Rodwin V. Management without objectives: the French health policy gamble. In: McLachlan G, Maynard A, eds. *The Public/Private Mix for Health.* London, England: Nuffield Provincial Hospitals Trust; 1982:289–325.

53. *Data from the Socio-Economic Monitoring System 1984–1999.* Chicago, Ill: American Medical Association. Available at: http://www.ama-assn.org/ama/pub/category/7801.html. Accessed November 20, 2002.

54. Audric S. *Les Disparités de Revenus et de Charges des Médecins Liberaux.* Paris, France: Direction de la Recherche, des Études de l'Évaluation et des Statistiques (DRESS), Ministère de l'Emploi et de la Solidarité; 2001. Études et Résultats no. 146.

55. Jourdain A, Duriez M, eds. Les agences dans le système de santé. *Actualité et Dossier en Santé Publique.* December 2001;37:18–60.

56. Matillon Y, Loirat P, Guiraud-Chaumeil B. Les rôles de l'ANAES dans la régulation du système de santé Français. *Actualité et Dossier en Santé Publique.* December 2001;37:46–50.

57. Durieux P, Chaix-Couturier C, Durand-Zaleski I, Ravaud P. From clinical recommendations to mandatory practice: the introduction of regulatory practice guideline in the French healthcare system. *Int J Technol Assess Health Care.* 2000;16:969–975.

58. Coudreau D. Les agences régionales de l'hospitalisation dans le système de santé. *Actualité et Dossier en Santé Publique.* December 2001;37: 50–54.

59. Lancry PJ, Sandier S. Rationing health care in France. *Health Policy.* 1999;50:23–38.

60. Fuchs V. What's ahead for health insurance in the United States? *N Engl J Med.* 2002;346:1822–1824.