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Public Health Insurance in Japan

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Japanese universal public health insurance which is largely based on a fee-for-services payment system has functioned well so far. There are several key factors for the success of this program such as social solidarity and infrastructure for the utilization review. However, people's demand on health services has increased over the years and as a result, reform in under way to provide more diversified and quality-oriented health services. The centralized system is viewed as less suitable for coping with these more recent issues related to the quality of health care. While the private sector has established an important infrastructure that delivers health services and maintains public health, its role is relatively small in terms of health service financing. Going forward, two major challenges remain. They are: (i) to provide the elderly population with adequate health, nursing, and long-term care services at an affordable cost, and (ii) to reduce regional differences in health care expenditure.

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Foreword

This paper was prepared for a project on Social Development in East Asia. The project was organized by the World Bank Institute under the auspices of the Program for the Study of the Japanese Development Management Experience (The Brain Trust Program), which is financed by the Policy and Human Resources Development Trust Fund established at the World Bank by the Government of Japan (GOJ). We greatly appreciate the generous support from GOJ.

The principal objectives of this Program are to conduct studies on Japanese and East Asian development management experience and to share the lessons of this experience with developing and transition economies. The experiences of other countries are often covered in order to ensure that these lessons are placed in the proper context. This comparative method helps identify factors that influence the effectiveness of specific institutional mechanisms, governance structures, and policy reforms in different contexts. A related objective of the Program is to promote the exchange of ideas on development among Japanese and non-Japanese scholars, technical experts and policy makers.

The papers commissioned for this project cover a number of important issues related to Japanese Social Policy. These issues include, among other, Japanese pension system, public health insurance in Japan, evolution of social policy in Japan, role of families, communities and government in improving socioeconomic performance, and Japanese policies towards poverty & public assistance. We hope that these papers will provide important policy findings and lessons for policymakers in developing countries and other development stakeholders.

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Tetsuo Fukawa

Most health services in Japan are provided through the public health insurance system, which covers the entire population. Although the private sector has established an important infrastructure that delivers health services and maintains public health, its role is relatively small in terms of health service financing. In examining this issue in this paper, the first section deals with the history of the health insurance system and issues Japan has faced throughout the system's development. Subsequent sections describe the present health insurance system, explore Japanese health insurance from a comparative perspective, and present future issues and possible lessons learned from the country's experience so far.

The Development of the Health Insurance System in Japan

THE PREWAR PERIOD. Japanese public health insurance was first introduced for private sector employees by the Health Insurance Law of 1922, the implementation of which was delayed until 1927 because of the Great Kanto Earthquake of 1923. Prior to this, there were only a few private companies that offered health insurance to their employees, and few programs providing employers' assistance to workers for their injuries and illnesses as specified by the Factory Law of 1911. The Health Insurance Law was enacted to protect workers, but the coverage of the Law was partial and its benefits were not comprehensive:

- The Law applied to factories, mines, and transportation companies with 10 employees or more;
- Those with an annual income of more than 1,200 yen were excluded;
- Benefits applied to insured persons only (and not dependents); and
- The period of benefit provision was 180 days.

The Health Insurance System, though it faced a financial crisis shortly after its establishment in 1929 owing to the global Great Depression, gradually gained financial stability in its management after the crisis, as the nation's economy grew.

When the country began to head rapidly toward World War II, the health insurance system was gradually improved and extended as a part of a government effort to strengthen the country's labor force. The Ministry of Health and Welfare was established in 1938, and region-based National Health Insurance was introduced in the same year.

THE POSTWAR PERIOD. After the war, social security systems including health insurance were introduced and improved, one after another. With the introduction of Labor Standard Law and Workers' Accident Compensation Law in 1947, provision of health care for work-related illnesses and injuries were excluded from health insurance coverage. In 1948, the National Public Service Mutual Aid Association Law was established and a number of other insurance schemes for employed persons were institutionalized in the years that followed. In 1954, the national government set aside one billion yen for the first time to subsidize government-managed health insurance. The goal of universal public health insurance coverage was finally attained in 1961.

Table 1. *History of Public Health Insurance in Japan*

1922	Health Insurance Law (implementation: 1927).
1934	Revision of the Health Insurance Law. – Expansion to cover companies with five employees or more
1938	Establishment of the Ministry of Health and Welfare. National Health Insurance Law.
1941–45	World War II.
1958	Revision of the National Health Insurance Law. – 50 percent benefit provision for the insured.
1961	Universal coverage.
1962	Establishment of the Social Insurance Agency.
1972	Revision of the Welfare Law for the Elderly (implementation: 1973). – Free medical care for the elderly
1973	Revision of the Health Insurance Law (so-called First Year of Welfare State). – Improvement of benefit level for families of the insured from 50 percent to 70 percent. – Introduction of the upper ceiling for patients' cost-sharing. – National subsidy of 10 percent of health expenditure for government-managed Health Insurance.
1982	Law of Health and Medical Services for the Elderly (implementation: 1983).
1984	Revision of the Health Insurance Law. – Ten percent cost-sharing by the insured. – Relaxation of regulations on high-technology health care. – Introduction of the health care program for retired persons.
1985	Revision of the Medical Service Law. – Medical plan by prefecture.
1989	Ten-Year Strategy for the Promotion of Health and Welfare for the Elderly so-called Gold Plan).
1991	Revision of the Law of Health and Medical Services for the Elderly. – Visiting nurse care service for the elderly. – Increase in public funds for nursing care from 30 to 50 percent.
1992	Revision of the Medical Service Law. – Classification of hospitals by function : high-tech hospital, long-term care beds.
1994	New Gold Plan.
1997	Revision of the Health Insurance Law. – Twenty percent cost-sharing by the insured. – Introduction of the patient charge on pharmaceutical costs for outpatient services.

Sources: White Paper on Health and Welfare 1998 Edition; Japan International Corporation of Welfare Services (1995).

IMPROVEMENT OF BENEFIT LEVELS IN THE 1960S AND 1970S. The public health insurance system took firm hold in the 1960s, and benefit levels were improved throughout the 1970s. When a health insurance system that covered the entire population was established in 1961, benefits covered 100 percent of costs for insured persons and 50 percent for their dependents in employer-based insurance schemes, while National Health Insurance covered 50 percent for both heads of households and household members. Thereafter, these benefit levels were improved step by step, and they were raised to 70 percent for

subscribers of National Health Insurance and dependents of employer-based insurance in 1968 and 1973, respectively. Furthermore, the benefit level of inpatient care for dependents of employer-based health insurance was raised from 70 percent to 80 percent in 1980.

A number of important measures were introduced in 1973. The 30 percent patient cost-sharing of the elderly aged 70 and over was paid out of public funds, with the implementation of a so-called free health service system for the elderly in this year. A ceiling on patient cost-sharing was introduced for the first time in 1973, and when the monthly out-of-pocket amount was higher than the ceiling, the excess amount was paid back to the patient from insurance funds. In addition, the public retirement program was substantially improved by raising benefit levels and through the introduction of a cost-of-living adjustment in line with the consumer price index increase. Therefore, the 1973 social security reform is remembered as an epoch-making move toward a welfare state.

REFORM IN THE 1980S—SOME EFFORTS TOWARD COST-CONTAINMENT. Following the establishment of universal coverage, health expenditures increased by double-digit percentage points every year, reflecting extended accessibility to health services. After the first oil crisis of 1973–74, the Japanese economy changed from high growth to stable growth. Health expenditures nevertheless increased rapidly in the latter half of the 1970s, owing to such measures as the free health service system for the elderly and an increase in benefit levels for the nonelderly. Under circumstances dominated by an aging population and mounting pressure for reducing the budget deficit, containment of health expenditures was regarded as a matter of urgency, and the public health insurance system underwent several reforms in the 1980s. First, health insurance for the elderly was created in August 1982 and fully enforced as of February 1, 1983. This system was designed to spread the burden of health costs for this age group equally among various sickness funds and introduced cost-sharing for cases involving elderly patients.

The government revised the health insurance system in 1984, which was the second important step in the reform process. The most important point of the revision was the introduction of a deductible, or 10 percent cost-sharing to be paid by the insured person under employer-based insurance. Before the revision, the insured was granted full benefits for health care expenses, except for the first visit fee (800 yen) and for the hospitalization charge (500 yen per day for the first month only). At the same time, a ceiling on total household out-of-pocket costs was introduced to relieve individuals and households affected by high expenditures (before the revision, cost-sharing was considered on an individual basis). Another important program was also introduced by the 1984 reform: Under the conventional health insurance system, whenever advanced technology that was not covered by health insurance was applied, the total costs were treated as ineligible for insurance coverage. Under the new program, if a patient receives certain high-technology treatments in specially approved medical facilities, the basic part corresponding to the conventional health service is covered by the insurance, and the patient should pay the balance.

A separate program for retired employees was also created in 1984 within the National Health Insurance system. A scheme was introduced that would transfer money from employer-based funds to the National Health Insurance fund to help cover the costs of retired employees. Health insurance for the elderly was amended in 1987 to increase patient cost-sharing and change the method of calculating contributions from sickness funds. The focus of reforming health insurance for the elderly is always providing appropriate nursing and care services as well as health services, and ensuring the long-term stability of the system. The following four points were envisaged as key issues to provide well-qualified and effective health services to the entire nation:

- Coordination between health services and care or welfare services, especially for the elderly;
- Elimination of inappropriate long-term hospitalization;
- Separation of insurance-covered health services from medical training costs (which should be covered by the education budget) at university hospitals; and
- Improvement of services for patients.

In December 1989, the Ten-Year Strategy for the Promotion of Health and Welfare for the Elderly, or the "Golden Plan," was formulated to improve underdeveloped long-term care and welfare services for the elderly with substantial government commitment. This strategy stated the targets that were supposed to be reached by March 2000 with regard to domiciliary welfare, facility welfare, and other services for the elderly. These target figures were revised upward in December 1994.

Improvement in Health and Socioeconomic Conditions

Tuberculosis was the most common illness in Japan from the 1950s to the mid-1960s. However, the pattern changed drastically thereafter, and now geriatric diseases such as hypertensive disease, cerebrovascular disease, heart disease, and malignant neoplasms are dominant.

The main goal of health policy during the 1950s and 1960s was to provide health services for all without heavy cost-sharing. After the introduction of universal coverage through public health insurance, the benefit level improved throughout the 1970s. These measures contributed to a substantial increase in national health expenditure, an average annual increase of 18 percent during the 1970s.

Health service delivery in Japan today is dominated by the private sector, which consists mainly of small private hospitals. Japanese hospitals have a history of alternate dominance between public and private, based on two opposing ideas: that medical care should basically be delivered by the private sector, and that it should be a public service. Soon after the Meiji Restoration (in 1867, which was the starting point of civilization in Japan), the pendulum swung toward the public sector. However, the medical profession claimed that its professional freedom of practice was being hindered and resisted government control. After World War II, the American mission in charge of reforming social security strongly advised that Japan should have a network of public hospitals and abolish private practice. The Ministry of Health and Welfare followed this advice and made a plan to construct the proposed network throughout the country, but implementation faced financial difficulties. Then Japanese economy took off after the Korean War and along with success in establishing a universal health insurance scheme came again the call to swing back to the private sector. In 1962, the upper limit for inpatient capacity was set to the number of beds in public hospitals, although the limit was not applicable to private hospitals. After that private facilities continued to construct beds and many clinics grew to become hospitals—most of them small, private institutions (Gunji 1994).

Outline of the Present Health Insurance System

Public health insurance in Japan is currently financed through individual contributions, employer contributions, and government subsidies. This system accounted for 84 percent of all health expenditures in fiscal 1996. Health services for needy persons based on the Public Assistance Law of 1950 and public funding for specific diseases and disorders such as tuberculosis, nuclear irradiation, and mental illness accounted for 5 percent of all health expenditures. Direct patient payment for services not covered by insurance was 12 percent.

Japan has three categories of health insurance: employer-based insurance, national health insurance, and health insurance for the elderly. The former two categories cover the total population, and there are hundreds of separate sickness funds (or insurers, as can be seen in Appendix 1) linked to a person's employer, occupation, or geographic location. Each fund provides coverage for a person and his or her dependents. Unlike in Germany, there is no choice among funds. While there are many similarities among sickness funds in terms of health services covered and reimbursement procedures for services provided, there are systematic differences in cost sharing, financing, available benefits, and level of national subsidy. Health insurance for the elderly is a special program that provides additional benefits to those who qualify.

Employer-Based Insurance

This category includes society-managed health insurance, government-managed health insurance, and mutual aid associations (Appendix 1). Society-managed health insurance covered 25.4 percent of the population in 1997. The average contribution rate was 8.5 percent of wages in 1997, shared evenly by employers and employees. However, some employers agree to pay more than half of the contributions, and consequently employee shares in the society-managed sector averaged below 45 percent of the total contributions. The 1,814 funds receive a small subsidy for administrative expenses from the national government.

Government-managed health insurance covers those private sector employees who are not covered by society-managed health insurance. The plan is administered by 298 branch offices, and insured 30.7 percent of the population in 1997. Its premium in 1997 was fixed at 8.5 percent of payroll, divided equally among employers and employees. While society-based plans may offer extra benefits, the government-managed plan offers only one package. Because its members are generally lower-wage earners than those in society-managed plans, the state contributed 13 percent of benefit costs and all administrative costs. Mutual aid associations cover public sector employees and insured 9.2 percent of the population in 1997.

National Health Insurance

National Health Insurance is community-based health insurance that covers those not eligible for employer-based insurance, in particular agricultural workers, self-employed individuals, and retirees, as well as their dependents. In March 1997 there were 3,249 municipal plans, and 166 separate national health insurance associations that served separate categories of craftspeople. These plans enrolled 34.7 percent of the population in 1997. The health services covered are generally the same as those for employer-based insurance; however, patient cost-sharing is higher, and cash benefits are usually somewhat more limited than those provided under employer-based insurance. Contributions vary from community to community and are based on individuals' income and assets. In the absence of an employer, the state pays 50 percent of the costs under the municipal plans and from 32 to 52 percent for the craft-based plans.

Health Insurance for the Elderly

Health insurance for the elderly was introduced in 1983 to spread the burden of providing health care for this group equally among various sickness funds and introduced cost-sharing for elderly patients. Membership in this plan is for those aged 70 and over, as well as disabled persons aged 65–69. These persons may be in any fund, although they are most likely to be in National Health Insurance. Under this program, patient cost-sharing is 500 yen per day (up to a maximum of 2,000 yen per month for the same medical facility) for outpatient care and 1,100 yen per day for hospital care in 1998. This system creates a pooled fund, to which each individual fund contributes as if it had the national proportion of the elderly. Patient cost-sharing aside, 70 percent of the total cost is covered by all sickness funds, 20 percent by the national government, and 10 percent by local governments. In consideration of the importance of long-term care for the elderly, the proportion borne through public funds was raised in 1992 from 30 percent to 50 percent in cases in which the expense is related to long-term care services.

Benefit Coverage

All funds cover a broad range of medical services including hospital and physician care, dental care, and pharmaceuticals, and even some transportation. The sickness funds also pay some cash benefits, such as for maternity leave, but society-managed funds generally pay greater cash benefits than National Health Insurance. Large employers provide some preventive care, but health insurance covers little preventive care in general, and it provides only cash payment for normal pregnancy because pregnancy is not considered an illness in Japan.

All patients except the elderly face higher cost-sharing. The holders of employer-based health insurance pay 10 percent coinsurance for their care, but their dependents pay 20 percent for inpatient care and 30 percent for outpatient care. Concerning National Health Insurance, regular patients pay 30 percent coinsurance, while retired employees within the National Health Insurance scheme pay 20 percent and their dependents pay 20 percent for inpatient care and 30 percent for outpatient care. However, there is a universal upper limit for patient cost-sharing, and all funds pay 100 percent of expenses above 64,000 yen per month. This cap is lower for low-income persons and those who have already paid the maximum for three months within a year. Because of this universal cap, the average effective level of patients' cost-sharing was 13.5 percent for society-managed health insurance, 15.5 percent for government-managed health insurance, and 19.7 percent for National Health Insurance in 1994.

Payment Regulation Mechanisms

The rules for paying doctors and hospitals are identical for all plans, and providers are also paid in a centralized manner. Payment to the facility is in principle on a fee-for-service basis, but package payment has been introduced partially in health insurance for the elderly. The price for each insurance-covered medical treatment is listed in the fee schedule, which is determined by the government based on a recommendation by the Central Social Insurance Medical Council. A different version of the fee schedule has been prepared for the elderly to eliminate unnecessarily long hospital stays and promote treatments that are appropriate for the physical and mental characteristics prevalent among the elderly. The fee schedule is revised every two years. The drug price standard determines the price of prescribed drugs that can be claimed by the medical facilities. Each month, bills are submitted to regional offices of two central examination and payment organizations: the Social Insurance Medical Fee Payment Fund and the National Health Insurance Federation (see Appendix 2). These organizations examine the bills to find errors, excessive utilization, and fraud. Thus there is an utilization review, conducted by physicians, but reviewing capacity is naturally limited and only very expensive cases or specified facilities are reviewed intensively. Once approved, bills are forwarded for payment to individual funds. Payments to hospitals and physicians are processed again through these examination and payment organizations.

Japanese Health Insurance from a Comparative Perspective

According to the Organisation for Economic Co-operation and Development (OECD) statistics, Japanese per capita health expenditure is lower than Germany by 15 percent and by about a half compared to that of the United States. Japanese health expenditure as percentage of gross domestic product (GDP) was 7.2 percent, or 5.5 percent based on Japanese national data in 1995 (table 2). Taking account of the fact that the definition of health expenditure is limited to personal health care through the public system in Japanese official health statistics, Japan's health expenditure level is still not high when measured by international standards. Health Data compiled by the OECD shows that public health

expenditures as percentage of total health expenditures was about 71 percent in Japan in 1995, which is the same as in Germany and slightly lower than the European average of 76 percent. Since the introduction of universal coverage through public health insurance in 1961, the benefit level has been improved considerably, which has contributed to the successful provision of adequate health services to the whole nation.

Table 2. *Trends of Health-Related Indicators in Japan*

	Population			*GDP*	*Health expenditures*			*Health expenditures of the elderly*				*Life expectancy at birth*	
	Total million	*65+ million*	*B/A*	*Trillion yen*	*Trillion yen*	*D/C*	*Share of 65+*	*Trillion yen*	*E/D*	*Eligible persons million*	*F/A*	*Years*	*Years*
Year	*A*	*B*	*%*	*C*	*D*	*%*	*%*	*E*	*%*	*F*	*%*	*male*	*female*
1950	83.2	4.1	4.9					-	-	-	-	59.57	63.0
1955	89.3	4.7	5.3	8.6	0.24	2.8		-	-	-	-	63.60	67.8
1960	93.4	5.4	5.7	16.7	0.41	2.5		-	-	-	-	65.32	70.2
1965	98.3	6.2	6.3	33.8	1.12	3.3		-	-	-	-	67.74	72.9
1970	103.7	7.3	7.1	75.3	2.50	3.3		-	-	-	-	69.31	74.7
1975	111.9	8.9	7.9	152.4	6.48	4.3		0.87	13.4	4.7	4.2	71.73	76.89
1980	117.1	10.6	9.1	245.6	11.98	4.9	31.3	2.13	17.8	5.9	5.0	73.35	78.76
1985	121.0	12.5	10.3	324.3	16.02	4.9	37.5	4.07	25.4	8.2	6.7	74.78	80.48
1990	123.6	14.9	12.0	438.9	20.61	4.7	41.5	5.93	28.8	9.7	7.9	75.92	81.90
1995	125.6	18.3	14.5	488.5	26.96	5.5	45.2	8.92	33.1	11.9	9.4	76.57[a]	82.98[a]
1996	125.9	19.0	15.1	500.5	28.52	5.7	46.3	9.72	34.1	12.4	9.9	77.01	83.59
2000	127.4	21.7	17.0		38.0			13.0	35.0				

a. Japanese Notational Data, 1994.

Source: Japanese Notational Data, 1995.

Table 3 shows health-related indicators in six countries. Japan enjoys the longest life expectancy at birth and the lowest infant mortality rate, whereas its health expenditure as a percentage of GDP is second-lowest after that of the United Kingdom. Average length of stay in hospitals is by far the longest, because long-term care also is provided in hospitals, without bothering to classify the situation as acute or nonacute. The number of beds per 1,000 people is especially large in Japan, whereas the number of physicians is almost half that of Germany. Appendix 3 shows age-standardized death rates by cause of death in six countries. Reflecting an overall low death rate, Japanese death rate was lowest for many causes of death. Especially low was heart disease, but deaths attributed to respiratory system disease was the second-highest after the United Kingdom. By contrast, German death rates from cerebrovascular disease and digestive system diseases were the highest among the six countries.

Table 3. *Health-Related Indicators in Six Countries*

		Canada	*France*	*Germany*	*Japan*	*UK*	*USA*
Total population (million)	1995	29.5	58.0	81.6	125.1	58.3	263.3
65+ (%)	1995	11.8	14.9	15.2	14.1	15.5	12.6
75+ (%) men	1994		4.4	3.8	3.9	4.8	4.0
women			8.0	8.7	6.7	8.6	6.9
Health expenditure/GDP (%)	1997	9.3	9.9	10.4	7.3	6.7	14.0
Physicians per 1,000 population	1990		2.7	3.1	1.6	1.4	2.3
Beds per 1,000 population	1990		9.7	10.4	15.8	6.4	4.7
Average length of stay (days)	1990		12.3	16.5	50.5	14.5	9.1
Health expenditure by function (%)	1990						
Inpatient care			44.2	36.6	30.2	44.0	46.2
Ambulatory care			28.4	28.0	40.5		29.4
Pharmaceuticals	1993		19.9	17.1	29.5	16.4[a]	11.3
Life expectancy at birth	1993–94						
male		74.8	73.8	73.0	76.6	74.1	72.3[a]
female		81.0	82.1	79.6	83.3	79.5	79.2[a]
Life expectancy at 65							
male		15.8	16.2	14.7	16.8	14.7	15.5
female		19.9	21.0	18.4	21.3	18.5	19.3
Infant mortality per 1,000 birth	1995	6.4	6.6	5.6	4.3	6.3	6.9

a. 1992
Source: OECD. (1997); WHO (1996).

The health care system has to be evaluated based on its effectiveness, efficiency, and equity. There are three determinants of effectiveness : accessibility, quality, and integration. Integration means that the system functions well in ensuring that a patient receives care in facilities that are appropriate for the seriousness of the disease. In other words, it means there is a good referral system. Evaluating Japan based on these determinants, we find that the accessibility of the health care system is excellent; its quality is not known because there is no official data on this aspect or a system that monitors and ensures the quality of medical care; and integration is poor because there is no explicit referral system (Gunji 1994). The number of beds is twice the number in the United States. The average size of Japanese hospitals is smaller than those found in any other country. Many small private hospitals are scattered throughout the country, and the economic barrier is negligible because universal health

insurance covers the entire population. Hence, the accessibility of Japan's health care system is excellent. There is often an important potential conflict between efficiency and equity, but in Japan this is less of a problem because people are accustomed to their egalitarian system generating minor inconveniences in terms of accessibility (Mooney 1996).In view of the low level of health expenditures as percentage of GDP, Japan's health care system might be regarded as quite efficient. However, it has not yet been proven whether there is any trade-off between low per capita expenditures and quality of care provided, especially for the elderly (Kobayashi and Reich 1993). Empowerment of the user is another area in which the system needs improvement; this is important in terms of the quality of medical services, especially from the users' point of view.

There are several factors contributing to high health expenditures in the United States: the exorbitant costs associated with medical technology itself; the existence of uninsured and underinsured patients; very expensive terminal care; defensive practice (against lawsuits triggered by medical errors) and malpractice premiums; high administrative costs including advertising; and so on. All of these factors are controlled in one way or another in Japan, making today's low health expenditure level possible (Fukawa 1994).

Lessons from Experience

We will examine this topic under two headings: the first will introduce present and future issues in the Japanese system, and the second will examine specific lessons learned from Japanese experiences.

Present and Future Issues in the Japanese System

The following issues outline the fundamental problems to be addressed in the Japanese health care system:

- Quality assurance and coordination between primary and secondary care;
- Overuse of pharmaceuticals;
- Excessive price control;
- Equitable distribution of health care costs in cases involving elderly patients;
- Rapid aging of the population and cost-containment; and
- Coordination among different social security systems.

Japanese health insurance is divided into various programs, and there are certain inequalities among them in terms of benefit level, patient's cost-sharing, contribution, and so forth. Everyone is part of the same delivery system, however, and payments are strictly coordinated. Coverage is quite egalitarian in terms of burdens as well as benefits through an intricate set of cross-subsidization mechanisms (Campbell 1996). The fee schedule clearly favors physicians in private practice over hospitals, and fees are especially low for services that more advanced hospitals provide, such as surgery and intensive care (Hsiao 1996). Therefore hospitals compete with clinic doctors by promoting their outpatient care. Clinic doctors and small hospitals counter by trying to buy prestige in the form of high-tech equipment (White 1995). Japanese hospitals, in turn, are not eager to perform services that are undervalued by the fee schedule. Ikegami (1991) argued that the fee schedule was the key factor controlling the increase in health expenditures in Japan. As a matter of fact, it plays the central role in Japan's health insurance system, from economic evaluation of new health service technology to delineation of the public system's role . However, the fee schedule is a limited tool to deal with quality issues, because it can only take into consideration quantitative aspects of health

services. Moreover, there are incentives built into the fee schedule that clash with medical ethics (Fukawa 1995).

More than one-third of Japan's national health expenditure is consumed through a program that covers health expenditures of the elderly; table 2 shows the figure for those who are aged 65 and over to be 46 percent. The following are among the characteristics of health expenditures for elderly Japanese: (a) about two-thirds of the cost is financed with the involvement of all sickness funds, and this transfer system makes many sickness funds financially unstable (table 4); (b) consumption of pharmaceuticals is quite high for this segment of the population, outpatient care stands out in particular (about half of elderly outpatient expenditure goes to pharmaceuticals (table 5)); and (c) the percentage of long stays in hospitals is quite high, and especially serious is the prevalence of unnecessary hospitalization among elderly patients who no longer need any health services (this is called socially induced hospitalization).

Table 4. *Health Expenditure by Source of Fund: Fiscal 1994*
(in 100 billion yen)

	Source of Fund										
		Contribution			*Public fund*			*Transfer 1*	*Transfer 2*	*Patients cost-sharing*	*%*
	Total	*Total*	*Employee*	*Employer*	*Total*	*National*	*Local*				
Health expenditure	257.9	146.9			80.4	61.7	18.7			30.3	12
Publicly funded service	12.6	-			12.6	9.6	3.0	-		-	
Govt.-managed health insurance	41.4	53.3	26.5	26.8	8.0	8.0	-	15.9	4.0	7.6	15 ⑤
Society managed health insurance	29.7	45.7	19.9	25.8	0.6	0.6	-	13.1	3.5	4.8	14 ⑤
Public sector program	11.0	16.6	8.3	8.3	-	-	-	4.7	0.9	1.6	13 ⑤
National health insurance	51.1	28.0	28.0	-	34.5	27.0	7.5	18.6	+8.4	12.5	20
Workers injury insurance, and so on	3.3	3.3	-	3.3	-			-		-	-
Health insurance for the elderly	78.4	-			24.7	16.5	8.2	+52.8		3.8	5 ①
Patients cost-sharing	30.3										
		⑥			④	④	③	②			

Source: Japanese Notational Data, 1994.

Table 5. *Health Expenditure in Japan*

	1955	*1960*	*1965*	*1970*	*1975*	*1980*	*1985*	*1990*	*1995*	*1996*
Health expenditure										
in billion yen	239	410	1,122	2,496	6,478	11,981	16,016	20,607	26,958	28,521
percent of GDP	2.8	2.5	3.3	3.3	4.3	4.9	4.9	4.7	5.5	5.7
Annual growth rate (%)										
Health expenditure	11.0	13.0	19.5	20.1	20.4	9.4	6.1	4.5	4.5	5.8
GDP		20.0	11.1	15.7	10.0	9.0	6.3	8.0	2.0	2.5
Source of fund (%)										
Contribution	45.5	50.4	53.5	53.0	53.5	53.2	54.3	56.3	56.4	56.1
Public fund	15.9	19.6	25.9	27.6	33.5	35.5	33.4	31.4	31.7	32.0
Patient cost-sharing	38.7	30.0	20.6	19.3	12.9	11.0	12.0	12.1	11.8	11.8
Others	0.0	0.0	0.0	0.1	0.1	0.3	0.3	0.2	0.1	0.1
Health expenditure by function (%)										
inpatient	n.a.	n.a.	36.6	35.2	39.3	40.3	44.2	41.5	40.8	40.6
outpatient	n.a.	n.a.	53.3	54.9	52.0	47.6	43.4	45.7	44.3	43.8
dental care	n.a.	n.a.	10.2	9.8	8.8	10.7	10.5	9.9	8.8	8.9
others	n.a.	n.a.	0.0	0.0	0.0	1.4	1.9	2.9	6.1	6.7
Proportion of pharmaceuticals (%)										
total	n.a.	21.5	38.2	44.8	37.8	38.2	29.1	29.3	27.7	25.9
inpatient										
Nonelderly							16.8	15.8	12.1	11.3
Elderly							21.2	18.8	15.2	13.3
outpatient										
Nonelderly							39.3	37.6	37.4	35.3
Elderly							50.2	49.0	48.0	45.0
Per capita health expenditure of 65+ relative to 0-64 (=1.0)	n.a.	n.a.	n.a.	n.a.	n.a.	4.7	5.2	5.2	4.8	4.8

Source: Ministry of Health and Welfare.
Japanese National Health Expenditure, each year.

Consumption of pharmaceuticals is another factor contributing to the differences in health services structuring among countries (see appendix 4). Because of economic incentives involved as well as tradition, the percentage of pharmaceutical-related expenses in total health expenditures is exceptionally high in Japan. The figure was reportedly 29.5 percent (including both inpatient and outpatient care) in Japan in 1993, compared with 17.1 percent in Germany and 11.3 percent in the United States (table 3). Japanese doctors not only prescribe drugs but also dispense them. There is a certain gap between the discount price at which doctors buy drugs and the official price by which doctors are reimbursed by the insurance system for the drugs they prescribe. One apparent target in cost-containment efforts has been the price of drugs in many countries. Accordingly, pharmaceutical reimbursements as percentage of health expenditures fell by 10.5 percentage points in the last 15 years in Japan, from 38.2 percent in 1980 to 27.7 percent in 1995. Improving this reimbursement mechanism is one of the major issues in Japanese health reform today.

Three perspectives have been stressed recently in regional health policy: emphasis on viewpoints of service receivers, decentralization in decision-making, and coordination between health and welfare services. These perspectives are mutually interrelated. In order to improve the satisfaction of service receivers, it is desirable to make various decisions and coordinate services at points the system interacts

with end-users. In fact, it is quite natural from the consumers' point of view to demand coordination between health and welfare services. However, there are several conditions to be met before one can accomplish this goal. In order to emphasize the viewpoints of service receivers, we should have a process in place that sets a framework concerning whose opinion, and to what extent, shall be reflected. People have diversified needs on health and welfare services. Therefore, the role and extent of public programs should be defined. It is necessary to set priorities based on some objective analysis to utilize limited resources more efficiently. Who will finance the cost of health and welfare services is another important issue for the maintenance of a fair and stable system. Coordination between health and welfare services can be established by endowing municipalities with decision-making powers and responsibilities. Municipalities are expected not only to construct facilities but also to provide care-coordination functions for their citizens.

Regional differences in health expenditures is a prominent issue in Japan; the Ministry of Health and Welfare keeps a close eye on this matter from a perspective framed by the desirability of effective and equitable use of health services. Per capita health expenditure in 1993 was highest in the prefecture of Kouchi (272,000 yen) and lowest in the prefecture of Chiba (145,000 yen). Age is one of the important factors underlying regional differences in health expenditures. There remains a significant difference, however, in per capita health expenditure even after one adjusts for age. Health expenditure does not coincide with life expectancy, but there is a strong relationship between health expenditure and capacity for health services. Within a country, if there are differences amounting to one region's figure being twice as much as another's, and if those cannot be explained reasonably, the country's overall health expenditure might be reduced by half without affecting the output in health services (Fukawa 1998). There are many factors that may cause regional differences in health expenditure: the population's demographic and epidemiological profiles; patient and physician behavior; institutional settings; and the people's sociocultural attitudes toward health services. However, differences in technology utilization and medical practice by region are considered to be the main causes for these differences (Fukawa 1995).

The fee schedule and the drug standard have been the primary tools used to pursue health care reforms in Japan. It has become clear, however, that these tools are limited, and other measures are being studied to improve the quality and efficiency of health services concurrently. Classification of hospitals according to their functions and streamlining patient flow are among options that are seriously considered by the Japanese government. More attention has been directed at the quality aspect in health care reforms in the 1990s. Because of legal caps, patient cost-sharing has been low historically (about 15 percent on average for the nonelderly and 5 percent for the elderly); therefore this has not been a major problem in Japan so far. However, patient cost-sharing has increased and patient charges on pharmaceutical costs for outpatient services has been in use for the first time since September 1997,[1] which was reported to have a major impact on patients' behavior.

Other issues the Japanese system needs to deal with are stated below. In terms of inefficiency there is not only such problem areas as long hospital stays and outpatient care waiting times but also various inadequacies in delivering health care services. Amenities in Japanese hospitals are far inferior to those in other developed countries. A significant but uncounted number of services are not reimbursed by sickness funds and may not be included in national health expenditure calculations. Families often help with nursing in hospitals. There are also some under-the-table payments to physicians for favors such as special attention and treatment, and quick admission. And finally, Japanese health insurance in general pays relatively little attention to preventive care.

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[1] Patient cost-sharing as a percentage of total expenditure involved was found to increase as follows:

Elderly	Outpatient care:	4.4 percent	11 percent;
	Inpatient care:	6 percent	7.5 percent;
	Total:	5.5 percent	9 percent; and
Nonelderly	Total:	17 percent	23 percent.

Lessons from Japanese Experiences

Japan enjoys the lowest infant mortality rate and the longest life expectancy in the world. Furthermore, the country's public health expenditure is only 5 or 6 percent of its GDP, and the health care system appears to be functioning quite well. However, we should be careful in drawing any conclusions from these, because infant mortality rate and life expectancy at birth are no longer proper indicators for evaluating a health care system. Japan's health care delivery system and patterns of patient preferences provide good examples of economic incentives, equity in health services, and cost control, but they also raise many questions (such as quality issues and overuse of pharmaceuticals). Both positive and negative lessons could be drawn from Japanese experiences. We will go into some positive lessons first.

Universal health care coverage through a public health insurance scheme with fee-for-service payments is the basic definition of the Japanese system, which has contributed to the equitable distribution of health services and relieved family from old-age support. Benefit levels were improved during high economic growth periods. Several mechanisms are necessary to make a fee-for-service payment system work, including price-setting, utilization review (to control volume of service), and regulations (to minimize moral hazards tempting both physicians and patients). In Japan, the fee schedule is determined by the government based on the recommendation of a powerful Council, which reaches this point through intense negotiations among parties concerned. Utilization reviews are done through examinations by payment organizations (shown in appendix 2) on a rather limited scale, since the task requires an appropriate infrastructure in each region. However, even when the scale is limited, the existence of a utilization review itself has an important impact on the prevention of excessive utilization and fraud.

It is generally understood that life expectancy in Japan has gone up mainly because of improvements in the standard of living. The availability of health insurance and improvements in its coverage have also helped to raise the quality of people's lives, and equity and stability in society. Employer-based insurance eliminates workers' fear of financial burdens imposed by illness. Community-based National Health Insurance functions as a kind of barrier against an individual's becoming a recipient of public assistance too easily. Health insurance for the elderly provides a remarkable example of nationwide solidarity. The proportion of patient cost-sharing in the national health expenditure decreased from 40 percent in 1955 to 11 or 12 percent in 1980 and afterward, which has been especially beneficial for elderly patients and their families.

Once benefits provided by health insurance reach a certain level, moral hazard comes into play inevitably—for patients as well as physicians. In this vein, we now turn to negative lessons from Japanese experiences. Despite vigorous price control measures in the 1980s and 1990s, health expenditures increased by 1 trillion yens annually in recent years. As a general rule, if the persons receiving fees (such as physicians) also control the volume of services, they will normally respond to a reduction in fees by raising the volume of services to restore their income; Japan is no exception. One salient aspect of the Japanese health system is its establishment of low health expenditure through regulated fees, which especially affect health care services for the elderly. Per capita health expenditure increases with age until the age group 85–89, and it decreases afterward. If health expenditure growth is controlled within the growth rate of a National Income in such countries as Japan where the population is aging quite rapidly, per capita health expenditure will inevitably decrease relative to economic growth. The Japanese experience has shown so far that fee regulation on virtually any service, combined with utilization review, can control costs even without supplementary measures to limit volume (White 1995). There is a very large number of beds in Japan. Nevertheless, the health care system operates at a relatively low cost when judged against international statistics, largely because of the relatively low prices of the resources used (Mooney 1996). However, this approach faces serious limitations in the 1990s, and Japan's government is searching for new measures to control the increase in the volume of health services.

Japan's health care system has been developed by the strong leadership of the national government. This approach has been efficient in terms of raising the national standard of health services in successive

expansion periods. Now people's demands on health services are diversified and quality-oriented, and therefore the centralized system is viewed as less suitable for coping with more recent issues related to the quality of health care.

We would like to conclude with a few comments on health care reform in Japan. The effects of patient cost-sharing on distributional aspects and on effective use of health services are not fully investigated. Moreover, we cannot continue to increase patient cost-sharing. The next step might be the introduction of selective benefit. In this scenario, insurance coverage would be classified into two categories: basic benefit and selective benefit. A higher contribution would be required to receive the selective benefit. This kind of argument has so far been possible in Japan, but it has been limited to cases in which benefit refers only to amenity. Many elderly people with chronic conditions need more extensive care than standard health services can provide. It is more reasonable for the elderly themselves to decide which services they use, if they have enough knowledge and information about these services. The elderly may be able to reduce the use of inpatient care considerably without any adverse impact on their health. However, there may not be plenty of room for saving in the total expenditure of health and care services. In any case, providing elderly patients who only need old-age-related care services with institutional care at hospitals is clearly an inefficient approach. Providing an elderly population with adequate health, nursing, and long-term care services at an affordable cost, and improving the quality of services provided as much as possible, under circumstances marked by the aging of the general population, shifting family structures, and financial constraints, is a common challenge for each developed country—and eventually will be for countries that are developing at present.

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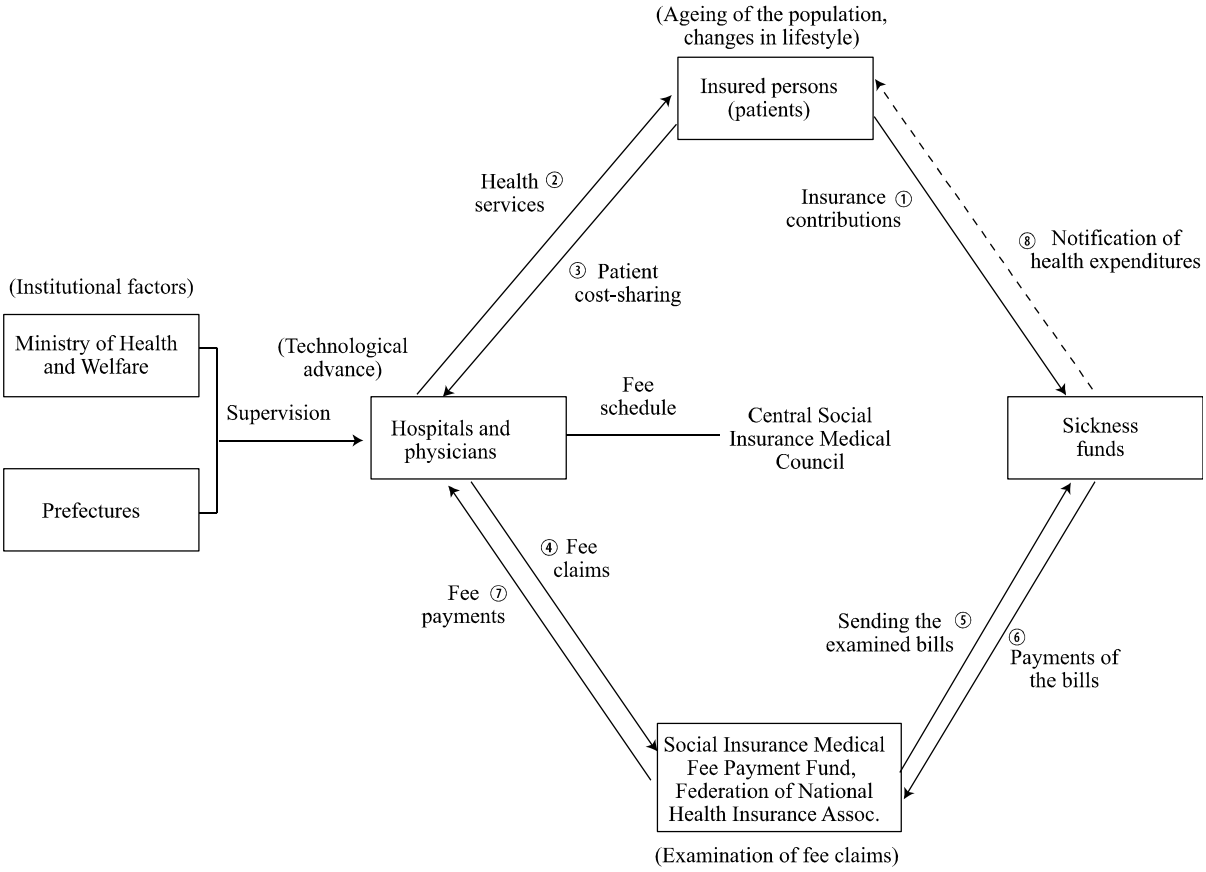
Appendix 1. *Outline of Health Insurance System in Japan*
(As of March 1997)

	Employer-based health insurance				
	Health Insurance			*National Health Insurance*	*Health insurance for the elderly*
	Govt. managed	*Society managed*	*Mutual Aid Associations*		
Insured persons	Mainly employees at small and medium-sized companies	Mainly employees at large companies	National and local public service employees, and so on.	Farmers, self-employed, and so on.	Persons aged 70 and over as well as disabled persons aged 65–69
Insurer	National government	Health insurance societies: 1,814	Mutual aid associations: 82	Municipalities: 3,249 N.H. I. associations: 166	Municipalities: 3,249
Coverage as percentage of total population	30.7	25.4	9.2	34.7	10.1
Benefit level of medical care	(Note 1) Insured person: 80% Dependent: 80% for inpatient care, 70% for outpatient care.			(Note 1) 70%	(Note 2) 100%
Contribution rate	8.5%	8.5%	8.5%	(Note 3)	—
National subsidy as percentage of health expenditures	13.0%	6.7 billion yen	None	50%	(Note 4)
Percentage of insurers who are eligible to health insurance for the elderly	5.4	2.9	4.1	21.1	—

Note 1. Patient's cost-sharing in excess of 63,600 yen (35,400 yen for low-income persons) per month is covered by the insurance.
Note 2. Patient's cost-sharing : 1,100 yen per day for inpatient care and 500 yen per day (max. 2,000 yen per month for the same medical facility) for outpatient care (April 1998~).
Note 3. The amount of contribution is related to the income and assets of each insured. Average annual contribution was 158.6 thousand yen per household.
Note 4. 20 percent by national government, 5 percent by prefecture and percent % by municipality.
Source: White Paper on Health and Welfare 1998 Edition.

Appendix 2. *The Public Health Insurance System in Japan*



Appendix 3. *Age-Standardized Death Rates for Selected Causes, by Sex*
(Per 100,000 population)

Causes	*Canada 1993*	*France 1993*	*Germany[a] 1994*	*Japan 1994*	*U K 1994*	*USA 1992*
Male						
All causes	873.3	909.3	1028.4	768.4	966.8	992.8
Infectious and parasitic disease	6.3	11.3	7.2	14.4	5.1	13.2
Malignant neoplasms	244.1	293.2	265.7	227.5	261.7	247.9
Disease of circulatory system	330.2	253.9	451.7	232.7	416.6	398.6
Ischaemic heart disease	203.8	86.2	218.9	49.7	265.5	223.3
Cerebrovascular disease	53.1	59.5	94.0	90.8	78.5	50.7
Disease of respiratory system	82.0	65.5	73.1	116.5	132.7	88.8
Disease of digestive system	31.9	46.7	54.3	36.2	30.0	34.9
Injury and poisoning	65.1	96.1	62.4	63.7	41.4	83.5
Female						
All causes	527.6	475.0	610.4	423.4	615.6	603.7
Infectious and parasitic disease	4.4	6.9	4.3	7.4	3.5	9.3
Malignant neoplasms	159.7	129.3	158.9	110.0	176.8	162.5
Disease of circulatory system	195.2	148.7	286.8	153.8	249.1	247.4
Ischaemic heart disease	100.7	36.6	108.7	26.6	126.1	120.3
Cerebrovascular disease	44.9	42.5	75.1	64.7	70.9	44.5
Disease of respiratory system	41.6	30.5	29.1	48.4	80.5	50.9
Disease of digestive system	20.0	24.7	29.5	17.7	23.4	22.1
Injury and poisoning	26.1	41.3	24.9	25.2	16.8	28.2

a. West Germany.
Source : WHO (19960.

Appendix 4. *Health Expenditures by Function, 1992*
(In percent)

	France	*Germany*[a]	*Japan*	*UK*	*USA*
As percentage of GDP	9.0	8.4	6.9	8.0	12.8
Distribution by function					
Hospital care	45.8	34.2	40.6	44.1	41.0
Ambulatory medical services	15.8	16.9	14.5	12.6	22.2
Dental services	6.2	11.3	6.6	4.8	5.3
Pharmaceutical prescriptions	17.3	16.4	17.5	12.9	7.7
Medical appliances	4.4	7.1	5.3	2.5	4.4
Nursing home care	5.2	8.5	12.8	18.2	10.5
Others	5.3	5.5	2.7	4.9	8.8

a. West Germany.
Source: BASYS. Gesundheitssysteme im internationalen Vergleich, 1994.

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