## Chapter 11 National Health Insurance

Currently, many developing countries lack a medical insurance system with universal coverage, so access to medical services is difficult, particularly for people living in poverty. The link between sickness and poverty cannot therefore be broken, creating a large barrier to the elimination of poverty. In these circumstances, starting with the newly industrialized countries and the countries that are developing economic power and have comparatively stable administrative capabilities, the opportunity arises to aim for national universal insurance.

Japan is unique among advanced countries in having a publicly managed universal health insurance system. Furthermore, it has the distinction of having been established before Japan entered a period of advanced economic growth, an example that should be useful to developing countries. The greatest characteristic of Japan's public medical insurance system is that it is a Universal Health Insurance Coverage, featuring a very high level of equality that enables "anyone, anywhere, any time" to receive the same quality of medical treatment for a small out of pocket contribution.

This chapter will first provide a summary of the history of Japan's medical insurance system, then introduce the current system, and discuss the characteristics of Japan's medical insurance system in comparison with a number of other countries. In conclusion, we will sum up Japan's experience that may be relevant to developing countries in establishing their own medical insurance systems.

# 1. History of the Medical Insurance System

## 1-1 Birth of Medical Health Insurance (1900~1944)

Medical health insurance in Japan started in early 1900, when some government enterprises and large private corporations introduced mutual benefit associations, but the national system started with promulgation of the Health Insurance Law in 1922. This law was extremely limited in scope, however, covering only employees in businesses covered by the Industrial Law and the Factories Law, and adequate medical treatment was not guaranteed (in 1920, there were about 770 labor unions, of which about 45 unions were functional)<sup>1</sup>. Agricultural workers, who comprised the majority of Japanese people at that time, were not covered, and in agricultural villages subjected to panic after World War I, the weight of medical expenses increased the burden of poverty.

On the other hand, organizations resembling health insurance cooperatives had existed as mutual-aid organizations in rural villages since the Meiji Era (1868~1912) in Japan. The government introduced the National Health Insurance Law in 1938 to extend this system into a national system to cover those not formally employed, particularly farmers. In the following year of 1939, the Employees Health Insurance Law and Seamen's Health Insurance Law were enacted, further expanding the range of people benefiting from

<sup>&</sup>lt;sup>1</sup> The Ministry of Health and Welfare (1988) *Kosei Sho Goju-nen Shi (Kijutsu-hen)* [Fifty Year's History, Ministry of Health and Welfare (descriptive version)] Kosei Mondai Kenkyukai.

health insurance coverage<sup>2</sup>. During World War II, at the end of 1943, the National Health Insurance system had already spread to 95% of municipalities throughout Japan, and with the exception of the major cities, near universal health insurance had been achieved, making this the "First Age of Universal Health Insurance"<sup>3</sup>.

## 1-2 From the End of the War to the Establishment of Universal Health Insurance (1945~1961)

When the confusion after the end of World War II settled, establishment of universal health insurance was for some while regarded as a major aim. Although the First Age of Universal Health Insurance was achieved before the end of the war, Japan suffered great economic and social damage during World War II, and was affected after the war by serious economic depression and high prices, bringing the National Health Insurance system near to a collapse. At that time, about onethird of Japanese, largely engaged in agriculture and their own businesses, were not covered by health insurance to cover these people<sup>4</sup>.

For several years after 1945, every effort was devoted to rebuilding the health insurance finances, through revision of the average monthly wage, an increased health levy rate, and expansion of the number of people eligible for health insurance. In 1956, the social security system committee issued its "Recommendations concerning Medical Insurance." These recommendations gained considerable public support, and in 1958 a new National Health Insurance Law was enacted, with the Universal Health Insurance Coverage for all people commencing in April 1961.

## 1-3 Phase of Revisions to the Health Insurance System (1962~1981)

Universal Health Insurance Coverage was thus introduced as described above. There was, however, a disparity in that insurers in National Health Insurance alone incurred a co-payment of 50%, whereas those covered by employee health insurance had no co-payment component. To correct this disparity, efforts continued up to 1980 to reform the system to reduce the patient's burden and make it easier for the economically disadvantaged to receive treatment, by means such as reducing the maximum co-payment for the National Health Insurance system to 30%, and using taxation funding to pay for health insurance payment deficits. These methods are considered to have greatly improved consultation rates, particularly for elderly patients.

In 1973, the government introduced the elderly medical fees payment system, whereby medical costs of the elderly were paid by public funds, and this year was called the "First Year of Welfare."

## 1-4 Phase of Response to the Aging Society (1982~present)

Although the aging of the population had already started in Japan in 1955, and the birth rate continued to decline after that, the mortality rate of the elderly declined so rapidly that the speed of aging of the population increased beyond expectations. As society aged quickly, the financial burden of medical costs for the aged drastically increased, and from 1982, the social security system underwent reform. In the medical insurance system also, in 1982 the prevention, treatment and rehabilitation of illnesses was

<sup>&</sup>lt;sup>2</sup> Murakami, Yoichiro (1996) Niju-seiki no Nihon (9) Iryo - Koreishakai he Mukatte [Japan in 20th Century (9) Medical Care – Toward Aging Society] Yomiuri Shimbun Sha.

<sup>&</sup>lt;sup>3</sup> The Ministry of Health and Welfare (1988) *Kosei Sho Goju-nen Shi (Kijutsu-hen)* [Fifty Year's History, Ministry of Health and Welfare (Descriptive Version)] Kosei Mondai Kenkyukai., Hiroi, Yoshinori (1999) *Nihon no Shakai Hosho* [Social Security of Japan], Iwanami shinsho.

<sup>&</sup>lt;sup>4</sup> The Ministry of Health and Welfare (1988) *Kosei Sho Goju-nen Shi (Kijutsu-hen)* [Fifty Year's History, Ministry of Health and Welfare (Descriptive Version)] Kosei Mondai Kenkyukai.

1922	Health Insurance Law enacted
1938	National Health Insurance Law implemented
1961	Universal health insurance coverage achieved
1982	Law for the Health and Medical Services for the Elderly enacted
1984	User co-payment of 10% introduced to employee health insurance
1997	User co-payment lifted to 20% for employee health insurance
2000	Long-term Care Insurance Law implemented (user co-payment of 10%)
2000	Fixed co-payment of 10% introduced for the elderly (elimination of partial payment of pharmaceuticals cost)
2001	Aged health insurance, user co-payment of 10% introduced
2003	User co-payment lifted to 30% for employee health insurance, basis for calculation of health insurance premiums changed from monthly to annual income
* Curren	tly undergoing evaluation of fundamental reform for the 21st century.

Table 11-1 Major Developments in the Japanese Medical Insurance System

standardized, and the Law for the Health and Medical Services for the Elderly was enacted, requiring partial co-payment of elderly medical expenses. A scale of appropriate medical expenses (increasing the user co-payment rate, etc.) was also promoted.

As the aging of the society continued, the increased prevalence of chronic illnesses such as lifestyle-related diseases caused rising treatment costs, while health insurance income slowed due to reduced income growth as the economy entered a period of slow growth, creating a structural deficit for the various medical insurance systems. In response to this situation, in 1997 system reforms were instituted, such as changing the health insurance benefit and contribution rate, and in 1998 the aged health costs contribution was revised<sup>5</sup>.

In 1994, the Long-term Care Insurance Law was promulgated (implemented from 2000), and part of the moneys provided for aged treatment were provided to welfare services, promoting an integrated approach to medical treatment, health insurance, and welfare.

In 2002, the government unveiled its overall

plan for reform of the health system, and in March 2003, the Cabinet adopted the "Basic Policy concerning the Health Insurance System and Medical Remuneration System." It is currently evaluating fundamental reform proposals, including the creation of a new Elderly Health System (replacing the Aged Health System), aimed at constructing a sustainable health insurance system for a truly aged society.

## 2. Overview of the Public Medical Insurance System

#### 2-1 Outline of the Medical Insurance System

National public health systems can be broadly divided into two categories: either the government itself is the provider of medical services (as in the United Kingdom and Sweden); or the social insurance system compensates individuals for the cost of medical expenses (as in Germany and France). Japan's system is modeled on the German health insurance system, and therefore falls into the latter category.

<sup>&</sup>lt;sup>5</sup> Nakamura, Yoshio (1998) Kosei Gyosei [Government Administration of Medical Affairs], Gyosei.

Under the medical insurance system in Japan, beneficiaries can access medical services at any medical institution in the country on the production of a valid healthcare certificate. As Table 11-2 shows, the current health insurance system comprises several independent sub-systems, which can be broadly classified as either employee (or occupational) health insurance for employed workers, or regional National Health Insurance, generally for selfemployed persons. Employee's health insurance plans include health insurance (where the insurers are the government and the health insurance associations), seamen's insurance and mutual aid associations. Across-the-board healthcare for the elderly (70 years and over<sup>6</sup>) is a common feature of all systems.

The level of benefits paid varies according to the medical insurance plan, as well as factors such as the circumstances of the insured (the employee or individual) and the insured's family, and whether treatment is received as an inpatient or outpatient. Under employee's health insurance and the National Health Insurance System, the insured and dependent relations are required to contribute 30% of costs (as of April 2003). Elderly persons contribute only 10%, with a monthly ceiling of ¥3,000 for outpatients and ¥37,200 for inpatients. Expensive medical procedures are subject

Scheme		Eligibility	Benefits		Funding	
			Co-payment		Premiums	Treasury/subsidies
Health insurance	Government	Employees of small and medium enterprises	(1) Insured and family members = 30%	contributions	Premium rate = 8.2%	13.0% of benefits (16.4% of contributions for health schemes for the elderly)
	Health associations	Employees of major enterprises	(2) Medication purchased separately	in the case of expensive	Premium rate depends on circumstances of	
Seamen's insurance		Seamen	_	medical	insured; usually split 50/50 between employee and employer (legal maximum = 9.5%)	None
Mutual aid associations		Public servants (national government) Public servants (local government) Private education teaching staff				
National Health Insurance system (municipalities)* <sup>1</sup>		Farmers and farm workers Self-employed persons	<ul> <li>(1) Insured = 30%</li> <li>(2) Medication purchased separately</li> </ul>		Fixed portion and variable proportion (depending on ability to pay) for each individual household	50% of benefits
Health insurance for the elderly* <sup>2</sup>		Usually persons 70 years or older	<ul> <li>(1) Outpatients = 10%</li> <li>(2) Inpatients = 10%</li> </ul>		Contribution Government (national, prefectural, municipal) = 30% Contributions from insured = 70% (until Sep 2002)	

Table 11-2 Summary of the Japanese Medical Insurance System (as of June 2003)

Notes: \*1 Includes retirement medical insurance scheme.

\*2 The minimum eligibility age for benefits will be progressively raised to 75 years between October 2002 and October 2012, and the government contribution towards the medical expenses of elderly persons will be progressively increased to 50%. Monthly ceilings on personal contributions and fixed-price contributions have been abolished and replaced with a uniform 10% contribution rate (20% in high income brackets).

Sources: Based on Ministry of Health and Welfare website, Health and Welfare Statistics Association, Nakamura , Yoshio (1998).

<sup>&</sup>lt;sup>6</sup> 65 years and over for persons where the insured is bedridden.

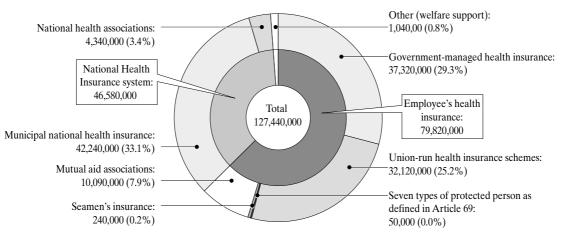


Figure 11-1 Breakdown of Enrollments in the Medical Insurance System

NB: • Classifications may differ between schemes.

- Employee's health insurance membership applies to the insured and their family/dependents.
- National Health Insurance membership applies to all persons other than employees.

Source: Ministry of Health, Labour and Welfare website

to a separate system under which contributions are waived above a maximum limit determined in accordance with the insured's income level<sup>7</sup>.

In addition, various forms of direct cash payment are also available, including sickness allowance, moving expenses, lump sum payments for childbirth and child rearing, childbirth allowances and funeral expenses.

Insurance premiums are either deducted from the employee's pay (for employee plans) or paid directly to the municipality operating the insurance system (for the National Health Insurance system). The amount of the premium payable is calculated as a fixed percentage of the insured person's income. The percentage rate (called the premium rate) differs between employee's health insurance plans and the National Health Insurance System. There is also variation among employee's health insurance plans, particularly between health insurance systems managed by mutual aid associations and unions and government-run plans, and even among the former, the premium rate can differ depending on the job or position. The premium rate is 8.3% in government-managed health insurance plans; premium rates in nongovernment systems vary but the maximum rate under law is 9.5%<sup>8</sup>. The premium rate in the National Health Insurance system is a combination of a fixed sum per household and a percentage contribution based on income level. The exact method of calculation can differ between municipalities, who are the insurers.

#### 2-2 Long-term Care Insurance System

In addition to the medical insurance plans described above, a long-term care insurance system was introduced in April 2000 to accommodate the needs of the rapidly aging Japanese society.

Long-term care insurance is administered by municipal authorities. It applies to all Japanese citizens aged 40 and over, who are divided into Type 1 (aged 65 years or older) and Type 2 (aged

<sup>&</sup>lt;sup>7</sup> From April 2003, the monthly ceiling is ¥35,400 for those in low income brackets, ¥79,890 for average earners and ¥220,110 for those earning ¥560,000 per month or more. An elderly person (aged 70 or more) who earns more than the threshold value is considered to be working, and pays ¥40,200 (average income bracket) or ¥15,000 ~ ¥24,600 (low income bracket).

<sup>&</sup>lt;sup>8</sup> Revised December 2002.

between 40 and 65 years) categories. Long-term care benefits are funded 50% by the state and 50% by insurance premiums payable by the insured. The premium in the Type 1 category is a fixed amount determined by each municipality separately, which is deducted directly from pension payments (where applicable). In the Type 2 category, premiums are collected by insurers in the form of an extra levy (a fixed amount throughout the country) added to medical insurance premiums. Benefits are payable to any Type 1 citizen recognized as being in need of nursing care or other support, and to Type 2 citizens requiring nursing care or support in connection with illnesses or conditions associated with aging, such as Parkinson's Disease. The longterm care insurance system covers nursing care services in the home, elderly people's homes, and other recognized forms of nursing care and support. Benefits are paid in the form of the services. The user contribution is 10%.

## 2-3 Welfare and Medical Expenses Support Systems

The medical insurance system described above is complemented by welfare support and publicly funded medical services.

#### 2-3-1 Welfare System

Any household with a total income below the minimum cost of living as determined by the government, that also satisfies certain criteria (such as absence of financial support from other families) is eligible for welfare support. Medical expenses incurred by households on welfare support are paid out of health support, with no co-payment required.

#### 2-3-2 Public Funding System for Medical Expenses

Public funding for medical services comes in many different forms, such as state guarantees,

social protection and social welfare. State guarantees include benefits for medical treatment paid under the Law for Special Aid to the Wounded and Sick Retired Soldiers. Social protection includes the provisions of the Tuberculosis Control Law, the Mental Health and Welfare Law, the Narcotics Control Law, and laws for Infectious Disease Control and Patients with Infectious Diseases. Medical services related to social welfare, meanwhile, are provided for under the Daily Life Protection Law, the Law for the Welfare of Disabled Persons and the Child Welfare Law.

Public funding is also provided for treatment of specified illnesses (specifically, 45 listed illnesses including SMON and myasthenia gravis) and for the care of children with chronic illnesses (10 listed illnesses including malignant neoplasia and asthma).

In addition to public funding at the national level, local governments also provide funding for a range of medical expense plans. Total public funding of medical expenses in FY2000, including funding provided separately by local government, was estimated at \$1,605,100 million, which represents 5.3% of the total national expenditure on medical services<sup>9</sup>.

## 3. Structure of Medical Insurance Systems in Developing Countries in the Light of Japanese Experience

In this paper, we will consider ways in which Japan's experience in developing its medical insurance system may be useful to developing countries in the process of building their own medical insurance systems. We will begin by examining the defining characteristics of the Japanese medical insurance system. Next, we will contrast these with the needs and circumstances of developing countries today to identify those

<sup>&</sup>lt;sup>9</sup> Suzuki, Shosuke and Hisamichi, Shigeru eds (2003) *Shinpuru Eisei Koshueisei-gaku 2003* [Simple Hygiene and Public Health 2003] Nanko Do.

elements that may be applicable.

## 3-1 Characteristics of the Medical Insurance System in Japan

#### 3-1-1 Universal Health Insurance Coverage

Probably the single most important defining characteristic of the Japan's medical insurance system is its universal nature, providing health insurance coverage to all citizens. This stands in contrast to the United States, for instance, where over 15% of the population is without health coverage due to the prohibitive cost of private health insurance, the primary source of healthcare. Although Japan's medical insurance system was originally modeled on that of Germany, even the German system does not provide universal coverage. Insurance groups in Germany are generally occupation or workplace based, and are funded entirely by insurance premiums with no contribution from public funds. Self-employed persons, the elderly, and workers outside the designated occupational groups, are therefore not automatically covered.

Japan's medical insurance system provides universal coverage through a combination of two distinct elements: workplace-based health insurance associations for employees, and staterun healthcare plans designed for workers in primary industry and their families, since primary industry employed the great majority of the workforce in Japan when the system was first established. In this sense, the Japanese system is now closer to that of the United Kingdom, where medical services are funded by taxes and provided free of charge<sup>10</sup>.

#### 3-1-2 Major Role Played by the Government

In Japan, the national government maintains central control over medical funding. For example,

all insurance plans are subject to national compensation and remuneration controls. In this way, the system overall has more of a social welfare (income redistribution) flavor than a social insurance one. In social insurance, the insurer (the body operating the insurance, the insurer (the body operating the insurance system) is normally (or theoretically) a private sector entity (even though this entity may be subject to various forms of government regulation) and as such is afforded a degree of independence. Typical examples of this approach are the Sickness Funds seen in Germany, which have the authority to determine remuneration for medical services.

Japan has many different insurers, but they are all subject to central government controls in areas such as remuneration, thus ensuring that all citizens have access to the same quality of service at the same price. Furthermore, the government itself also acts as an insurer and operates its own insurance plan. The National Health Insurance System is funded from taxes, with the state maintaining harmony between taxes and insurance. This is a distinctive feature of a healthcare system developed by what was then a developing country<sup>11</sup>.

#### 3-1-3 Inclusion of those Not Formally Employed

One of the biggest issues for designing healthcare systems in developing countries is how to include those not formally employed, such as workers in agriculture, forestry and fisheries industries, and the self-employed. Michael Jenkins of the International Social Security Association (ISSA) points out that "farm workers and workers in the informal sector (self-employed workers and others who do not belong to formal organizations) have often missed out on the protection afforded by social security guarantees, and this is particularly applicable to developing countries."<sup>12</sup>

When a modern medical insurance system was being developed in Japan in the 1930s and 1940s,

<sup>&</sup>lt;sup>10</sup> Hiroi, Yoshinori (1999) Nihon no Shakai Hosho [Social Security of Japan], Iwanami Shinsho.

<sup>&</sup>lt;sup>11</sup> *ibid*.

<sup>&</sup>lt;sup>12</sup> *ibid*.

primary industry accounted for nearly half of all workers, since the country had been slow to embrace industrialization. As the first country in the world to extend medical insurance to the informal sector, Japan was obliged to create its own unique model, parts of which persist symbolically in the National Health Insurance System today. When the National Health Insurance Act was enacted in 1938, municipal authorities and local industry associations (with the status of private organizations) were the basic building blocks of the health insurance system. Shortly after the war, in 1947, the independent local insurers were all brought under the control of the municipalities in order to promote the universality of the system. In 1958, the new National Health Insurance System established the principle of compulsory participation and created a truly universal system. This approach - beginning with small-scale local insurance plans and gradually broadening the reach of the system - has particular relevance for developing countries today.

#### 3-1-4 Extremely High Number of Insurers

Japan has the government-managed health insurance system, individual workplace health insurance associations, and the National Health Insurance System in which municipalities act as insurers. Overall, Japan has many more different insurers than most other countries (see Table 11-3). Medical insurance system in Japan is a unique combination of one very large insurer (the government, which operates the government-managed schemes) and a very large number of small insurers.

## **3-2** Applicability of Japan's Medical Insurance Systems to Developing Countries

For many developing countries, the primary goal of providing all citizens with proper access to medical services is hampered by a lack of public funding. Although some form of user contribution is necessary in order to ensure the continuing economic feasibility of the system, the 100% user-pays approach as seen in the United States is certainly not realistic. The mechanisms and processes that were used in Japan - beginning with small-scale public health insurance plans at the local level and subsequently introducing universal coverage under central government control - could provide the solution to funding problems. In this essay, we will consider how the Japanese experience may be applicable to developing countries today.

## 3-2-1 Preconditions to Make Universal Health Insurance Coverage Succeed

Kobayashi (2000) argues that a combination of favorable factors enabled the successful establishment of universal health insurance coverage in Japan. The first factor was the strong political will to provide universal healthcare. The broad political consensus on the importance of universal healthcare, not just within government but among politicians and the general public, was indispensable to this success. The second factor was the wholesale merger of municipal governments that took place during the Showa Era (1926~1989), which boosted the management and operational capacity of local government.

The third factor was the incremental approach to the introduction of universal health insurance coverage. After the National Health Insurance Act was enacted in 1938, the scope of eligibility was gradually extended over the next 23 years, until the health insurance system took on its current form. This approach was ideally suited to the circumstances of Japan at the time, when the nation lacked medical facilities, expensive medical procedures were rare, and the aging population was not an issue. Expenditure on medical services accounted for only a small proportion of Gross Domestic Product (GDP) (around 3% in the 1960s,

<sup>&</sup>lt;sup>13</sup> Nakamura, Yasuhide (2001) "Hokeniryo Bunya niokeru Tonan Asia Shokoku no Patonashioppu no Kochiku [Establishment of the Partnership between Southeast Asian Countries in the Field of Public Health and Medical Services]," NIRA E ASIA Research team ed. Higashi Asia Kairo no Keisei [The Establishment of the East Asian Corridor] pp. 245-275, Nihon Keizai Hyoron-sha.

compared to 7% in the 1990s)<sup>13</sup>.

The three main prerequisites for the introduction of universal healthcare can therefore be summarized as: strong political will, proper administrative capacity, and an incremental approach. Naturally, the incremental approach to broadening the system will be governed by financial considerations: in other words, whether the overall rate of economic growth and development is sufficient to generate the taxes and premiums needed to continue extending the reach of the system. Similarly, the design of a health insurance system must take into consideration the

USA	UK	Germany	France	Japan
State (Medicare) + private insurance	State (National Health Service (NHS)) [taxes]	Sickness Funds (approx 900 in eight groups)	Small number of Sickness Funds	approx. 5,300 (state, associations 1,800; national health schemes 3,400)

Social insurance groupings

Source: Based on Hiroi, Yoshinori (1999) p. 54

#### Box 11-1 A Comparison of the Medical Insurance Systems of the USA, UK and Germany

**USA:** In contrast to the approach taken by Japan, medical insurance in the United States operates purely according to market principles. Medical insurance is generally provided by private-sector insurance companies, and citizens are required to act as consumers in purchasing their medical insurance products. Larger employers often subsidize the medical insurance costs of their employees, but individual membership in a private medical insurance plan costs hundreds of dollars per month. As a result, some 15% of the population of the United States is without medical insurance. Many insurance companies specify which medical institutions their policy-holders may use, in order to keep costs down. A variety of restrictions also apply: for instance, before a patient can be admitted to a medical institution, the institution must obtain the approval of the patient's insurance provider. Many medical institutions are themselves privately run, with both funding and provision of medical services operated on private-sector principles. The government provides subsidies designed to supplement the free-market healthcare system, including Medicare, which funds the medical expenses of elderly persons (65 and over) and persons with disabilities (of all ages); and Medicaid, which covers low-income earners, persons with disabilities, and certain categories of children and pregnant women.

**UK:** The United Kingdom has opted for the welfare state model exemplified by the expression "from the cradle to the grave." Apart from a small number of private hospitals, the taxpayer-funded National Health Service (NHS) operates virtually all the medical institutions in the United Kingdom, at which all citizens are eligible for free medical services. In direct contrast to the United States, the state is responsible for the funding and provision of medical services. The United Kingdom system also differs from the Japanese system in providing free medical services funded entirely from tax revenue. The use of medical services in the United Kingdom is, however, subject to a range of restrictions. For instance, each citizen is required to register with one General Practitioner (GP) and is not permitted to see other GPs. Patients cannot visit a hospital unless referred by their GP; patients without referrals must pay the full cost of their visits. Recently,

shortages in the number of medical personnel such as doctors and nurses have reached critical levels, with patients often obliged to wait two to three weeks to see their GPs. Hospital treatment can involve a wait of several months. As a result, many people are choosing to take out private health insurance and use private medical institutions. Some public hospitals have even set up "private wings," where fees are charged in the same way as a private hospital.

Germany: The health system in Japan was originally modeled on the German social insurance system, but has subsequently shifted towards the United Kingdom model of universal healthcare. There are accordingly some similarities between the German and Japanese healthcare systems today, but also some important differences. For instance, the German system is funded primarily by premiums levied by occupation-based insurance associations of insurers and policyholders. As in Japan, Germany has around 900 occupation-based insurance associations called Sickness Funds; however, whereas elderly Japanese are covered by special plans such as health insurance for the elderly and long-term care insurance, in Germany, the occupation-based health insurance systems are extended to elderly persons. Some 90% of hospital beds in Germany are in public medical institutions (including charity hospitals), whereas in Japan, around 80% of beds are in private medical institutions. Self-employed people and high income earners can opt out of health insurance, so the system cannot be considered truly universal. In order to pursue the goal of universal healthcare, Japan was obliged to move away from the original German model and use taxes to make up the funding shortfall from premiums for government-managed health insurance plans and the National Health Insurance System. The Japanese system today is therefore a cross between the universal healthcare approach of the United Kingdom, where medical services are funded entirely by taxpayers, and the social insurance approach of Germany.

	Japan	USA	UK	Germany
Provision	Private	Private	Public	Public
	About 20%	About 25%	Virtually 100%	About 90%
Funding	Public	Private	Public	Public
	Premiums + tax revenues	—	Tax revenues	Premiums

International Comparison of Funding	and Provision of Medical Services
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Note: The percentage figure in the Provision row represents the relative proportion of public (and/or national) hospital beds. In Germany, this includes hospitals run by non-profit institutions such as religious organizations and foundations.

Source: Based on Hiroi , Yoshinori (1999) Nihon no Shakai Hosho [Social Security of Japan], Iwanami Shinsho

capacity of individual citizens to pay insurance premiums and co-payments.

## 3-2-2 Scale at Introduction, and Phased Expansion of a Medical Insurance System Suited to the Stage of Economic Development

Earlier in this Chapter, in "1. History of the medical insurance system" we identified the four

main phases in the history of the medical insurance system in Japan. Here, in order to analyze the relevance of the Japanese experience to developing countries, we will examine each phase in the context of the economic circumstances of the time, and consider how economic factors influence the scale and timing of the introduction of a medical insurance system.

		Main forms of health insurance available	Scope/eligibility	Corresponding developing countries/regions	
Early industrialization phase	Birth of medical insurance (1900~1944)	2000 Postavinas (Fordinar) e		Senegal, Burkina Faso	
		Enterprise-based mutual aid associations	Employees of state-run corporations and major private enterprises		
Beginnings of economic growth	From postwar recovery to genuine universal coverage (1945~1961)	Enterprise-based mutual aid associations	Employees of major enterprises	Kenya, Indonesia, the Philippines	
		Government-managed health insurance schemes	Employees of small to medium enterprises		
		National Health Insurance System	Residents of designated municipalities, members of local industry unions		
		All thre			
Rapid economic growth	Institutional reform period (1962~1981)	Enterprise-based mutual aid associations Government-managed health insurance schemes National Health Insurance System	All citizens	Thailand, the Philippines	
		Centralized			
MaturityAdapting to the aging of society (1982~present)All the above + Elderly Health SystemAll citizens		All citizens	South Korea, Taiwan		

Table 11-4 Economic Stages and Medical Insurance Stages in Japan

Source: Compiled by the authors

Table 11-4 summarizes the four phases of the medical insurance system with reference to economic circumstances. In the early industrialization phase, modern industry had started to appear but fullscale industrialization was yet to begin. This period corresponds to the birth of medical insurance, provided only by local mutual-aid associations and employee health insurance plans operated by state-run enterprises and major private corporations. The next phase, the beginnings of economic growth, refers to the period from post-war recovery through to the start of economic growth. This phase saw medical insurance extended to include the informal sector (farm workers and the self-employed) throughout the country, a process that was to continue through to the development of a truly universal system extending coverage to all citizens (hence it is called "From post-war recovery to universal coverage" in Table 11-4). In the subsequent period of advanced economic growth, the system was gradually refined and modified to improve the equality of the universal coverage that had been established. This phase is accordingly known as the institutional reform period. In the maturity period, as socio-economic development reached maturity, the population began to age, and stable economic growth was replaced with an economic downturn. The medical insurance system was required to adapt to these changes, particularly the acceleration of the aging process.

Let us now consider how the experiences of Japan can be applied in the context of the economic development of developing countries today.

#### (1) Early Industrialization

In the early industrialization phase, the majority of workers belong to the informal sector, typically agriculture and cottage industries. Health insurance is available only to a small proportion of the population, usually government workers and employees of large private corporations. This phase would correspond to many low-income countries. Unlike the Japanese experience, however, in nearly all developing countries today, foreign insurance companies are already providing health insurance services to the wealthy. For countries at this stage of economic development, as was the case for Japan, the first step is to create a sound insurance system for government workers and employees of major corporations. The next step is then to set up local insurance schemes tailored to the needs and capacity of each region.

#### (2) Beginnings of Economic Growth

Countries in which the majority of the population is employed in the informal sector and where economic growth has started to take off can benefit from the Japanese model. Kenya, for instance, is working on the development of a universal health insurance system to promote economic growth and security. Kenya currently has a national hospital insurance fund managed by a government corporation, but it is designed only for the formally employed, and is subject to minimum income stipulations. As a result, coverage is extended to less than 10% of the population at present. The new administration, which came to power in December 2002, set up a task force to prepare for the launch of a National Social Health Insurance system for the entire population in July 2004. This development corresponds closely to Japan in the 1940s, when preparations were underway for the introduction of universal health insurance.

Hiroi (1999) observes that the National Health Insurance System, the mainstay of the Japanese model, has significant implications for many developing countries today in their attempts to extend health insurance coverage to workers from the informal sector (i.e. those not formally employed). Hiroi points out that the Japanese system was set up at a time when primary industry still accounted for a significant proportion of the working population (45% in FY1961), and initially served as a form of localized "farming insurance," with village-based cooperatives as the basic administrative units. In this sense, the Japanese system provides a useful model for developing countries and regions at a similar stage of development.

Many countries at this stage, however, do not yet have the administrative capacity to implement such a system. Development of administrative skills is thus a major issue. The national hospital insurance fund in Kenya, for instance, is hampered by problems of embezzlement and corruption by officials, which must be addressed through capacity building in government. Efforts to stamp out corruption should be incorporated into the process of constructing a carefully designed health insurance system.

#### (3) Advanced Economic Growth

Japan's experiences after the achievement of universal health insurance coverage are of relevance to developing countries which are currently enjoying rapid economic growth, and have constructed a universal health insurance system that still requires further refinement in certain respects, such as the scope of service provision.

Thailand, for instance, having been impressed with the success of the complex medical insurance system in Japan, requested technical assistance with personnel training in operational and administrative processing. Japan has been providing assistance in this area since 2003. According to Inoue (2003), the Philippines has been developing a universal health insurance system through a combination of three programs designed to cover regular employees, selfemployed workers, and the poor. The system still requires further expansion, since it only covers some 70% of the population at present. This is where Japanese initiatives in refining and expanding its universal health insurance system after its initial introduction could prove most relevant.

#### (4) Maturity

Initial signs of aging of the population can be discerned among the newly industrialized countries, signifying that medical expenses will inevitably start to increase at some point in the future. In Japan, where the National Health

#### Box 11-2 The Medical Insurance System in South Korea

The medical insurance system in South Korea was modeled on the Japanese system. Launched in 1977, it originally applied only to companies with 500 or more workers, but was subsequently expanded to include civil servants, public and private school teaching staff, and companies with less than 500 workers. By 1989, coverage had been extended to all employees, employers and self-employed persons in urban areas. The success of the system can be attributed to a combination of strong economic growth of up to 12% per year, and strong leadership from the military government, as well as an increasing level of demand for greater equality from the general public.

Like Japan, South Korea already had many insurance associations (417 in 1989), which were steadily absorbed into the National Health Insurance Corporation established under the 1997 National Medical Insurance Law.

All South Korean residents are covered under the National Health Insurance System, including foreign nationals (upon application). The system is funded by insurance premiums (payable by insured persons), employer contributions, and government subsidies. Benefits are paid to insured persons and their dependent family members for a range of services including prevention and treatment of illness and injury, childbirth, health promotion activities, and rehabilitation programs. In 2001, premiums accounted for approximately 75% of total funding, with government subsidies making up the remaining 25%. Some benefits are paid directly, for instance for medical services, hospitalization and pharmaceuticals, while others are in the form of cash payments, for instance childbirth and funeral expenses. Co-payment rates are 40% for hospitalization, 61% for outpatient visits, and 30% for pharmaceuticals, all of which are significantly higher than in Japan. Every medical service and procedure has a fixed cost, which is the same nationwide.

Health insurance has exhibited explosive growth in South Korea, and medical expenses have increased at a similar pace. There is a growing disparity between city and country with respect to the utilization of the healthcare system. The provision of medical insurance is currently being reviewed in light of the funding crisis in National Health Insurance associations and the high user contribution rates.

Source: Based on Kim (2003)

Insurance System is administered at the local level and has always been designed to accommodate older persons after retirement, the aging of the population has boosted the proportion of elderly persons in the system, and is slowly transforming it into a health insurance plan for the elderly. As social and individual attitudes change, an increasing number of people in Japan are refusing to pay their National Health Insurance premiums. The government has yet to produce a coherent strategy to address these changes. While Japan is unable to provide any useful insights in this area to developing countries that are likewise grappling with the challenge of an aging population, the Japanese experience does demonstrate the importance of developing and refining the system based on long-term population forecasts.

Although Japan's medical insurance system is relevant to developing countries in many ways, as noted by Hiroi, it nevertheless represents only one of many possible approaches. It is important for developing countries to examine the many different health systems around the world, in addition to the Japanese system, and to consider the strengths and weakness of each system in the context of their own level of economic development and other extenuating local conditions and circumstances. While the Japanese system serves as a useful model for reference, it might also be prudent to consider the health systems in South Korea and Taiwan, where the user contribution is higher than in Japan and where the range of illnesses and injuries is more restricted, or in Singapore, where the concept of family dependents has been jettisoned in favor of an enforced insurance savings system predicated on individual contributions (see Boxes 11-2 and 11-3).

Finally, it should be noted that economic conditions and globalization in developing countries today are considerably more complicated than those of post-war Japan, due to factors such as globalization and the level of

#### Box 11-3 The Medical Insurance System in Singapore

The health system in Singapore is not based on the welfare state model prevalent in much of Europe. Payments of medical expenses and nursing care in old age are considered to be an issue for individuals and families, not the state. The health system is a combination of enforced savings for health expenses and optional health insurance, with no notion of mutual aid.

The medical insurance system in Singapore is known as the 3M system: Medisave, Medishield and Medifund, together with the new long-term nursing care insurance component, ElderShield, which was launched in June 2002. These plans all operate under the basic principle of premiums levied on individuals and families, with the government providing benefits only for persons in poverty, and others requiring specific forms of assistance.

Employers and workers are required to pay a fixed monthly installment for every worker into the Central Provident Funds (CPF), into an account held in the worker's name. The CPF installment rates are normally 20% of the worker's salary plus another 20% paid by the employer, although these can vary depending on the worker's age (the rate declines with age) and general economic circumstances.

Installments paid into the CPF account are then apportioned among three accounts: a Medisave account, a normal savings account, and a special account. The Medisave account receives 6% - 8.5% of the installment, which is kept aside to pay for medical insurance in old age. As a rule, savings in the Medisave account cannot be accessed before the age of 55. However, due to the large number of elderly people who missed out on the Medisave system or have insufficient funds in their accounts, direct family members (siblings or children) are currently permitted to withdraw from their own accounts in order to pay for medical expenses of their elderly relatives. The Medisave account cannot cover all medical expenses for individuals and their families, which is why the Medishield plan was introduced in 1990. Although Medishield is technically optional, around 90% of CPF members have joined Medishield. Premiums are low, but the scope of benefits is limited: pre-existing conditions and mental illnesses are not covered, nor is medical treatment required as a result of civil disturbance or rioting. To this end, Medishield Plus was introduced in 1994 to provide additional coverage.

In 1993, the government launched the S\$2 billion Medifund, which pays medical expenses of those people unable to cover the costs themselves.

In response to concerns about the capacity of the 3M system to fund medical expenses for the elderly, the ElderShield plan was launched in June 2002. Operated by the private sector, ElderShield is an optional insurance package like Medishield, and is available only to persons between 40 and 69 years of age. Benefits are paid from 65 years of age, in the form of cash

payments of \$\$300 per month payable for up to five years to persons recognized as requiring nursing care. By September 2002, 67% of the population in the 40-69 age bracket had joined the ElderShield insurance system.

The CPF system was launched in 1955 as a form of economic security to replace the retirement pension, but the objectives of the fund have been steadily broadened to the point where it can be used for housing loan repayments and educational expenses. Indeed, the CPF today is more like a lifelong social security savings plan.

It is often said that Japan should consider implementing aspects of the Singaporean healthcare system. It should be remembered, however, that Singapore is a smaller country than Japan, with a population of just 4.1 million people (this figure includes foreign nationals resident in Singapore for at least one year). The average age of the population is just 34.0 years, average life expectancies are 75.6 years for men and 79.6 years for women, and the proportion of elderly of the overall population reached 7% only relatively recently, in 1998. Finally, Singapore ranks sixth in the 2000 WHO Health Ranking, compared to Japan in tenth place.

(1S\$ = \$65 approx as of January 2003)

Source: Based on Yu, Reirei (2003) "Shingaporu no Koreisha Taisaku to Iryohoken Seido [Measures for the Aging Society and Medical Insurance System in Singapore]," Aging, Spring, 2003, Japan Aging Research Center