

Cherie Haowen Cao, hc2611
Kevin Xi Luo
Fang Liu
Grace Feng Wu, fw2215
Health Insurance
International Project
5/4/2012

Japan Health System

Health Insurance System

Life expectancy in Japan is one of the highest. People can see any doctor at almost any time they want. Japan has about 157 million people and the healthcare spending is about 8% of GDP. It has a universal healthcare system, where everyone is covered under the system. There are two major systems: Employees' Health Insurance and National Health Insurance.

The Employees' Health Insurance (EHI) system is a workplace-based health insurance system, which covers salaried workers of companies and their dependent family members. The EHI pays insurance benefits in the event of sickness, injury, childbirth and death. The employer is responsible for enrolling the employees in the system by submitting the "Application to Enroll in Employees' Health Insurance" within 5 days after employment.

The National Health Insurance (NHI) is for people who are not eligible to be members of any employment-based health insurance program. This is required if a person moves to the municipality from another municipality or overseas and isn't covered by EHI, withdraws from EHI, stops receiving public assistance, or is born and not covered under parents' EHI. When the insured uses a medical facility that accepts NHI, they will only need to pay part of the cost.

There are many centers of excellence in Japan, such as Aizawa Hospital, Asanogawa General Hospital, Atsuchi Neurosurgery Hospital, Chiba Cardiovascular Center and some others.

The Japanese Health Care System began in 1927 when the first EHI plan was created. In 1961, Japan achieved universal health insurance coverage. However, the copayment rates differed greatly. While those who enrolled in EHI needed to pay only a nominal amount at the first physician visit, their dependents and those who enrolled in NHI had to pay 50% of the fee schedule price for all services and medications. From 1961 to 1982, this 50% copayment rate was gradually lowered to 30%.

Since 1983 all elderly persons have been covered by government-sponsored insurance. In the late 1980s, government and professional circles were considering changing the system so that primary, secondary, and tertiary levels of care would be clearly distinguished within each geographical region.

By the early 1990s, there were more than 1000 mental hospitals, 8700 general hospitals, and 1000 comprehensive hospitals with a total capacity of 1.5 million beds. Hospitals provided both out-patient and in-patient care. In addition, 79000 clinics offered primarily out-patient services, and there were 48000 dental clinics.

Governing Organizations

There are organizations that govern the health insurance system in Japan. The Japan Medical Association (JMA) provides continuing professional development (CPD) and various training programs, such as Emergency medicine. Each medical specialty society gives specialty accreditation according to different criteria. JMA certifies the industrial physician and this is reflected in the law. JMA mainly nominates the school physician. Local medical associations are a main body to promote vaccination. The following laws govern the insurance system: Medical Care Law, Medical Practitioners Law, Health Insurance Law, and Pharmaceutical Law payment regulation mechanism.

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

Perceived Problems With the Current System

Although the nationally uniform fee schedule has brought about both equity- and cost containment, it has also had a negative effect on the health care system. The first negative feature is the distorting effect on patient volume. Since fees are controlled, providers seek to maximize their revenue by seeing more patients. This dilutes the services provided. In outpatient care, a clinic physician sees an average of forty-nine patients per day; 13 percent see more than a hundred. While patients have ready access to care, consultation times are short, and patients end up paying repeat visits to the clinics. In inpatient care,

the total number of staff per occupied bed is still only 0.77, about one-quarter the U.S. level.

A second negative feature is the-distorting effect on the type of services provided. Services for which the fee schedule's price is higher than the market price (for example, drugs and laboratory tests) tend to be provided excessively, despite a recent lowering of their scheduled prices. In the case of drugs, the result of lowered fees has been heavy promotion of new drugs whose patents protect them from fierce price competition. One consequence is that third-generation antibiotics are used more extensively in Japan than anywhere else. In the case of laboratory tests, free-standing laboratories have cut their prices to the point that their efficacy is questioned. On the other hand, cognitive procedures and home care are under-provided because of the implicit rationing process that keeps their fees at a very low level, if fees are established at all. Also, experimentation with new financing mechanisms has proved difficult because of the monolithic structure of the nationally enforced procedure-based fee-for service system.

The third, and perhaps most serious, negative feature has to do with quality of care. Because Japan's fee schedule guarantees uniform payment to all providers, on the assumption that their quality is uniform, no real incentives exist to maintain quality. No formal quality assurance programs exist, and specialty boards do not contribute much to quality assurance. Under these circumstances, the increasingly quality-conscious public has turned to the large public and-teaching hospitals, perceiving that their quality is higher. This has resulted in long queues in their outpatient departments (appointments are not the general rule, even in these hospitals) and waiting lists in their inpatient departments. As a consequence, a black market exists for those who can afford it. Using the channel of a monetary gift in the range of one to three thousand dollars to the attending physician in a Tokyo university hospital, which is socially prescribed, a patient choosing a private room can be admitted sooner and can be treated by a senior specialist¹. Notwithstanding the inequities implicit in such an arrangement, it also means that quality assessment is difficult, if not impossible.

The fourth is an overcrowded and overworked system. The hospital sees the patient, gets a fixed fee for each services. It is mostly capitations based. The system is over crowded and the doctors are overworked. On average, doctors see 60 patients each day and spend about five to ten minutes per patient. The doctors work long hours and get little pay. Because of that, most doctors do not have time to be specialized in training, and because the fees are captivated, there are little incentives to invest money in technology and training.

Medical doctors receive licenses that are for good for life (doctors in the U.S. have to their licenses periodically reviewed). They are generally immune from public scrutiny and are not required by law to release their medical records. Some doctors join *ikyoku*, closed groups that decide where doctors work and how much they get paid and other matters. There have been groups with dictatorial leaders that engaged in shady practices

¹ <http://unpan1.un.org/intradoc/groups/public/documents/APCITY/UNPAN020063.pdf>

and forced doctors to work for little pay. Increasing young doctors are shunning these organization.

The government health ministry is currently working on ways to reduce the workload of hospital doctors such as adhering strictly to night or day shifts, encouraging work sharing, hiring more people to take care of paper work and adhering to rules that give doctors two days off a week and prevent them from working more than 16 hours at a time.

Actuaries and Pricing

There are 1182 fully qualified and registered actuaries, 749 associate members and 1726 research member (that means 2475 partly qualified actuaries²), total is 3657 up to September 2007.

Based on the revision of the Insurance Business Law in 1996, the appointed actuary system was also adopted for non-life insurance companies. The first appointed actuary system was stipulated similarly to that of the life insurance companies, etc., and the appointed actuary was regulated to confirm the soundness and appropriateness of the liability reserves and actuarial participation required concerning long-term maturity-refund-type non-life insurance and nursing care payment insurance.

After several years, the Enforcement Regulations of the Insurance Business Law was partially revised, following the mutual entries of both life and non-life insurance companies into the fields of accident, sickness and nursing care. And, this expanded the areas in which the appointed actuary was to be involved, including outstanding claim reserve and contractual values.

The role of the appointed actuary of non-life insurance company has been expanded since May 2006 due to the regulation changes. The area that appointed actuaries needs to be involved in has been enlarged from long-term maturity-refund-type non-life insurance and nursing care payment insurance to all types of non-life insurance except the compulsory automobile insurance and earthquake insurance. As a result, every non-life company licensed in Japan is basically required to nominate an appointed actuary. Also, the new regulation requires non-life companies to calculate IBNR reserves by statistical methods and confirmation on IBNR reserves has been added to the duties of appointed actuaries.

Actuarial pricing for the reimbursement fees uses a point system assigned to the 2,241 diagnosis procedure combinations³ and services. They are calculated using Rules to Calculate Treatment Fees under health insurance law from MHW Notification No. 177, which was issued in 1958. A point value is assigned to each medical treatment. Actuarial

² http://www.actuaries.org/FUND/Bangkok/Summary_Country_Questionnaires.pdf

³ Pharmaceutical Administration and Regulations in Japan, pg 192, March 2012.
<http://www.jpma.or.jp/english/parj/pdf/2012.pdf>

pricing also uses Diagnosis Procedure Combination (DPC) system for lump sum payments, such as emergency admission.

Basic formula for reimbursement: Points x Risk Adjustment x Frequency x 10.

Points are different for each DPC procedure; some cases with earlier discharge receive higher points. Each hospital has a different risk adjustment factor, which considers the hospital's performance record. There are about 1500 hospitals participates in this new system. The factor ten means ten yen.

Comparison to the U.S. system

HEALTHCARE FACTORS - JAPAN AND THE U.S.

ATTRIBUTES ⁴	JAPAN	U.S.
Healthcare Expenditures/capita	\$2,249	\$5,711
Healthcare as % of GDP	8%	15.20%
Age Structure: % 65+ years old	21.60%	12.70%
Life Expectancy	82.1 years old	78.1 years old
Pharmaceutical Market	57.3 million	\$281.90
Drug Consumption/ capita	\$450.11	\$929.91
Physicians/1,000 people	2	2.4

Among countries, Japan has the highest expectancy and one of the world's lowest infants mortality rates. Although the Japanese elderly population, e.g. 65 years or older is 21.6%, almost double the U.S., which is only 12.7%, the healthcare percentage as of nation's gross domestic product in Japan is only half of the expenditure in U.S., reported by Med Ad News. "Unlike in the U.S. system, no one is denied coverage because of a preexisting condition or goes bankrupt because a family member gets sick", says Blaine Harden. Also, drug consumption per capita in Japan are about half of the U.S. However, since the Japanese has an aging population, the healthcare expenditures is going to increase rapidly in the future.

There are 80% of hospitals and 94% of physician offices are privately operated⁵. Different from Americans, Japanese visit doctors on average 14 times annually, compared to 3 times for an American, according to a McKinsey report in 2009. There is an MRI and CT scan usage problem in Japan, where a typical MRI costs around \$400 while it costs around \$4000 in America. For generations, Japan maintained a low-cost health care system by using the capitation payment system. The hospitals are required by law to be nonprofit and doctors in Japan make far less money than in U.S. Administrative costs are also way more lower than in the U.S., the insurance companies are not legally to

⁴ Source: www.cia.gov; Med Ad News, September, 2008

⁵ The Japanese Health Care System: Its Success and Challenges for the Future *Naoki Ikegami, MD, MA, PhD*

advertise to attract clients with lower risk but higher profits, nor do they set rates for treatment or deny claims.

They then making tradeoffs in other areas, resulting gaps in treatment in urgent care. Japanese hospitals experience a "crowding out" effect, with space for emergency care and serious medical conditions sometimes overwhelmed by a flood of patients seeking routine treatment, said Naohiro Yashiro, a professor of economics and health-care expert at International Christian University in Tokyo. "Patients are treated too equally," he said. "Beds are occupied by less-urgent cases, and there are no penalties for those who over-use the system." Compared with the U.S., shortages in the Japan healthcare system are: the length of hospital stays are four times as long in Japan than in the U.S.; doctors have less specialized life-saving skills; obstetricians, anesthesiologists and emergency room specialists have lower pay, longer hours and higher stress; less emergency room service; limited ER beds in many hospitals and lack of diagnostic expertise.

The most prevalent chronic diseases in Japan are hypertension due to high salt intake and diabetics due to large aging population. The inefficient vaccination system due to the difficult drug approval process is noticeable in Japan. According the OECD 2009 report, a drug takes 3.9 years to be on the market compared to 2 years in U.S. after international filings. there is a chronic shortage of health workforce and little access to quality care in the rural area⁶.

The Biggest Liability

According to JETRO, by 2050 it is projected that one out of every three Japanese will be a senior citizen, meaning a need for greater medical and nursing care services. Due to the aging population, the Japanese Ministry of Health plans to increase the volume of generics in the market, the total pharma sales is going to increase by 22.7 percent by 2012, according to Med Ad News. Many health-care economists point out Japan's low-cost healthcare system is not sustainable without reform, costs are projected to double, reaching current U.S. levels in a decade, according to the Organization for Economic Cooperation and Development (OECD).

Currently in Japan, there is a Long Term Care insurance system in place. The benefit design goal of long-term care is to alleviate the tasks of family. There are two groups: age 65+ and age 40-64. It covers 17% of age 65+ and 1% of age 40-64 with age-related diseases⁷. Some of the benefits include: home-care takers: home help, adult day care, respite care, home modification, assistive devices, and visiting nurses. The system is financed through premium and taxes. The pooling includes: premiums collected from age 65+ stays at the local city level, and premiums from 40-64 are collected a national level and redistributed to different municipalities. It has programs in preventive care programs

⁶ Future of Japan's system of good health at low cost with equity: beyond universal coverage, Kenji Shibuya, Hideki Hashimoto, Naoki Ikegami, Akihiro Nishi, Tetsuya Tanimoto, Hiroaki Miyata, Keizo Takemi, Michael R Reich

⁷ John Creighton Campbell, Naoki Ikegami and Mary Jo Gibson, Lessons From Public Long-Term Care Insurance In Germany And Japan, *Health Affairs*, 29, no.1 (2010):87-95

and regular LTC insurance. Typically seniors pay 10% co-payment. The costs are the following: preventive care: \$430-950, regular programs: \$1440-3400, institutional care: \$1600-\$3600.

Emergency Response

In responses to disasters, the government established special medical teams called the Japan Disaster Medical Assistance Team (DMAT) in 2004. The DMAT with 130 medical profession responded within 24 hours of March 11 earthquake and provided rescue treatments, including transporting patients and performing minor surgeries⁸. There are programs in place that are managing the health of affected population, including physical health, mental health and monitoring radiation exposure.

⁸ Looking to the Future: Healthcare Reform and Disaster Preparedness Planning in Japan, An Interview with Dr. Makoto Aoki, By Rebecca Kennedy and Karuna Luthra, June 2, 2011, National Bureau of Asian Research