No.27

Characteristics and Reforms of Public Health Insurance System in Japan

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September 1996

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CHARACTERISTICS AND REFORMS OF PUBLIC HEALTH INSURANCE SYSTEM IN JAPAN

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Prepared for the International Conference

ANA Hotel, Washington,DC

August 30, 1996

SUMMARY

In Japan, the public health insurance system consists of several health insurance plans, and equal benefit levels as well as fair burden-sharing of costs among plans are considered important under the universal system. This paper deals with health insurance reforms, which are divided into two periods after the achievement of universal coverage in 1961: the 1960s to the early 1980s, and the early 1980s to today. Future reforms will be classified as another period.

After the achievement of universal coverage, the Ministry of Health and Welfare further reformed health insurance plans to expand health benefits with a view to equal benefit levels by raising contributions from the central government through to the early 1980s. However, because of the increase in national health expenditures, especially health expenditures for the elderly, the Ministry reformed health care to emphasize cost containment in the early 1980s, the goal being that the rate of growth in national health expenditures should be equal to or below the rate of growth in national income. There have been three major cost containment efforts made toward achieving this goal: (1) Introducing deductible and copayment, (2) Revising the medical fee schedule, and (3) Establishing new programs for elderly persons which are largely financed by contributions from all health insurers.

Japan is a rapidly aging society. Future health insurance plan reforms will be focused on controlling health care costs for elderly persons, thereby easing the financial burdens of health insurance plans for non-elderly persons. Furthermore, the Ministry plans to establish public long-term care insurance in the near future, which will have a large impact on plan reforms.

INTRODUCTION

In Japan, universal coverage was achieved in 1961. The public health insurance system, which consists of several health insurance plans, has been playing an important role in ensuring access to health care services. Commercial insurance companies also write health insurance to generally provide inpatient expenses not covered by public health insurance plans.

Universal coverage through public health insurance plans ensures that these private health insurance plans do not play such an important role in Japan as in the United States. National health expenditures(NHE) have been growing during the past three decades.[1] They were ¥24,363 billion, or ¥195 thousand per capita and consumed 5.2 percent of the gross national product(GNP) in 1993, an increase from 2.6 percent of GNP in 1961 (Table 1). Health expenditures for the aged have been rapidly growing during the last two decades due to the growth of the aged population.[2] They reached ¥7,451 billion, or ¥685 thousand per capita in 1993, accounting for 30.6 percent of NHE, a sharp increase from 10.9 percent of NHE in 1973 (Table 2). Health expenditures per capita for the elderly are about five times as large as those for the non-elderly.[3]

This paper provides a summary of the major characteristics of the current health insurance system, the health insurance reforms after the achievement of universal coverage, and the future direction of public health insurance system in Japan.

I CHARACTERISTICS OF CURRENT HEALTH INSURANCE SYSTEM

Health Insurance Plans

The public health insurance system is composed of several health insurance plans for non-elderly persons, and health care programs for elderly persons, with enrollment in one of these plans being compulsory (Table 4).[4] Health insurance plans may be broadly classified as employer-based insurance plans and community-based insurance plans.

The employer-based insurance plans include all the plans except National Health Insurance Plans. Society-Managed Health Insurance Plans cover employees and their dependents mainly in large private firms (29 percent of the population). Health Insurance Societies are established by a single employer with more than seven hundred employees, or multiple employers with more than three thousand employees. The Government-Managed Health Insurance Plan covers employees and their dependents largely in private, small and medium-size firms with more than five employees (25 percent).[5] Mutual Aid Association Plans, which consist of Central Government Employee Mutual Aid Association Plans, Local Government Employee Mutual Aid Association Plans, and the Private School Teachers Mutual Aid Association Plan, cover public employees and their dependents or private school teachers and their dependents (9 percent). Individuals covered under employer-based health insurance represent 63 percent of the population. In the United States, individuals covered under employer-sponsored health insurance account for almost the same percentage, or 61 percent of the population (Figures 1 and 2).

The community-based insurance plans, which are called National Health Insurance Plans, cover farmers, self-employed persons, employees in small private firms, retired employees, and other persons who are not covered by employer-based insurance plans (28 percent of the population). National Health Insurance Plans consist of National Health Insurance Society Plans and Municipal Government-Managed Health Insurance Plans. The National Health Insurance Societies are established by more than three hundred people having the same occupation such as physicians, dentists, lawyers, or barbers. National Health Insurance Society Plans cover these persons and their dependents. Municipal Government-Managed Health Insurance Plans cover the residents in each municipality. Many enrollees in community-based insurance plans, especially in Municipal Government-Managed Health Insurance Plans, have low incomes (Table 5). In this respect, these plans play an important role in maintaining universal access to health insurance coverage.

Available Health Insurance

Health insurance is available to employers only from one source: Society-Managed Health Insurance Plans, the Government-Managed Health Insurance Plan, the Seamen's Insurance Plan, or Mutual Aid Association Plans. Health Insurance Societies and Mutual Aid Associations are established by employers themselves as mentioned above. Such employer-based health insurance is different from employer-sponsored health insurance in the United States, which is available from several sources such as commercial insurance companies, Blue Cross and Blue Shield plans, health maintenance organizations or other managed care plans, and

self-insured plans.[6] Health insurance is available from one source to persons who are not covered under employer-based insurance plans through enrollment in community-based insurance plans in the municipalities where they live.

Coverage and Benefits

Health insurance plans cover a broad range of services for illness, injury, death (other than occupational ones), and maternity. All the plans provide almost the same kind of mandated benefits, consisting of service and cash benefits. The great majority of mandated benefits are service benefits.[7] Service benefits include doctors' services, inpatient and outpatient medical services and supplies, and prescription drugs, being equally provided among all the plans. Cash benefits include illness and injury allowance, childbirth allowance, childbirth and child care benefit, and burial benefit.[8] These benefits are paid directly to insureds. However, the level is somewhat different among employer-based insurance plans.

Community-based insurance plans generally provide a lower level of childbirth and child care benefit and funeral benefit than employer-based insurance plans, and are not required to provide illness and injury allowance and childbirth allowance. Society-Managed Health Insurance Plans (also Mutual Aid Association Plans) provide voluntary cash benefits in addition to mandated cash benefits.

In 1994, 91.9 percent of the plans provided voluntary cash benefits for employees or their dependents, and the benefits accounted for 4.3 percent of total benefits (Tables 6 and 7). Employees in large firms require their

employers to provide these benefits through the deliberative organ (Society Committee) consisting of the representatives of employers and employees, the supreme decision-making body in the Health Insurance Society, because mandated benefits can not be altered. Employers provide their employees with more employee benefits by adding voluntary health benefits to mandated health benefits.

Coinsurance Percentage[9]

Health insurance plans contain coinsurance provisions under health insurance laws, whereby the plans pay a specified percentage of the covered expenses. (No deductible applies to the expenses.) Patients are required to pay the remaining percentage. Although employer-based insurance plans pay the same percentage of covered expenses, the percentage is different between employer-based insurance plans and community-based insurance plans.

Under employer-based insurance plans, 90 percent coinsurance applies to the expenses of both inpatient and outpatient care for employees(insureds), and 80 percent and 70 percent coinsurances apply to the expenses of inpatient and outpatient care respectively for their dependents. In the case of community-based insurance plans, 70 percent coinsurance applies to the expenses of both inpatient and outpatient care for both insureds and their dependents under almost all of the Municipal Government-Managed Health Insurance Plans. Among National Health Insurance Society Plans, coinsurance provisions vary. Under some plans 100 percent and 70 percent coinsurances apply to the expenses of both inpatient and outpatient care for insureds and their dependents

respectively, and under other plans the same coinsurance percentage as that under Municipal Government-Managed Health Insurance Plans applies to the expenses of both inpatient and outpatient care for insureds and their dependents. In this way, all the employer-based insurance plans and almost all of the community-based insurance plans provide almost the same level of mandated service benefits for dependents, however, the level provided for insureds differs between employer-based insurance plans and community-based insurance plans.

Premium Rates

Premium rates are prescribed by health insurance laws, and are different among health insurance plans. Under employer-based insurance plans other than Society-Managed Health Insurance Plans, employers and employees equally pay the premiums based on the average monthly wage. For Society-Managed Health Insurance Plans, Health Insurance Societies can determine their premium rates voluntarily according to their respective financial conditions within the range of premium rates prescribed by the Health Insurance Act (Table 8). As such, employees in large firms negotiate premium rate and its share with their employers in the society committee. On average, employers paid 56.5 percent of the premiums and employees paid the remaining share in 1994 (Table 9).

In the case of community-based insurance plans (Municipal Government-Managed Health Insurance Plans), insureds pay premiums based on a combination of income, asset, capitation, and the number of family members. Premiums per family vary considerably among the plans according to their respective financial

conditions.[10]

Financing

Health insurance plans are financed by premiums paid by employers and insureds as well as contributions from governments. The majority of national health expenditures are service benefits paid by health insurance plans and copayments borne by patients. In 1993, 57.3 percent were financed by premiums, 23.7 percent by contributions from the central government, 7.0 percent by contributions from the local government, and 11.6 percent by out-of-pockets by patients (Table 10).

Contributions from the central government are different among health insurance plans. The Government-Managed Health Insurance Plan is financed by contributions of 13 percent of the benefits. This plan is financed through more contributions from the central government than Society-Managed Health Insurance Plans so that employers of small and medium-size firms can reduce the cost of providing health benefits for their employees. In relation to Society-Managed Health Insurance Plans, the National Federation of Health Insurance Societies assumes the role of financial supporter of the societies in financial difficulties by assessing additional premiums on member societies (employers and employees). In addition, all the employer-based insurance plans except the Seamen's Insurance Plan are financed from contributions of the total or partial administrative expenses.

In the case of community-based insurance plans, Municipal Government-Managed Health Insurance Plans and National Health Insurance Society Plans are

financed by contributions of as much as 50 percent, and 32 to 52 percent of the benefits respectively. In 1992, community-based insurance plans were financed through premiums paid by enrolled individuals, 41.3 percent, contributions from the central government, 38.1 percent, contributions from local governments, 7.8 percent, and others, 12.8 percent. Contributions from the central government play an important role in reducing the cost of the health benefits community-based insurance plans provide. Despite this, a large number of the plans are more or less in financial difficulties.

Medical Fee Schedule

Under all the health insurance plans, patients have freedom to choose health care providers. The health care providers are generally paid a fee for each medical service they furnish, referred to as the fee-for-service system. (For services provided for elderly persons, geriatric hospitals are reimbursed on either a fixed-fee basis or a fee-for-service basis, and intermediate nursing facilities and special nursing homes are reimbursed on a fixed-fee basis.)

On the basis of the uniform medical fee schedule, all the medical services (service benefits mentioned earlier) covered by health insurance plans are reimbursed to the health care providers. There are five similarly structured categories in the fee schedule: hospitals and clinics, dental services, pharmaceutical services, intermediate nursing facilities, and special nursing homes. The fee schedule is revised by the Central Social Insurance Medical Council and is authorized by the Ministry of Health and Welfare.[11] There are thirteen medical treatments such as medical examination, medication, injection,

diagnostic test, procedure, surgery, and hospitalization in the schedule. Each medical treatment includes many services and certain number of points are assigned to each service (one point equals to ¥10). Health care providers sum up the number of points for services they performed for each patient and submit bills to the review and payment organizations (the Social Insurance Medical Fee Payment Fund or Federation of National Health Insurance).[12] The organizations review the claims and then forward them to insurers. Medical fees are paid to health care providers through these organizations. In addition, the schedule lists more than 13,000 drugs and their prices. Drug prices are revised every second year by the Ministry of Health and Welfare to reflect the prevailing prices at which health care providers purchase drugs from pharmaceutical companies.[13]

II HEALTH INSURANCE REFORMS

Reforms of the 1960s and 1970s

The history of public health insurance plans in Japan began with the enactment of the Health Insurance Act of 1922 for employees of private firms. Coverage was expanded for other people under the National Health Insurance Act of 1930 and the mutual aid association acts which were enacted in the 1950s through the early 1960s. Universal coverage was achieved in 1961 under the amendment to the National Health Insurance Act which required all the municipal governments to provide community-based health insurance for the persons who were not covered by employer-based health insurance.

Until the early 1980s, with a view to equal benefit levels, the Ministry of Health and Welfare further reformed health insurance plans to expand benefits, especially to raise the coinsurance percentage which applied to the covered expenses for dependents under employer-based insurance plans and for insureds and their dependents under community-based insurance plans, by increasing contributions from the central government. Some of the major reforms were as follows:

- In 1963, the coinsurance percentage was raised from 50 percent to 70 percent of the covered expenses for insureds under community-based insurance plans.
- In 1968, the coinsurance percentage was raised from 50 percent to 70 percent of the covered expenses for dependents under all the community-based insurance plans.
- In 1972, medical care for elderly persons aged 70 and older or bedridden persons aged 65 through 69 became free of charge under an amendment to the Welfare Act for the Aged of 1963. Copayments which elderly patients would have been liable for if it had not been for the amendment were financed by contributions from central, prefectural, and municipal governments.
- In 1973, the coinsurance percentage was raised from 50 percent to 70 percent of the covered expenses for dependents under employer-based insurance plans.
- In 1973, a large medical expense benefits program was introduced to

ease the financial burdens on households, whereby if copayments exceeded specified amounts, the difference was paid as large medical expense benefits by health insurance plans.

- In 1980, the coinsurance percentage was raised from 70 percent to 80 percent of the covered inpatient expenses for dependents under employer-based insurance plans.

Reforms of the 1980s into the 1990s

The reforms of the 1960s and 1970s contributed to a substantial increase in national health expenditures during the period. National health expenditures increased from 2.6 percent of the gross national product in 1961 to 4.9 percent in 1980 (Table 1). In particular, health expenditures for the aged grew steadily in the 1970s (Table 2).

Recessions caused by the two oil crises in the 1970s forced the central government to reduce the government expenditures in line with the budget reconstruction. The share of contributions from the central government to national health expenditures has been decreasing since the mid-1980s (Table 10). In the early 1980s, the Ministry of Health and Welfare reformed health care to emphasize cost containment, the goal being that the rate of growth in national health expenditures should be equal to or below the rate of growth in national income. There have been three major cost containment efforts made toward achieving this goal: (1) Introducing deductible and copayment, (2) Revising the medical fee schedule, and (3) Establishing new programs for elderly

persons.

(1) Introduction of deductible and copayment

Nonexistent or small deductible and copayment often encourage patients to increase demand for medical services. The following reforms were aimed at retaining their financial interest in the cost of services, thereby avoiding unnecessary utilization.

The Health and Medical Program for the Aged was established in 1983, whereby a deductible applied to the covered inpatient and outpatient expenses was introduced. In the following years, it was increased several times and is scheduled to be revised every second year after 1995 on the basis of the Consumer Price Index.

A coinsurance provision was introduced to employer-based insurance plans in 1984, and 90 percent coinsurance was applied to the covered expenses for employees. Prior to this reform, employees had only to pay ¥800 for the first medical examination for outpatient care at health care providers, and ¥500 per day within a maximum of 30 days for inpatient care.[14] Since equal benefit levels and fair burden-sharing of costs among plans have been considered important under the universal system, the coinsurance percentage had been raised in the reforms of the 1960s and 1970s as mentioned earlier. In these 1984 reforms, coinsurance provision was introduced to reduce the difference in the coinsurance percentage between employer-based insurance plans and community-based insurance plans with a view to "equal benefit levels."

The designated medical expense benefits program was also established in

1984 to meet patients' needs to receive various services which are not covered by health insurance plans, and to determine to what extent the services are covered by the plans. The services are designated by the Ministry of Health and Welfare and include (1) special services patients receive at their own request such as private or semiprivate room in inpatient care and therapeutical materials, and (2) medical care with advanced medical techniques by medical institutions that are authorized to provide such care by prefectural governments. Under this program, if patients wish for a private or semiprivate room, they must pay the extra charge for the room and the plan will provide the remaining expense as designated medical expense benefit. Extra charges that were previously permitted informally, however, were legitimized, and services within the program were expanded.[15]

A deductible which applied to board in inpatient expenses was introduced in 1994. At present, the standard deductible amounts are ¥450 per day for the first 90 days and ¥300 per day thereafter for persons with low incomes, ¥200 per day for persons who have low incomes and are entitled to old-age welfare benefits, and ¥600 per day for other persons. These amounts are scheduled to increase to ¥660 and ¥500, ¥300, and ¥800 respectively in October 1996.

(2) Revision of the medical fee schedule

The fee-for-service system induces health care providers to furnish excessive medical services and to dispense unnecessary drugs. Doctors usually dispense drugs and are reimbursed at the official prices in the medical fee schedule

regardless of the purchase prices from the pharmaceutical companies. They make a profit by dispensing more drugs than are necessary, or by purchasing drugs at lower prices than the official prices. The share of drugs (medication and injection) by type of medical treatment has been high in national health expenditures. In order to correct inefficient allocation of resources, the drug prices have been being revised to reduce them since as early as the latter half of the 1960s (Table 11). This measure contributed to lowering the share of drugs in national health expenditures in the 1970s, from 37.8 percent in 1970 to 29.1 percent in 1980; this share remained constant in the 1980s and in the early 1990s, and stood 29.5 percent in 1993. However, the medical fee schedule has been revised to raise medical fees during the past three decades (Table 12). Compared to increases in consumer price and wages and salaries for permanent employees in medical institutions and facilities, medical fees including official drug prices have been held down throughout the 1980s into the early 1990s.[16]

(3) Establishment of new programs for elderly persons

In the 1980s, the Health and Medical Program for the Aged and the Retiree Medical Program were established to control their rising health care costs.

1. The Health and Medical Program for the Aged:

The Health and Medical Program for the Aged was established in 1983 under the enactment of the Health and Medical Program for the Aged Act of 1982 in place of the Welfare Act for the Aged of 1963 to provide elderly persons with a

comprehensive set of health care services and to reduce contributions from the central government. The program covers persons aged 70 and over or bedridden persons aged 65 through 69 for appropriate and efficient medical care, as well as persons aged 40 and over for comprehensive health services.

When employees retire, most of them enroll in community-based insurance plans which brings to the plans a larger share of elderly persons who need more health care services on average. As mentioned below, the health insurers pay most of the health care costs for the elderly to ease the financial burdens on the community-based insurance plans by correcting the financial disparity between employer-based insurance plans and community-based insurance plans. Health insurers finance the program (the Social Insurance Medical Fee Payment Fund) through contributions equal to the amounts that would be paid if they covered the average percentage of elderly enrollees among all the health insurance plans. The Health and Medical Program for the Aged Act of 1982 required that this arrangement apply to 50 percent of all the costs health insurers must pay and that the remaining costs be paid according to the actual percentage of elderly enrollees. However, the arrangement has applied to all the costs since 1990 under the 1986 amendments to the Act, thereby correcting the financial disparity. Main components of the program are as follows.

a) **Medical care for the elderly at general hospitals and clinics**

Under this program, the deductible was introduced and has been raised several times. At present, elderly patients must pay ¥1,020 per month for outpatient care and ¥710 per day for inpatient care at general hospitals and clinics.

The costs of the benefits less deductible are financed through contributions from health insurance plans and governments: health insurance plans, 70 percent, the central government, 20 percent, and local governments contribute 10 percent.

b) Health services for persons aged 40 and over

The program also provides comprehensive health services other than medical care for persons aged 40 and over (excluding those who receive equivalent services at their workplace). These services include the issue of a health passbook, health education, health consultation, health examination, rehabilitation, and visiting guidance. The cost is financed equally by contributions from central, prefectural, and municipal governments.

c) New health care facilities and reimbursements

Elderly persons who need chronic care or even long-term care have often entered general hospitals largely because of a lack of facilities which provide such care. In addition, the existing medical fee schedule under a fee-for-service system which applies to general hospitals providing geriatric care has contributed to rising health care costs for them.

Geriatric hospitals were established in 1983 to provide chronic care for the elderly, thereby avoiding utilization of general hospitals as chronic care facilities. A new category specifically targeting geriatric hospitals was created in the medical fee schedule to control costs by discouraging unnecessary procedures, especially since many of the non-essential procedures were highly labor-intensive or over-prescribed for elderly patients. The geriatric fee schedule is composed of a specialized array of health care services such as

rehabilitation and consultation. It allocates a fewer number of points to procedures that are less essential to elderly patients, such as injections, certain types of laboratory tests, and diagnostic imaging. However, faced with the rising costs of financing geriatric care under the fee-for-service system, a voluntary fixed payment system for geriatric hospitals was introduced in 1990 to lower the costs by reducing unnecessary services. Under the fixed payment system, geriatric hospitals are reimbursed a capitation fee for all procedures and nursing care.[17] A deductible applies to the covered expenses for services at geriatric hospitals, which is commensurate with that applied to the covered expenses for services at general hospitals. The costs of the benefits less deductible are financed through contributions from health insurance plans and governments: health insurance plans, 50.0 percent, the central government, 33.3 percent, and local governments contribute 16.7 percent.

Intermediate nursing facilities were established in 1988 to provide rehabilitation and nursing care for elderly bedridden persons. The facilities are also reimbursed a capitation fee. A larger deductible applies to the covered expenses for services at these facilities. Deductible amounts are determined independently for each facility (around ¥60 thousand per month on average). The percentage of contributions from health insurance plans and governments is commensurate with that of geriatric hospitals.

In addition to geriatric hospitals and intermediate nursing facilities, the establishment of special nursing homes has been promoted. The homes are reimbursed on a fixed fee per patient. Deductible amounts are determined

according to patients' income (around ¥40 thousand per month on average). The cost is financed from contributions from central and local governments shared equally (Health insurance plans do not cover the services provided at the special nursing homes).

2. The Retiree Medical Program:

Retired employees who enroll in community-based insurance plans and are not yet covered under the Health and Medical Program for the Aged must pay a higher percentage participation under the plans than under the former employer-based insurance plans. The health coverage for these persons is likely to be the cause of the financial burdens on community-based insurance plans.

The Retiree Medical Program was created in 1984 to reduce the percentage participation for patients and to ease the financial burdens on community-based insurance plans. Retired employees eligible for the program must pay 20 percent of the covered expenses of both inpatient and outpatient care, and their dependents must pay 20 percent and 30 percent of the covered expenses for inpatient and outpatient care respectively. The program is financed through premiums paid by retirees and their dependents as well as contributions from the former employer-based insurance plans.

III FUTURE DIRECTION OF HEALTH INSURANCE SYSTEM

Under the present system, all the health insurance plans provide the same kind of mandated service benefits, and all the employer-based insurance plans and

almost all of the community-based insurance plans provide almost the same level of the mandated service benefits for dependents, although the level provided for insureds still differs between employer-based insurance plans and community-based insurance plans. On the other hand, these characteristics bring the plans into differences in claim costs per capita because of age distribution, the number of dependents, and utilization of services. The differences are adjusted by premium rates and contributions from governments to balance the budgets. Health care costs for elderly persons are financed largely by contributions from all the health insurers (Table 13). Through the health insurance reforms of the 1980s which focused on cost containment, health care costs have shifted from the central government to health insurance plans and patients.

In recent years, Society-Managed Health Insurance Plans, the Government-Managed Health Insurance Plan, and Municipal Government-Managed Health Insurance Plans have been in financial difficulties. This is because of the slow increase in premium income based on wages and salaries due to the economic recession, and the rising health care costs, especially the resulting increase in contributions to the Health and Medical Program for the Aged (In the case of Society-Managed Health Insurance Plans and the Government-Managed Health Insurance Plan, contributions to the program as a percentage of total expenditures were 23.0 percent and 18.9 percent respectively in 1993). In 1994, approximately half of Society-Managed Health Insurance Plans, the Government-Managed Health Insurance Plan, and 66 percent of Municipal Government-Managed Health Insurance Plans incurred a deficit. The National Federation of Health

Insurance Societies estimates that financial deficits in Society-Managed Health Insurance Plans as a whole will increase for the next five years and consequently premium rates should be raised.

The universal health insurance system will be maintained, while the Ministry of Health and Welfare will focus its policy on controlling health care costs for the elderly persons in the future health care reforms in order to respond to a rapidly aging society. For example, under the Health and Medical Program for the Aged, the deductible may be raised sharply or the coinsurance percentage commensurate with that in health insurance plans for the non-elderly may be introduced for the covered inpatient and outpatient services provided at general hospitals and clinics, thereby easing the financial burdens on the plans. Health insurance plans for the non-elderly will also be reformed to further reduce the coinsurance percentage which applies to the covered expenses of inpatient and outpatient care for employees, and to redesign mandated service benefits. Furthermore, the Ministry plans to establish public long-term care insurance in the near future to separate costs of long-term care from those financed by health insurance plans for the non-elderly, thereby easing the financial burdens on the plans. There are, however, some questions concerning this program such as the following:

- Who will administer the program, the central government or municipal governments? The Ministry wants municipal governments to do so, while many municipal governors oppose it because they fear that the same situation will occur in the program as that in community-based insurance

plans, where municipal governments must cover the deficits through the general revenue.

- How much of the premiums will be shared between elderly and non-elderly generations? In the original plan, persons aged 20 and over were scheduled to pay the premiums with a view to solidarity between the two generations. However, the Ministry has changed the age to 40 and over because there is a possibility that many of the younger generation will not be very interested in the program and consequently will not pay the premiums.
- Will employers pay the premiums for their employees? If so, how much will they share?
- If elderly persons or their family members wish for care which is provided by the family members at their homes, will cash benefits be paid in place of service benefits?

Although it may take time to solve such problems, it is clear that the establishment of public long-term care insurance will have a large influence on the health insurance reforms of the future.

ENDNOTES

1. Japanese national health expenditures shown in Table 1 are estimated annually by the Statistics and Information Bureau of the Ministry of Health and Welfare. These expenditures differ from *total expenditure on health* compiled by the Organization for Economic Cooperation and Development(OECD) for the purpose of making comparisons among member countries.

   The majority of national health expenditures are service benefits paid by public health insurance plans and copayments born by patients. (As mentioned in the text, benefits provided by public health insurance plans consist of service benefits and cash benefits.) National health expenditures exclude such expenditures as (1) cash benefits paid by public health insurance plans, (2) extra charges for private or semiprivate room in inpatient expenses, (3) some dental services, (4) preventive care such as health promotion, (5) over-the-counter medicine, and (6) research and development.

2. Demographic changes are characterized by the rapid growth of the aged population caused by increases in life expectancy at birth and declines in total fertility rates. Elderly persons aged 65 and over have been growing and will continue to grow both in numbers and as a share of the total population. They numbered 14.9 million, or 12.0 percent of the total population in 1990, compared with 5.4 million, or 5.7 percent in 1960. It is projected that they will reach 32.4 million, or 25.8 percent of the total population by 2025 when the aged population peaks.

3. However, health care costs in Japan have been consuming a low share of

the gross domestic product(GDP) compared with those in the OECD countries (Table 3). And the growth rates of both national health expenditures and health expenditures for the aged have been slowed down in the 1980s through the 1990s. During this period, health care reforms have been focusing on cost containment.

4. Health care programs for elderly persons (the Health and Medical Program for the Aged and the Retiree Medical Program) will be mentioned in the next chapter.
5. Employers with less than five employees are not required to participate in the Government-Managed Health Insurance Plan. However, they can take part in the plan voluntarily if they can obtain the consent to do so from the majority of their employees. If they do not participate in the Government-Managed Health Insurance Plan, the employees and their dependents enroll in community-based insurance plans.
6. Also, in Japan commercial insurance companies write health insurance on a group or individual basis to generally provide inpatient expenses not covered by public health insurance plans. Some benefits are paid as a reimbursement of the actual expenses that the insured incurs, and others are paid as fixed amounts without regard to the actual expenses. The health insurance plans of commercial insurance companies provide for payment of benefits directly to the insureds.
7. For the share of mandated service benefits in total health benefits provided under Society-Managed Health Insurance Plans in recent years, see

Table 7.

8. Illness and injury allowance and childbirth allowance are paid monthly as fixed amounts for a certain period when employees become unable to work and earn wages or salaries from their employers because of illness, injury, or maternity. Childbirth and child care benefit and funeral benefit are paid in a lump sum.
9. The term *coinsurance* as used in this paper refers to the percentage of covered expenses paid by health insurance plans. And the term *copayment* refers to the percentage of covered expenses which are not paid by the plans and that therefore must be paid by patients.
10. Under Municipal Government-Managed Health Insurance Plans, the measure is taken to reduce the premiums paid by persons with low income.
11. The council is comprised of twenty members: eight representatives from health care providers, eight from payers (four insurers, two employers and two employees), and four from public interests.
12. The Federation of National Health Insurance is established in each prefecture by national health insurers.
13. For details of the medical fee schedule, see Araki,Kazuhiro, "Understanding Japanese Health Care Expenditures:The Medical Fee Schedule," in *Japan's Health System:Efficiency and Effectiveness in Universal Care.* New York: Faulkner & Gray,Inc.,1993,pp.45-61.
14. In 1942, a deductible was introduced which applied to the covered expenses for employees under employer-based insurance plans and increased several

times. Prior to this reform, 100 percent coinsurance had applied to the covered expenses less deductible.

15. For details of the designated medical expense benefits program, see Niki,R., *'Sekai Ichi' No Iryohi Yokusei Seisaku Wo Minaosu Jiki.* Tokyo: Keiso Syobo,Inc.,1994,pp.111–163.

16. Niki,*op.cit.*,pp.3–4.

17. Ando,Yumi and Amy Searight, "Geriatric Care in Japan," in *Japan's Health System:Efficiency and Effectiveness in Universal Care.*,pp.153–154,p.158.

REFERENCES

Health and Welfare Statistics Association. 1995. *Hoken To Nenkin No Doko* [*Trends in Insurances and Pensions*]. Tokyo:Health and Welfare Statistics Association.

Hiroi,Yoshinori. 1995. *Iryo No Keizaigaku* [*Health Economics*]. Tokyo:Nihon Keizai Shimbun,Inc.

Kohda, Masataka. 1993. "How Does Japan Do It? Universal Health Insurance Coverage in Japan," *EBRI Issue Brief.*(April)

Ministry of Health and Welfare. 1995a. *Heisei 5 Nendo Kokumin Iryo Hi* [*National Health Expenditures,1993*]. Tokyo:Health and Welfare Statistics Association.

Ministry of Health and Welfare. 1995b. *Heisei 6 Nenban Kosei Tokei Yoran* [*Health and Welfare Statistics Handbook,1994*]. Tokyo:Health and Welfare Statistics Association.

Ministry of Health and Welfare. 1995c. *Annual Report on Health and Welfare, 1993-1994.* Tokyo:Japan International Corporation of Welfare Services.

Ministry of Health and Welfare. 1995d. *Heisei 7 Nenban Kosei Hakusyo* [*White Paper on Health and Welfare,1995*]. Tokyo:Research Group for Health and Welfare Affairs.

National Federation of Health Insurance Societies. 1995a. *Heisei 6 Nendo Kumiai Kessan Gaikyo Hokoku* [*Report on Settlement of Accounts of Health Insurance Societies,1994*]. Tokyo:National Federation of Health Insurance Societies.

National Federation of Health Insurance Societies,eds. 1995b. *1995 Nenban Shakai Hosyo Nenkan* [*Social Security Year Book,1995*]. Tokyo:Toyo Keizai,Inc.

National Federation of Health Insurance Societies. 1995c. *Health Insurance and*

Health Insurance Societies in Japan,1995. Tokyo:National Federation of Health Insurance Societies.

Niki,Ryu. 1994. *'Sekai Ichi' No Iryohi Yokusei Seisaku Wo Minaosu Jiki* [*It is Time Japan Reconsidered the Strictest Cost Containment Efforts in the World*]. Tokyo:Keiso Syobo,Inc.

OECD. 1994a. *OECD Health Systems:Facts and Trends,1960-1991.*(Vol.I) Paris:OECD.

OECD. 1994b. *OECD Health Systems:The Socio-economic Environment Statistical References.*(Vol.II) Paris:OECD.

OECD. 1994c. *The Reform of Health Care Systems:A Review of Seventeen OECD Countries.* Paris:OECD.

Okimoto,Daniel I. and Aki Yoshikawa. 1993. *Japan's Health System:Efficiency and Effectiveness in Universal Care.* New York:Faulkner & Gray,Inc.

Tokita,Tadahiko,ed. 1995. *Nihon No Iryo Keizai* [*Japanese Health Economy*]. Tokyo:Toyo Keizai,Inc.

Tanaka,Shigeru. 1993. *Health Policy and Health Economics.* Tokyo:Nihon Hyoron,Inc.

Watanabe,Yoshiki. 1993. "Japan's Health-Care System and its Reform." *Review of Social Policy*,No.2(March).

*Bracketed parts in the references are translated from Japanese titles by the author of this paper.

Table 1
National Health Expenditures, Gross National Product and National Income, 1960-1993

Fiscal Year	Amount of NHE (billions)	Rate of growth of NHE	NHE per capita (thousands)	Gross national product (billions)	Rate of growth of GNP	National income (billions)	Rate of growth of NI	NHE as percent of GNP	NHE as percent of NI
1960	¥410	13.0%	4	¥16,662	19.9%	¥13,497	22.2%	2.5%	3.0%
1961	513	25.3	5	20,140	20.9	16,082	19.2	2.6	3.2
1962	613	19.5	6	22,283	10.6	17,893	11.3	2.8	3.4
1963	754	23.0	8	26,163	17.4	21,099	17.9	2.9	3.6
1964	939	24.5	10	30,302	15.8	24,051	14.0	3.1	3.9
1965	1,122	19.5	11	33,673	11.1	26,827	11.5	3.3	4.2
1966	1,300	15.8	13	39,600	17.6	31,645	18.0	3.3	4.1
1967	1,512	16.3	15	46,333	17.0	37,548	18.7	3.3	4.0
1968	1,802	19.2	18	54,793	18.3	43,721	16.4	3.3	4.1
1969	2,078	15.3	20	64,891	18.4	52,118	19.2	3.2	4.0
1970	2,496	20.1	24	75,152	15.8	61,030	17.1	3.3	4.1
1971	2,725	9.2	26	82,806	10.2	65,911	8.0	3.3	4.1
1972	3,399	24.7	32	96,539	16.6	77,937	18.2	3.5	4.4
1973	3,950	16.2	36	116,679	20.9	95,840	23.0	3.4	4.1
1974	5,379	36.2	49	138,156	18.4	112,472	17.4	3.9	4.8
1975	6,478	20.4	58	152,209	10.2	123,991	10.2	4.3	5.2
1976	7,668	18.4	68	171,153	12.4	140,397	13.2	4.5	5.5
1977	8,569	11.7	75	190,035	11.0	155,703	10.9	4.5	5.5
1978	10,004	16.8	87	208,781	9.9	171,779	10.3	4.8	5.8
1979	10,951	9.5	94	225,402	8.0	182,207	6.1	4.9	6.0
1980	11,981	9.4	102	245,360	8.9	199,590	9.5	4.9	6.0
1981	12,871	7.4	109	260,334	6.1	209,749	5.1	4.9	6.1
1982	13,866	7.7	117	273,462	5.0	219,392	4.6	5.1	6.3
1983	14,544	4.9	122	285,997	4.6	230,806	5.2	5.1	6.3
1984	15,093	3.8	126	305,725	6.9	243,609	5.5	4.9	6.2
1985	16,016	6.1	132	325,371	6.4	259,590	6.6	4.9	6.2
1986	17,069	6.6	140	339,685	4.4	269,395	3.8	5.0	6.3
1987	18,076	5.9	148	356,264	4.9	281,738	4.6	5.1	6.4
1988	18,755	3.8	153	379,230	6.4	299,589	6.3	5.0	6.3
1989	19,729	5.2	160	405,804	7.0	320,219	6.9	4.9	6.2
1990	20,607	4.5	167	435,362	7.3	342,873	7.1	4.7	6.0
1991	21,826	5.9	176	459,045	5.4	359,807	4.9	4.8	6.1
1992	23,478	7.6	189	468,877	2.1	361,000	0.3	5.0	6.5
1993	24,363	3.8	195	470,850	0.4	358,895	-0.6	5.2	6.8

Source: Ministry of Health and Welfare (1995a).

Table 2
Health Expenditures for the Aged, 1973-1993

Fiscal Year	Amount of HEFA (billions)	Rate of growth of HEFA	HEFA per capita (thousands)	Percentage of NHE	Covered persons (thousands)	Percentage of total population
1973	¥429	NA	¥101	10.9%	¥4,237	3.9%
1974	665	55.1%	148	12.4	4,493	4.1
1975	867	30.3	184	13.4	4,700	4.2
1976	1,078	24.4	220	14.1	4,894	4.3
1977	1,287	19.4	250	15.0	5,146	4.5
1978	1,595	23.9	295	15.9	5,408	4.7
1979	1,850	16.0	326	16.9	5,675	4.9
1980	2,127	14.9	360	17.8	5,907	5.0
1981	2,428	14.2	394	18.9	6,158	5.2
1982	2,749	13.2	425	19.8	6,465	5.4
1983	3,319	20.7	443	22.8	7,491	6.3
1984	3,610	8.8	461	23.9	7,823	6.5
1985	4,067	12.7	499	25.4	8,157	6.7
1986	4,438	9.1	523	26.0	8,484	7.0
1987	4,831	8.9	549	26.7	8,805	7.2
1988	5,159	6.8	568	27.5	9,084	7.4
1989	5,558	7.7	594	28.2	9,363	7.6
1990	5,927	6.6	609	28.8	9,732	7.9
1991	6,410	8.1	634	29.4	10,112	8.2
1992	6,937	8.2	661	29.5	10,488	8.4
1993	7,451	7.4	685	30.6	10,884	8.7

Notes: NHE is National Health Expenditures. Covered persons are those eligible for the Health and Medical Program for the Aged. In 1983, covered persons were increased because of the enactment of the Health and Medical Program for the Aged Act of 1982. Prior to the year, elderly persons were covered by the Medical Expense Payment Program for the Aged introduced in 1973 under the amendment to the Welfare Act for the Aged.
Source: Health and Welfare Statistics Association (1995).

Table 3
Total Expenditure on Health as Percent of Gross Domestic Product in the OECD Countries, Selected Years 1960-1991

	1960	1965	1970	1975	1980	1985	1990	1991
Australia	4.9%	5.1%	5.7%	7.5%	7.3%	7.7%	8.2%	8.6%
Austria	4.4	4.7	5.4	7.3	7.9	8.1	8.3	8.4
Belgium	3.4	3.9	4.1	5.9	6.6	7.4	7.6	7.9
Canada	5.5	6.0	7.1	7.2	7.4	8.5	9.5	10.0
Denmark	3.6	4.8	6.1	6.5	6.8	6.3	6.3	6.5
Finland	3.9	4.9	5.7	6.3	6.5	7.2	7.8	8.9
France	4.2	5.2	5.8	7.0	7.6	8.5	8.8	9.1
Germany	4.8	5.1	5.9	8.1	8.4	8.7	8.3	8.5
Greece	2.9	3.1	4.0	4.1	4.3	4.9	5.4	5.2
Iceland	3.5	4.2	5.2	6.2	6.4	7.1	8.3	8.4
Ireland	4.0	4.4	5.5	8.0	9.2	8.2	7.0	7.3
Italy	3.6	4.3	5.2	6.1	6.9	7.0	8.1	8.3
Japan	3.0	4.6	4.6	5.6	6.6	6.5	6.5	6.6
Luxembourg	NA	NA	4.1	5.6	6.8	6.8	7.2	7.2
Netherlands	3.9	4.4	6.0	7.6	8.0	8.0	8.2	8.3
New Zealand	4.3	NA	5.2	6.7	7.2	6.5	7.2	7.6
Norway	3.3	3.9	5.0	6.7	6.6	6.4	7.4	7.6
Portugal	NA	NA	3.1	6.4	5.9	7.0	6.7	6.8
Spain	1.5	2.5	3.7	4.8	5.6	5.7	6.6	6.7
Sweden	4.7	5.6	7.2	7.9	9.4	8.8	8.6	8.6
Switzerland	3.3	3.8	5.2	7.0	7.3	7.6	7.8	7.9
Turkey	NA	NA	NA	3.5	4.0	2.8	4.0	4.0
United Kingdom	3.9	4.1	4.5	5.5	5.8	6.0	6.2	6.6
United States	5.3	5.9	7.4	8.4	9.2	10.5	12.3	13.4

Sources: OECD(1994a), OECD(1994b).

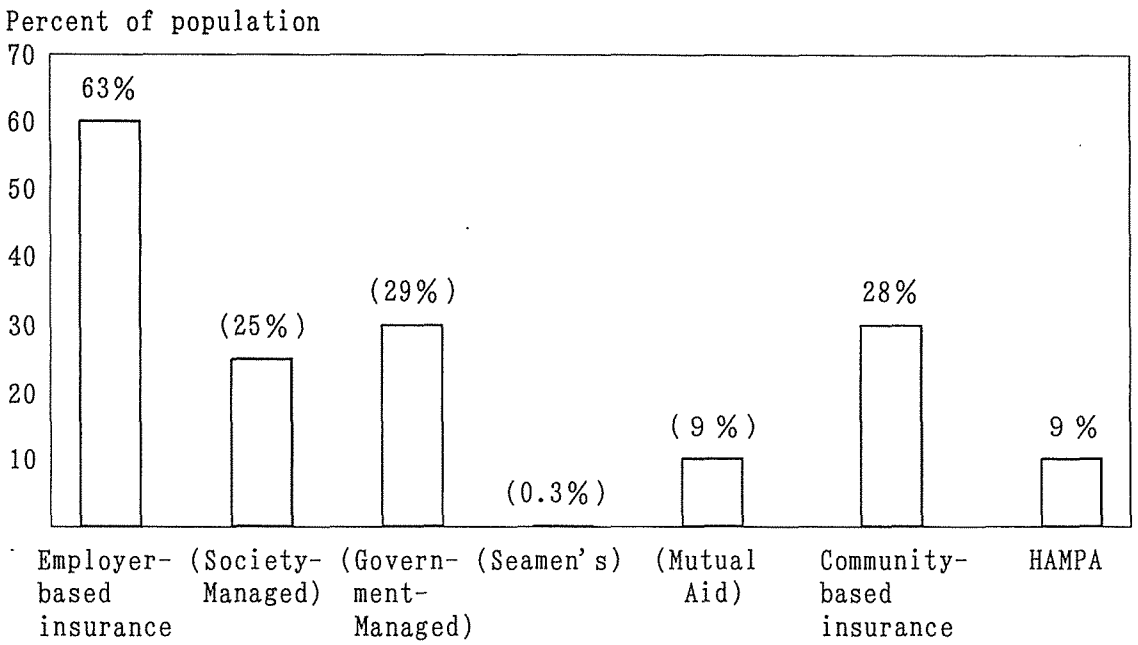
Table 4 Public Health Insurance Plans (as of the end of March, 1994)

Plan	Insurer [Number of insurers]	Insured	Number of enrollees including dependents (in thousands)		Premium rate	Contributions from the central government	Mandated benefits	Coinsurance percentage
Society-Managed Health Insurance	Health Insurance Society [1,817]	Employees mainly in large private firms	37,759		8.290% (on average) employer:4.686% employee:3.604%	¥63 billion for benefits, administrative expenses, etc.	Broad range of service benefits for doctors' services, inpatient and outpatient medical services and supplies, and prescription drugs Cash benefits[a] ·illness and injury allowance ·childbirth allowance ·childbirth and child care benefit for insured or spouse ·funeral benefit for insured or dependents	Insureds: 90 percent coinsurance for covered inpatient and outpatient expenses Dependents: 80 percent and 70 percent coinsurances for covered inpatient and outpatient expenses respectively
Government-Managed Health Insurance	Central government (Social Insurance Agency)	Employees mainly in private, small and medium-size firms	32,553		8.2% employer:4.1% employee:4.1%	13% of benefits Total of administrative expenses		
Seamen's Insurance	Central government (Social Insurance Agency)	Seamen	348		8.8% employer:4.4% employee:4.4%	¥3 billion for benefits		
Mutual Aid Association	Central Government Employee Mutual Aid Association [27]	Central government employees	4,126	11,788	7.808% (on average) employer:3.904% employee:3.904%	Total of administrative expenses		
	Local Government Employee Mutual Aid Association [54]	Local government employees	6,855		8.481% (on average) employer:4.241% employee:4.241%	Total of administrative expenses (financed from local government)		
	Private School Teachers Mutual Aid Association [1]	Private school teachers	807		8.450% employer:4.225% employee:4.225%	Part of administrative expenses		
National Health Insurance	Municipal government [3,252]	Farmers, self-employed persons, etc.	32,686	42,528	Average annual premium per family in 1993:¥149,926	50% of benefits, etc.		70% under almost all plans
		Retired employees eligible for the Retiree Medical Program	5,285			None		Insureds:80% Dependents:80 or 70%[b]
	National Health Insurance Society [166]	Physicians, lawyers, barbers, etc.	4,557		Average annual premium per family in 1993:¥237,727	32% to 52% of benefits		Insureds:100, 90, or 80% Dependents:80 or 70%[c]
Health and Medical Program for the Aged	Administered by municipal government	Persons aged 70 and over Bedridden persons aged 65 through 69	(10,884)		None	Central government:20% Prefectural governments:5% Municipal governments:5% Insurers:70%	Medical and health services	(Deductible)¥700 per day for covered inpatient expenses, and ¥1,010 per month for covered outpatient expenses

Notes: The number of enrolees in each plan includes elderly persons eligible for the Health and Medical Program for the Aged.
[a]National Health Insurance Plans are not required to provide illness and injury allowance and childbirth allowance.
[b]80 percent and 70 percent coinsurances apply to the covered inpatient and outpatient expenses respectively.
[c]Coinsurance provisions vary among National Health Insurance Society Plans.
Sources: Health and Welfare Statistics Association(1995), Ministry of Health and Welfare(1995d).

Figure 1

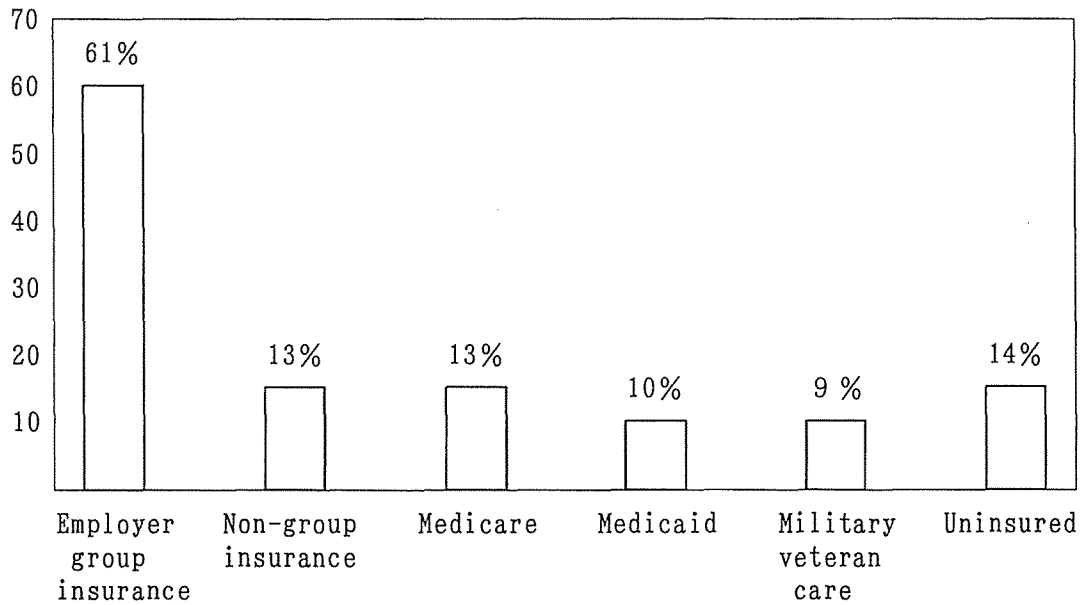
Japanese Health Insurance Coverage, 1993



Notes: HAMPA is the Health and Medical Program for the Aged. Those who are covered under the Retiree Medical Program are included in community-based insurance.

Figure 2

U.S. Health Insurance Coverage, 1990



Notes: Persons with more than one coverage are included more than once. Non-group is insurance purchased by individuals. Military includes dependents.

Source: OECD (1994c).

Table 5
Average Annual Income of Employees, Self-employed Persons, and Farmers per Family, 1993 (thousands of yens)

Employees	
Permanent employees	¥6,979
Firm size(number of employees):	
less than 30	5,200
30 to 999	6,443
1,000 and more[a]	8,617
Temporary employees	
Term of employment:	
one month to less than one year	3,933
daily or less than one month	2,552
Self-employed persons	
with employees	8,998
without employees	5,410
Farmers	
professional farmer	3,754
part-time farmer	8,314

[a]Includes public employees.
Source: Ministry of Health and Welfare (1995b).

Table 6
Number and Percent of Society-Managed Health Insurance Plans Providing Voluntary Benefits, 1994

Benefits	Number	Percent
Reimbursement for copayment	1,327	73.1
Home health care benefit	5	0.3
Large medical expense benefit	1,116	61.5
Illness and injury allowance	816	45.0
Extended illness and injury allowance	266	14.7
Burial benefit	1,303	64.9
Childbirth benefit	1,141	71.8
Child care benefit	1,075	59.2
Childbirth allowance	238	13.1
Child care allowance	938	51.7
Medical expense benefit for dependents	1,322	72.8
Home health care benefit	7	0.4
Burial benefit for dependents	1,374	75.7
Childbirth benefit for spouse	1,256	69.2
Child care benefit for spouse	1,213	66.8
Child care allowance for spouse	1,031	56.8
Number of societies providing benefits	1,668	91.9
Number of societies providing no benefits	147	8.1
Total	1,815	100.0

Source: National Federation of Health Insurance Societies (1995a).

Table 7
Mandated and Voluntary Benefits Provided by Society-Managed Health Insurance Plans,1990-1994

	1990	1991	1992	1993	1994
AMOUNT (in billions)					
Mandated benefits	¥2,463	¥2,635	¥2,849	¥2,948	¥3,058
Service benefits	2,282	2,446	2,639	2,734	2,828
Employees	1,258	1,368	1,495	1,567	1,623
Dependents	1,024	1,078	1,145	1,168	1,215
Cash benefits	181	189	209	213	230
Voluntary benefits	116	123	134	140	139
Total	2,579	2,759	2,983	3,087	3,197
PERCENT					
Mandated benefits	95.0%	95.5%	95.5%	95.5%	95.7%
Service benefits	88.5	88.7	88.5	88.6	88.5
Employees	48.8	49.6	50.1	50.8	50.8
Dependents	39.7	39.1	38.4	37.8	38.0
Cash benefits	7.0	6.9	7.0	6.9	7.2
Voluntary benefits	4.5	4.5	4.5	4.5	4.3
Total	100.0	100.0	100.0	100.0	100.0

Source: National Federation of Health Insurance Societies (1995a).

Table 8
Premium Rates of Society-Managed Health Insurance Plans (as of the end of February,1995)

Premium rates	Number of plans	Percent
under 7.0%	48	2.6
7.0%	54	3.0
over 7.0% — under 7.5%	71	3.9
7.5%	60	3.3
over 7.5% — under 8.0%	233	12.8
8.0%	183	10.1
over 8.0% — under 8.2%	44	2.4
8.2%	125	6.9
over 8.2% — under 9.0%	640	35.3
9.0%	139	7.7
over 9.0% — under 9.5%	99	5.5
9.5%	86	4.7
over 9.5%	33	1.8
Total	1,815	100.0

Source: National Federation of Health Insurance Societies (1995a).

Table 9
Average Premium Rate of Society-Managed Health Insurance Plans, 1990-1994

	Total	Employer	Employee
	Average premium rate		
1990	8.223%	4.653%	3.570%
1991	8.248	4.665	3.583
1992	8.252	4.666	3.586
1993	8.271	4.677	3.594
1994	8.295	4.687	3.608
	Percent		
1990	100.0%	56.6%	43.4%
1991	100.0	56.6	43.4
1992	100.0	56.6	43.4
1993	100.0	56.5	43.5
1994	100.0	56.5	43.5

Source: National Federation of Health Insurance Societies (1995a).

Table 10
Percent Distribution of National Health Expenditures by Source of Funds, 1960-1993

Fiscal Year	Total	Contribution			Premium			Patients' out of pocket	Other
		Total	Central government	Local government	Total	Employer	Employee and resident		
1960	100.0%	19.6%	15.7%	4.0%	50.4%	24.6%	25.7%	30.0%	—
1961	100.0	21.9	17.7	4.2	50.6	24.7	25.9	27.5	—
1962	100.0	23.7	19.5	4.2	51.3	25.2	26.1	25.0	—
1963	100.0	24.7	20.5	4.2	52.9	26.0	26.9	22.4	—
1964	100.0	24.1	20.0	4.1	54.3	26.1	28.2	21.7	—
1965	100.0	25.9	22.1	3.9	53.5	26.1	27.4	20.6	—
1966	100.0	26.2	22.5	3.8	53.6	25.8	27.8	20.2	—
1967	100.0	27.2	23.5	3.7	52.4	24.9	27.5	20.3	—
1968	100.0	28.1	24.6	3.4	51.7	24.6	27.1	20.2	—
1969	100.0	27.7	24.4	3.3	52.3	25.1	27.2	20.0	—
1970	100.0	27.6	24.2	3.5	53.0	25.6	27.4	19.3	—
1971	100.0	27.9	24.0	3.9	53.1	25.1	28.0	19.0	—
1972	100.0	29.9	25.5	4.3	52.5	24.7	27.8	17.6	—
1973	100.0	31.9	27.2	4.6	52.3	24.7	27.6	15.8	—
1974	100.0	33.4	28.7	4.7	53.2	25.3	27.9	13.4	—
1975	100.0	33.5	28.9	4.6	53.5	25.1	28.4	12.9	0.1%
1976	100.0	33.8	29.3	4.4	53.6	25.1	28.5	12.5	0.2
1977	100.0	34.8	29.6	5.2	53.3	24.9	28.4	11.7	0.2
1978	100.0	35.1	30.0	5.1	52.9	24.3	28.6	11.7	0.2
1979	100.0	35.3	30.1	5.1	53.0	24.1	28.9	11.4	0.3
1980	100.0	35.5	30.4	5.1	53.2	24.0	29.2	11.0	0.3
1981	100.0	35.4	30.3	5.1	53.5	23.8	29.8	10.8	0.3
1982	100.0	35.6	30.4	5.2	53.6	23.6	30.1	10.5	0.3
1983	100.0	36.4	30.6	5.7	52.5	NA	NA	10.8	0.3
1984	100.0	34.5	28.6	5.9	53.7	NA	NA	11.6	0.3
1985	100.0	33.4	26.6	6.8	54.3	NA	NA	12.0	0.3
1986	100.0	33.1	26.1	6.9	54.6	NA	NA	12.1	0.2
1987	100.0	31.6	24.9	6.7	55.6	NA	NA	12.5	0.2
1988	100.0	31.5	24.5	6.9	55.9	NA	NA	12.4	0.2
1989	100.0	31.4	24.7	6.7	56.1	NA	NA	12.3	0.2
1990	100.0	31.4	24.6	6.8	56.3	NA	NA	12.1	0.2
1991	100.0	31.2	24.5	6.7	56.6	NA	NA	12.0	0.2
1992	100.0	30.4	23.8	6.6	57.6	NA	NA	11.8	0.2
1993	100.0	30.7	23.7	7.0	57.5	NA	NA	11.6	0.2

Source: Ministry of Health and Welfare (1995a).

Table 11
Revisions of Official Drug Prices, 1967-1994

	Number of listed drugs	Number of revised drugs	Rate of increase(+) or decrease(-) (percent)
Oct. 1967	6,831	6,831	−10.2
Jan. 1969	6,874	6,874	− 5.6
Aug. 1970	7,176	7,176	− 3.0
Feb. 1972	7,236	7,236	− 3.9
Feb. 1974	7,119	7,119	− 3.4
Jan. 1975	6,891	6,891	− 1.55
Feb. 1978	13,654	13,654	− 5.8
June 1981	12,881	12,881	−18.6
Jan. 1983	16,100	3,076	− 4.9
Mar. 1984	13,471	13,471	−16.6
Mar. 1985	14,946	5,385	− 6.0
Apr. 1986	15,166	6,587	− 5.1
Apr. 1988	13,636	13,636	−10.2
Apr. 1989	13,713	13,713	+ 2.4
Apr. 1990	13,352	13,352	− 9.2
Apr. 1992	13,573	13,573	− 8.1
Apr. 1994	13,375	13,375	− 6.6

Sources: Health and Welfare Statistics Association(1995),
National Federation of Health Insurance Societies(1995b)

Table 12
Revisions of Medical Fee Schedule, 1967-1994

	Hospital and clinics	Dental services	Pharmaceutical services
Dec. 1967	+ 7.68%	+12.65%	
Feb. 1970	+ 8.77	+ 9.73	
Oct. 1970	+ 0.97		
Feb. 1972	+13.70	+13.70	+6.54%
Feb. 1974	+19.0	+19.9	+8.5
Oct. 1974	+16.0	+16.2	+6.6
Apr. 1976	+ 9.0	+ 4.9	
Aug. 1976		+ 9.6	
Feb. 1978	+11.5	+12.7	+5.6
June 1981	+ 8.4	+ 5.9	+3.8
Feb. 1983	+ 0.3		
Mar. 1984	+ 3.0	+ 1.1	+1.0
Mar. 1985	+ 3.5	+ 2.5	+0.2
Apr. 1986	+ 2.5	+ 1.5	+0.3
Apr. 1988	+ 3.8	+ 1.7	
June 1988		+ 1.0	
Apr. 1990	+ 4.0	+ 1.4	+1.9
Apr. 1992	+ 5.4	+ 2.7	+1.9
Apr. 1994	+ 3.5	+ 2.1	+2.0
Oct. 1994	+ 1.7	+ 0.2	+0.1

Sources: Health and Welfare Statistics Association(1995),
National Federation of Health Insurance Societies(1995b)

Table 13
Health Expenditures for the Aged by Source of Funds, 1990-1993

	1990	1991	1992	1993
AMOUNT (in billions)				
Governments	¥1,720	¥1,870	¥2,089	¥2,262
Central	1,147	1,247	1,393	1,508
Prefectural	287	312	348	377
Municipal	287	312	348	377
Health Insurance Plans	4,013	4,327	4,579	4,877
Employer-based	2,587	2,808	2,973	3,152
Society-Managed	1,005	1,090	1,155	1,226
Government-Managed	1,183	1,296	1,379	1,468
Seamen's	14	15	14	14
Mutual Aid	385	408	425	444
Community-based	1,426	1,519	1,607	1,725
Patients	194	212	269	312
Total	5,927	6,410	6,937	7,451
PERCENT				
Governments	29.0	29.2	30.1	30.4
Central	19.3	19.5	20.1	20.2
Prefectural	4.8	4.9	5.0	5.1
Municipal	4.8	4.9	5.0	5.1
Health Insurance Plans	67.7	67.5	66.0	65.5
Employer-based	43.6	43.8	42.9	42.3
Society-Managed	17.0	17.0	16.6	16.5
Government-Managed	20.0	20.3	19.9	19.7
Seamen's	0.2	0.2	0.2	0.2
Mutual Aid	6.5	6.4	6.1	6.0
Community-based	24.1	23.7	23.2	23.2
Patients	3.3	3.3	3.9	4.2
Total	100.0	100.0	100.0	100.0

Source: Health and Welfare Statistics Association(1995).

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