Health insurance and health policy, American and Japanese style: lessons of comparative experience

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Received February 1992, accepted November 1993

Abstract: This paper considers how American and Japanese policymakers might learn from their mutual experience with health insurance and health policy. Each country views itself as a health care leader in their respective areas of strength. Each country is characterized by distinctive patterns of health care organization and financing. Yet, policy analysts on both sides are intrigued and often envious of the other's success. Americans can learn from the central regulation of Japanese national health insurance and from Japan's stellar health status and its recent political commitment to long-term care. The Japanese can learn from the active role of payers and other organizations in the United States in controlling volume, assuring quality of care, and designing alternative health care delivery systems.

JEL Classification: I11

Keywords: Health care markets; Government policy; Health policy; Comparative policy

1. Introduction

Competitors are not driven by ambition alone; they are also motivated by envy. So it seems, at least, in thinking about how American and Japanese policymakers might learn from their mutual experience with health insurance and health policy. Both the United States and Japan consider themselves health care leaders in their respective areas of strength. Each country views its health care system as a case of "exceptionalism" in the sense that it is characterized by distinctive (and sometimes unique) patterns of health care

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I wish to thank Professor Ryuzo Sato for commissioning this paper and organizing a stimulating conference for its presentation. Also, I owe special thanks to the extensive and perceptive comments of an anonymous reviewer and to the careful reading of James Littlehales.

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organization and financing (Rodwin, 1987). Yet policy analysts on both sides are intrigued and often envious of the other's success.¹

For American policymakers holding a widely-shared belief that a system of universal and compulsory National Health Insurance (NHI) would result in runaway costs,² Japanese-style NHI raises a considerable challenge: How does Japan achieve the elimination of financial barriers to access and No. 1 health status at a cost that is among the lowest of wealthy industrialized nations? For Japanese policymakers sharing a general consensus about the high quality of American medical schools and medical research, health insurance and health policies in the United States represent an extraordinary laboratory in which to learn from American health services research, to study American management technologies such as case mix analysis for hospital reimbursement and resource-based relative value scales (Hsiao et al., 1988) for physician reimbursement, and to evaluate new organizational forms in the United States for improving coordination between social and medical services, hospital and ambulatory care.

Before assessing the lessons of comparative experience – first for the United States and then for Japan – it is helpful to compare the distinctive features of the American and Japanese health systems and to highlight important areas of convergence: the multi-payer, employment-based, nature of American and Japanese health insurance, the predominant role of private hospitals and fee-for-service practice, and the likelihood of significant reform in both health systems.

2. American and Japanese exceptionalism in health care

Since de Toqueville (1948) observed that the 'great advantage' of the American was that he did not have to 'endure a democratic revolution,' there emerged an abundant literature devoted to explaining why the United States is different from Europe. The three most striking differences in the health sector, which apply to Japan, as well, are the low level of public expenditure as a percent of total health expenditures, the high level of total health expenditures as a percent of gross domestic product (GDP) and the absence of a universal and compulsory NHI program (Abel-Smith, 1985).

Although the component elements of an NHI system already exist in the United States – Medicare for the elderly and severely handicapped and

¹ On the American side, see e.g. the special report of the Democratic Policy Committee’s (DPC 1990) series on Health Care in Industrialized Nations. On the Japanese side, see e.g. Masahira Anesaki’s discussion of “Japanese health care at the turning-point or in crisis” (Powell and Anesaki 1990).
Medicaid for the very poor – these programs were established later than in Western Europe, Canada and Japan. Moreover, long before these programs were adopted, the United States opted, in the 1930s, ‘40s and ‘50s, for a system of private health insurance. This was not the outcome of explicit health policy decisions. It was the result of two federal policies outside of the health sector: the exemption of fringe benefits from wage controls during World War II and their largely tax-exempt status since then (Starr, 1982). These indirect subsidies to the private health insurance industry are largely responsible for its important market share (32% of health expenditures) leaving 41% for all public expenditure (federal, state and local government) and 27% for direct patient payments.

In comparison to the 24 OECD nations, the United States has the lowest share of public expenditure as a percent of total health care expenditures, the highest level of per capita health expenditures and the highest level of total health expenditures as a percent of GDP (OECD, 1992). In addition, the United States has a number of other distinguishing characteristics. It has the lowest per capita number of inpatient hospital beds, with the exception of Spain, Portugal and Turkey (OECD, 1992). And it has the shortest average length of hospital stays, with the exception of Denmark, Ireland and Turkey (OECD, 1992).

To the extent that OECD data are available on hospital admission rates for selected procedures (McPherson, 1989), with the exception of appendectomies, the United States exceeds those of most selected OECD nations and far exceeds Japanese hospital admission rates (Table 1). Ikegami (1989) cites comparative survey data indicating that surgeons in the United States per-

<table>
<thead>
<tr>
<th>Procedure</th>
<th>United States</th>
<th>Japan</th>
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<tbody>
<tr>
<td>Tonsillectomy</td>
<td>205</td>
<td>61</td>
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<tr>
<td>Coronary bypass</td>
<td>61</td>
<td>1</td>
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<tr>
<td>Cholecystectomy</td>
<td>203</td>
<td>2</td>
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<tr>
<td>Inguinal hernia repair</td>
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<td>67</td>
</tr>
<tr>
<td>Exploratory laparotomy</td>
<td>41</td>
<td>–</td>
</tr>
<tr>
<td>Prostatectomy</td>
<td>308</td>
<td>–</td>
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<tr>
<td>Hysterectomy</td>
<td>557</td>
<td>90</td>
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<tr>
<td>Operation on lens</td>
<td>294</td>
<td>35</td>
</tr>
<tr>
<td>Appendectomy</td>
<td>130</td>
<td>244</td>
</tr>
</tbody>
</table>


* These figures are not age standardized and assume equal proportions of men and women. Some are likely to be incomparable for artifactual reasons.

Table 2

<table>
<thead>
<tr>
<th>HEALTH STATUS</th>
<th>United States</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life expectancy at birth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>71.5</td>
<td>75.5</td>
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<tr>
<td>Females</td>
<td>78.3</td>
<td>81.3</td>
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<tr>
<td>Infant mortality rate</td>
<td>10.0</td>
<td>4.8</td>
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<tr>
<td>Life Expectancy at 80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>6.9</td>
<td>6.9</td>
</tr>
<tr>
<td>Females</td>
<td>8.7</td>
<td>8.4</td>
</tr>
<tr>
<td>RESOURCES</td>
<td></td>
<td></td>
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<tr>
<td>Physicians per 10,000 populations</td>
<td>23</td>
<td>16.0</td>
</tr>
<tr>
<td>Hospital beds per 1000 population</td>
<td>5.1</td>
<td>15.6</td>
</tr>
<tr>
<td>Hospital staffing ratios 1</td>
<td>2.75</td>
<td>0.77</td>
</tr>
<tr>
<td>Intensive care unit beds per million 2</td>
<td>244.5</td>
<td>79.2</td>
</tr>
<tr>
<td>Coronary care unit beds per million 2</td>
<td>46.3</td>
<td>17.8</td>
</tr>
<tr>
<td>Neonatal intensive care unit beds per million 2</td>
<td>44.7</td>
<td>22.4</td>
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<tr>
<td>MEDICAL CARE USE</td>
<td></td>
<td></td>
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<tr>
<td>Physician visits per capita</td>
<td>5.3</td>
<td>12.9</td>
</tr>
<tr>
<td>Hospital admissions as % of population</td>
<td>13.8</td>
<td>7.8</td>
</tr>
<tr>
<td>Average length of hospital stay</td>
<td>9.3</td>
<td>52.1</td>
</tr>
<tr>
<td>Inpatient days per capita</td>
<td>1.3</td>
<td>4.1</td>
</tr>
</tbody>
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2 These data are from Woodward and Asano (1991). The U.S. data are from the American Hospital Association, U.S. ICUs and CCUs, Table 13. The Japanese data, from 1987, are from the Health and Welfare Statistics Association, 1989.

form more than four times the number of operations per capita than their Japanese colleagues. This pattern is supported by findings on cesarean section rates which are twice as high in the United States as in Japan (Notzon et al. 1987). Moreover, Woodward and Asano (1991) note that, in comparison to Japan, the United States has between two and three times the number of intensive care beds per capita (Table 2).

Japan, too, stands out as a case of exceptionalism among health care systems. Like the European, Canadian and Australian health care systems, there is a compulsory and virtually universal NHI program. But Japan surpasses 24 OECD countries in life expectancy at birth and has the lowest infant mortality rate (OECD 1991). It achieves these measures of health status at a cost, as a proportion of GDP (6.7%), that is the lowest of OECD nations, with the exception of the United Kingdom, Denmark, Greece, Portugal, Spain and Turkey (OECD, 1991). In addition, among 24 OECD nations, Japan has the highest per capita number of annual physician visits.

As pointed out by an anonymous reviewer, a small number of individuals, e.g. visiting students from poorer countries and illegal aliens, are still not covered under Japanese NHI.
and, paradoxically, the lowest physician-population ratio, with the exception of Ireland, the United Kingdom, Italy and Turkey (OECD, 1991).

Also, Japan has the highest per capita number of inpatient hospital beds, the lowest hospital admission rate, with the exception of Turkey, and by far, the longest average length of stay (52 days) for inpatient medical care services in hospitals (OECD, 1991). Japan has the highest per capita number of computerized axial tomography (CT) scanners in the world, the highest number of patients (per million) treated for end-stage renal disease failure, \(^4\) and the highest expenditure on drugs as a percent of total health expenditures. The high spending on drugs appears to be directly related to the fact that Japanese physicians dispense and may make profits on the drugs they prescribe. \(^5\) There is a clear preference, in Japan, for non-invasive procedures, which is reflected in the comparison with the United States of hospital admission rates for selected invasive procedures (Table 1), as well as in the medical technologies that are imported to Japan versus those that are exported. Equipment requiring invasive operations such as pace makers and artificial heart valves are almost all imported, whereas diagnostic equipment, e.g. CT scanners, are produced and exported in large numbers (Ikegami, 1988).

Beyond these more measurable characteristics that distinguish the United States and Japanese health systems, there are a host of political-institutional and cultural factors that reinforce each system’s distinctive identity. The United States is a federal system with 50 states having significant autonomy over matters of health insurance and public health policies. Although the federal government exercises a dominant role over the Medicare Program and regulatory aspects of health policy, American citizens are known for their multi-ethnic character, for their suspicion about excessive governmental authority and for their inclination to solve social problems at the local level. Japan is a centralized unitary state with a highly homogeneous ethnic population and a tradition of powerful state intervention in the economy including over its many health insurance plans.

The United States is the only industrially advanced nation with over 15 percent of its population uninsured for health care services. This has won us

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\(^4\) In Japan, in 1987, there were 663 patients per million treated for end-stage renal disease failure in contrast to 562 in the United States. See OECD data file published in the Health Care Financing Review, 1989 Annual Supplement, Table 47, p. 174.

\(^5\) Iglehart (1988) reports that in 1981 reimbursement for drugs by Japanese health insurance was equal to 38.7 percent of all health expenditures and that in 1987 this figure dropped to 28 percent. More recent data from OECD Health Systems: Facts and Trends (Paris:OECD, 1992) indicate that this figure has dropped to 18.4 percent in contrast to the U.S. figure of 8.3 percent. However, these data exclude pharmaceutical expenditures for inpatients which are substantial. Ikegami (1990) reports that "about 30 percent of Japan’s personal health expenditures are for drugs," which I assume include inpatient drugs and supports the contention that the Japanese are among the highest spenders on drugs.
a reputation for backwardness in some circles. The combination of a large private health insurance industry with over 1500 payers and a vast range of rules governing claims processing along with enormous government regulation have reinforced a largely hospital-centered medical system (to the detriment of primary care) and resulted in spending over 20 percent of health care expenditures on administrative services (Himmelstein and Woolhandler 1990), a figure that probably exceeds that of any other OECD country. 

In contrast to the United States, Japan’s low rate of hospital admissions (Table 2) reflects its tendency to emphasize ambulatory over inpatient care (Ikegami, 1991). But once hospitalization occurs, Japan has an OECD record for long lengths of stay and low hospital staffing ratios (Table 2). It is the only industrially advanced nation with over 25 percent of hospital beds in private physicians’ offices known as clinics, which, by law, must have less than 20 beds. Competition for patients between clinics and hospitals, limited availability of nursing homes and home health care, inclusion of mentally ill patients and non-medically ill elderly patients in overall length-of-stay statistics and the concept of “ansei” which emphasizes regenerative bed rest and recuperation from illnesses, are all important factors in explaining Japan’s long lengths of stay (Littlehales, 1991).

3. Points of convergence

Although the United States and Japan present important cases of exceptionalism in the health sector, there are also some noteworthy points of convergence.

First, the United States and Japan share complex systems of health insurance, both of which are financed on the basis of employer and employee premiums and involve thousands of insurance plans organized largely around occupational groups. Like European systems of NHI, the Japanese model of health care financing is structurally more similar to existing patterns in the United States than to Canadian NHI or national health service (NHS) systems, e.g. the United Kingdom or Sweden where health care financing is raised largely from government tax revenues. In the United States, Medicare, Medicaid and other public programs cover roughly 22 percent of the population, individual health insurance policies cover roughly 10 percent, but most

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6 There are no studies comparable to that of Himmelstein and Woolhandler (1986) outside of Canada and the United States. As Ikegami (1991) argues, it is likely that Japanese administrative costs are very low in comparison to those of the United States. However, the 2.5 percent figure he cites is not comparable to the Himmelstein–Woolhandler analysis since it does not include administrative costs of hospitals and physicians. Even if these costs were included, given the multi-payer nature of the Japanese health system, it is probable that Japan’s administrative costs are higher than those of Canada.

7 The only OECD country for which data are available, which has a lower hospital staffing ratio than Japan is Austria.
(54 percent) are insured by private employer-based plans. In Japan, all health insurance plans are taxed to finance a national fund covering all health care costs for the elderly over seventy years of age. Roughly 37 percent of the population – the self-employed and their dependents, and the elderly on pensions – are covered by a number of community-based and NH1 associations. But as in the United States, most (63 percent) are covered by 1800 employer-based schemes (Ikegami 1991).

Second, the United States and Japan share a tradition of entrepreneurialism in health care. Both health systems are characterized by the predominant role of private fee-for-service practice and private hospitals. And American and Japanese physicians are among the highest paid of all OECD countries. In the United States, although roughly 30 percent of hospitals are public (either federal, state local or municipal institutions), and most hospitals are in the private non-profit sector, roughly 15 percent of all hospital beds are in the for-profit sector, some in small doctors' hospitals, most in large investor-owned multihospital systems. In Japan, 20 percent of hospitals (37 percent of beds) are public – the large medical research centers and teaching institutions. But most hospitals, and all clinics, are private. They have been shown (clinics in particular) to exhibit income maximizing behavior on the part of their general practitioners whose revenues and net profits increase in direct relationship to the quantity of their drug prescriptions (Abe, 1985).

The third point of convergence is that the United States and Japan currently face strong pressures to adapt their systems of health insurance and medical care organization to some common problems: (1) demand for health services continues to increase in response to new and expensive medical technologies and the growing elderly population; (2) the population dependency ratio is increasing and the growth rate of health care expenditures has been high.

In the United States, these problems take the form of soaring health insurance premiums paid by big business, budget deficits, particularly at the federal government level but also at state and local levels, and growing concern about the 35 million uninsured Americans. A recent report by the General Accounting Office (Bowsher, 1991) notes that between 1989 and 1990 the average health care outlays of larger businesses rose 21.6 percent and that health spending has been the second fastest growing component of the federal budget after the public debt. There is increasing political moment-

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8 In 1981, physician income relative to average employee income was 4.7 in Japan and 5.1 in the United States (OECD, 1987), p. 22.
tum to overhaul the financing and organization of the health care system. But there is not yet any consensus about any one reform proposal.

In Japan, the problems noted above take the form of a projected 24 percent of the population over the age of 65 in the year 2020 – the highest proportion of elderly population projected for all OECD countries. In the United States, by comparison, the elderly population is estimated to reach 17.3 percent in 2020. Some observers note that the Japanese demographic shift, combined with its relatively underdeveloped system of social services, will push the health system in the direction of major reform (Powell and Ancesaki, 1990). For example, they note the problems of coordination within the health care system and between health and social services and criticize the inadequate functional differentiation between primary, secondary and tertiary services, and rising perceptions among the public about problems of misdiagnoses. Others have noted the growth of multihospital systems in Japan as evidence of important supply-side restructuring (Niki, 1990) and suggested that health care institutions recognize that they will need to pay more attention to management in the future (Levin et al., 1987; Tanaka, 1990).

4. Learning from comparative experience

Given the important points of convergence between health insurance and policy concerns in the United States and Japan, can comparative experience be useful for purposes of learning from abroad? If the points of convergence outweigh the distinctive features of their health systems, one could argue that the United States and Japan could benefit by adopting selected elements of their health systems. But there is also a deeply rooted skeptical variant to this position. Those who emphasize the importance of American and Japanese exceptionalism and who presume that comparative studies of health systems are not useful for policy learning often rely on this "assumption of uniqueness" to reject ideas from abroad (Stone, 1981).

Both of these responses are probably inappropriate. The second response – that comparative experience is not useful – insulates us from the experience of other nations. It is ethnocentric; it tends to make us conservative; and therefore it supports the status quo in the United States and Japan. The first response – that both countries should adopt elements of their health systems – relies too heavily on the experience only of the United States and Japan. It is misleading because there are serious limitations in each of these systems.

A third response, encouraged by Iglehart (1991) in his journal, *Health Affairs*, and adopted here, is well articulated by Canadian economist, Robert Evans:

Nations do not borrow other nations' institutions. The Canadian system may be 'better' than the American. I believe it is, though that is a very complex question, and
as I have just pointed out, my views, like yours, are contaminated by my origins. Even if it is better, I am not trying to sell it to you. You cannot have it. It would not ‘fit’ because you do not see the world, or the individual, or the state, as we do . . . . The point is that by examining others’ experience you can extend your range of perceptions of what is possible.”

In the spirit of extending the range of “perceptions of what is possible,” the remainder of this paper speculates on the lessons of comparative experience from the perspective of what characteristics of the American and Japanese health systems seem most enviable from the other side. Such an approach, of course, reflects a good deal about the perception of policy problems within each country.

4.1. Lessons for the United States

There is great interest, among health policy circles in the United States, about alternative NHI bills, the problems of financing long-term care and the broader problems of improving health status. The experience of Japan suggests at least five lessons in this regard.

(1) NHI is feasible, in practice, along the lines of proposals that mandate employer coverage – so-called “play or pay” plans – without such radical reforms as a Canadian single-payer system (Himmelstein and Woolhandler, 1989) which would give the government unilateral control over health insurance, or supply-side reform through “managed competition” (Enthoven and Kronick, 1989).

Japanese NHI provides universal coverage and comprehensive health care benefits. In contrast to the United States where out-of-pocket payments by beneficiaries are equal to roughly 27 percent of total health care expenditures, in Japan, the equivalent figure is 12 percent. Insurance schemes finance 58 percent of Japan’s health expenditures and the government covers the remaining 30 percent. Virtually all residents of Japan are covered by either an employer or a community-based plan without regard to any medical problems they may have or to any predisposing conditions.

(2) A multi-payer NHI Program requires an extensive system of government regulation mandating coverage and benefits, as well as providing subsidies to health insurance schemes covering poor and higher risk populations.

Most of Japan’s health insurance schemes are legally private organizations but, in practice, they have a quasi-public status insofar as they are largely

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10 Cited by Iglehart (1991) in his introduction to a special issue of Health Affairs, Pursuit of Health Systems Reform.

11 This figure from Ikegami (1991) is, as pointed out by an anonymous reviewer, an underestimate because the Japanese definition of national medical expenditures is far narrower than the American one.
bound by requirements to provide uniform benefits and to cover all eligible beneficiaries (GAO, 1991). All employers are mandated to insure their employees and dependents. They have little freedom to alter premium levels which range from 7.3 to 9.5 percent of the wage base (Ikegami, 1991). And these premiums are taxed to finance a national pool, which along with government subsidies, are returned to health insurance schemes on the basis of their number of elderly subscribers. The self-employed, also, are required to subscribe to health insurance schemes that are administered by local governments or trade associations.

(3) In a multi-payer NHI Program, all payers are subject to the same rules (standardized reimbursement rates) governing the payment of providers. This severely reduces the possibilities of cost-shifting between payers and maintains the monopsony power of a single payer system.

In Japan, all payers abide by the established rates of a national uniform fee schedule. The rates are set by the Central Social Medical Care Council of the Ministry of Health and Welfare, which comprises eight provider representatives, eight representatives for health insurance and four charged with representing the public interest. When all health insurance schemes, together with government, make coordinated demands in annual fee negotiations, they represent a formidable bargaining force against physician representatives. There is no balance billing. All health care providers must accept the negotiated fees as payment in full for their services.

(4) Progress may be made on the problem of long-term care once the government makes a political commitment to developing plans, getting them accepted and allocating budgets to increase the chances of actual implementation.

Publication by the Ministry of Health and Welfare (1990) of the Golden Plan represents an important step in solving a perceived problem of crisis. Currently roughly 700,000 elderly in Japan or 4.6 percent of those aged 65 and over are so severely disabled that they are bedridden or require constant supervision. The plan aims to reduce the geriatric population in geriatric hospitals and to increase capacity in skilled nursing homes and particularly new institutions known as geriatric rehabilitation centers. In addition, it calls for a three-fold increase in government-employed visiting homemakers, a twelve-fold increase in respite care centers, and a ten-fold growth in adult day centers. As Butler (1990) notes in his introduction to the English version of this plan that will cost the government $40 billion over the next ten years, “it is encouraging to see a long-term care plan proposed, accepted and budgeted. Perhaps the Golden Plan can help guide us in the U.S. as we struggle to resolve similar issues.”

(5) The possibilities for improved health status are enormous and extend well beyond the health care system, beyond disease prevention programs and health promotion campaigns that focus on changing individual behaviors, to
such factors as the provision of good high school education and more equity in the distribution of income.

Japan's record on infant mortality rates and life expectancy, at birth, reflects factors that appear to go well beyond its health care system. In fact, the health status indicator that may reveal something about the effectiveness of medical care organization is life expectancy at age 80 (Table 2). Along this measure, Japan is no further ahead than the United States. But Japan does have an excellent educational system and one of the highest literacy rates in the world. It also has one of the most equitable income distributions of all OECD countries. Finally, it has so far been spared the number of social pathologies that currently plague the United states – AIDS, drugs, alcoholism, and the large number of urban homeless people with their attendant health problems.

4.2. Lessons for Japan

In Japan, there is great interest in the problems of controlling the volume of medical services, assuring the quality of medical care and coordinating, within a highly fragmented and functionally non-differentiated health care system, the ambulatory and inpatient activities of clinics with those of private and public hospitals. Although the United States has, by no means, solved these problems, its diverse experience in these areas suggests at least four lessons about these issues.

(1) The problem of volume and quality control reflects a deeper problem of management control over the health care system. This, in turn, requires information on patient complaints, their diagnoses, the unit costs of medical services, diagnostic tests, therapeutic procedures, outcomes and the evaluation of costs versus benefits.

The United States has developed extensive capability in the areas and much could be usefully learned from the experience of utilization review (Gray and Field, 1989), uniform cost accounting for hospitals, diagnosis-related groups (DRGs) – both as measures of hospital case mix and as a hospital reimbursement methodology – outcomes and effectiveness research (Ellwood, 1988; Roper, 1988) and studies of medical practice variations (Wennberg, 1984).

One frequently repeated complaint about Japanese health insurance is that some doctors are guilty of filing false claims and providing excessive medical care (Kemporen, 1984). Some doctors prescribe more drugs than necessary because they stand to earn more money. Some prescribe the inappropriate drugs, e.g. newer antibiotics, because their profit rates are relatively higher on these products. Some doctors sometimes extend the period of hospitalization beyond what is required. In short, what seems needed are controls on supplier generated costs, e.g. tighter monitoring of
diagnostic procedures and closer scrutiny of insurance claims by providers to curb overservicing and overprescribing. Although the practice of American health insurers typically strikes foreigners as a case of micromanagement, the experience of the United States may be most helpful to Japan if it is appropriately integrated within the NHI system as a tool of "macromanagement."

(2) Since no nation has yet solved the problem of volume control in health care only on the basis of acquiring detailed management information systems, a more pragmatic solution is to design more sophisticated fee schedules and to impose budget limits or targets within which physicians are given free rein to make clinical judgments.

In the United States, the work of the Physician Payment Review Commission (PPRC) in reforming the Medicare Program's system of physician reimbursement is noteworthy and may have implications for the Japanese fee schedule's "point system." Starting with Hsiao's (1988) studies for estimating the value of physicians' work for a resource-based relative value scale, the PPRC has undertaken a technically sophisticated effort to design a fee schedule and procedures to update it based on such factors as the rate of growth of physician expenditures, technological change, and changes in the costs of practice. Since no fee schedule, alone, can control the volume of physician billings, the PPRC recommended, and Congress passed a law setting expenditure targets for all physicians' services under the Medicare Program (Rodwin, 1989; Rodwin et al., 1990). Influenced, in part, by the experience of Germany and Canadian provinces, the expenditure target allows the fee schedule conversion factor to increase a set amount for year \( n \) under the assumption that volume will not exceed projected increases (Rice and Bernstein, 1990). If these increases are exceeded, in year \( n + 1 \), the growth of the conversion factor will be restrained.

(3) As in the case of volume control, since no nation has yet solved the problem of quality control in health care only on the basis of acquiring a detailed management information system, a more pragmatic solution is to develop institutional mechanisms such as hospital tissue committees, medical audits, hospital quality assurance committees, peer review organizations and, above all, some strategies for changing the behavior of physicians once clinical guidelines are agreed upon (Eisenberg, 1986).

In the United States, there has been experience in all of these areas. Also, Medicare's experience with quality assurance is worth study (Donaldson et al., 1991). In addition, the work of the Joint Commission on Accreditation of Health Care Organizations (JCAHO), about which there is considerable Japanese interest (Kawatika, 1989), is noteworthy for making large numbers of private hospitals comply with elaborate standards. One can argue as to whether all the input and process standards are appropriate, and whether all the paperwork and personnel deployed to assess compliance is worth the
cost. But there is no question that there is potential for learning a great deal about how to assure quality by simply studying the experience of the JCAHO.

In addition, the Health Care Financing Administration's (HCFA's) hospital mortality reports are important for highlighting the problem of hospital quality for the public. These reports compare risk-adjusted mortality data for every hospital accepting Medicare patients in the United States. Again, one can dispute the methods used, and no doubt they will improve in response to the criticisms. But it is hard to deny their utility in dramatizing the apparent disparities in quality between hospitals and sensitizing the public, including physicians, to these issues.

(4) Managed care and alternative health care delivery systems often improve coordination between inpatient activities and primary and tertiary levels of care. The idea, for example, of introducing health maintenance organizations (HMOs) in combination with elements of market competition, within Japan's NH1 system has a certain intellectual appeal. Since an HMO is, by definition, both an insurer and a provider of health services, it establishes a link between the financing and the provision of health services. Because it is financed on the basis of prepaid capitation payments, its managers have an explicit budget as well as a clearly defined clientele. Moreover, since an HMO is responsible, on a contractual basis, for providing a broad range of primary, secondary and tertiary level services to its enrolled population, it has powerful incentives to provide these services in a cost-effective manner while simultaneously maintaining quality to minimize the risk of disenrollment.

There is enormous experience, in the United States, with HMOs and emerging forms of managed care including case management for long-term care services and high-cost illnesses. Luft's (1991) recent paper on the applicability of the U.S. experience with HMOs for other health systems is full of astute advice and cautionary observations. He concludes that "it may be better to consider the HMO not as a 'package' to be imported but as a set of lessons concerning the use of incentives to shape medical care delivery."

To the extent that Japanese physicians are well-known to respond – sometimes perversely – to financial incentives (Broida, 1978; Kemporen, 1984; Abe, 1985), some attention on the part of Japan's NH1 managers to alternative incentive schemes for improving the coordination of medical care is probably well warranted.

5. Concluding observations

The United States and Japan provide striking contrasts of health insurance and health policy. Analysis of the lessons from their comparative experience reveals that the differences between these two competitors are at the same time paradoxical as well as a source of mutual envy.
Fujii and Reich (1988) argue that, in Japan, health insurance policy takes precedence over medical services policy and tends to be reactive rather than proactive. They refer here to recent changes in the fee schedule and to decreases in reimbursement rates for prescription drugs. In contrast, recent health insurance policy changes in the United States provide examples of an emphatically proactive role: the encouragement of alternative delivery systems, ranging from HMOs to Preferred Provider Organizations (PPOs) and managed care programs; the implementation of DRGs for hospital reimbursement; and the new fee schedule for physician reimbursement. It is paradoxical, indeed, that the United States has used its payment system to alter medical care organization while Japan, on the other hand, the envy of some American proponents of NHI, has not deployed its powerful financing mechanism to reorganize the structure of its own health sector. Steslicke and Hashimoto have argued that Japanese NH1 has, in fact, reinforced existing inequities between occupational groups and been strongly resistant to organizational change and unable to react to new problems as they arise. In contrast, however much NH1 in the United States has been an elusive goal, proponents and detractors alike, tend to view it as an opportunity – for better or for worse – to reform further the structure of medical care organization including patterns of clinical practice.

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