

The Japanese Health Care System: Its Success and Challenges for the Future

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With a population of 127 million, Japan has the second largest economy in the world. Its macro health indices of life expectation at birth and infant mortality are among the best in the world, while the percentage of the GDP (Gross Domestic Product) consumed by health expenditures at 8.0% is about half that of the United States.¹ This impressive record can be explained partly by the fact that less demand is placed on the system in the way of crime, illicit drug use, traffic accidents, and human immunodeficiency virus (HIV) prevalence compared with that in most developed countries.²⁻⁵ However, the healthcare system should deserve some credit for providing universal coverage and egalitarian access to care without the existence of long waiting lists which have plagued countries with socialized medicine. I will briefly describe the delivery and financing systems before focusing on its cost containment mechanisms. I will conclude by describing the current reform plan and its prospects of success.

Delivery System

The Japanese system shares some basic characteristics with the American system. About 80% of its hospitals and 94% of its physician-offices (referred to as clinics) are privately operated. With the exception of the regional cap on hospital beds, there are no restrictions on capital development. Japan has the highest per capita number of CT scans and MRIs in the world.¹ However, Japan differs from the United States in the following three aspects. First, the Japanese system is more loosely organized. Virtually all clinics are solo-practices owned by their practicing physicians, while most of the hospitals are physician-owned, free standing facilities. However, the prestigious hospitals tend to be either in the public sector, or owned by universities and other non-profit organizations such as the Red Cross. Investors are prohibited from opening for-profit hospitals in Japan. By law, the chief executive of any hospital must be a physician, and nearly all of the CEOs continue to pursue some clinical activities.

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Second, Japanese providers tend to be far less functionally differentiated than those in the United States. Patients may visit hospitals without referral or appointment and are seen on the same day. Virtually all hospitals maintain large outpatient departments from which they draw their inpatients. Their medical staffs, with the exception of physicians who own a private hospital, are all employed and receive fixed salaries. These hospital-based physicians constitute about two-thirds of the total. The remaining one-third practice in clinics, which, unlike the British system, profess specialties and some have sophisticated equipment on-site such as a MRI. However, since clinic-based physicians seldom have any hospital privileges, most tend to focus on primary care. There is also less functional differentiation between acute care and long-term care (LTC). Many hospitals have LTC units and some have become de facto nursing homes. However, even if these LTC beds are excluded, the average length of stay in hospitals is 20 days,⁶ which indicates that the acuity of care is less intense in Japan.

Third, there is less standardization and quality control in Japan. Most newly qualified physicians join university clinical departments and spend their professional career within the closed network of hospitals affiliated with each department. Because hospital-based physicians have been recruited in this way, the need and development of formal certifications have been slower than that in the US. Although two-thirds of the physicians are now certified as specialists, only about half have undergone a formal training process, and the rest have been "grandfathered in" based on their experience.⁵ Regarding hospitals,

an accrediting organization was created in 1997 with funds provided by the Ministry of Health and Welfare (MHW, from 2001, merged to become the Ministry of Health, Labor and Welfare, MHLW), Japan Medical Association (JMA) and other provider and payer organizations. Although about a quarter of all hospitals are now accredited and the survey results have become available on the web,⁷ accreditation has not necessarily conferred tangible advantages to the hospital in the way of more reimbursement or waiving of government inspections.

Financing System

Japan's financing system features multiple payers as does the American system, but there the similarity ends. Virtually all residents in Japan are compulsory covered either by the social health insurance (SHI) plan provided by their employer, or by the municipality where they reside if self-employed or are pensioners. Dependents are covered by the plan of the household head. There is virtually no choice of plans, either by the employer or the employee, and all plans provide essentially the same benefits that include unrestricted access to all providers, drugs, dental care and some preventive services. The co-payment is 30%, with the exception of most of the elderly (70 years of age and older who pay 10%), children (3 years of age and younger who pay 20%), and those with designated chronic diseases. However, if the monthly co-payment amount exceeds on average 80,100 Yen (\$760, the ceiling amount greater if of high income and less if of low income or with chronic diseases), then the co-payment rate above this amount is re-

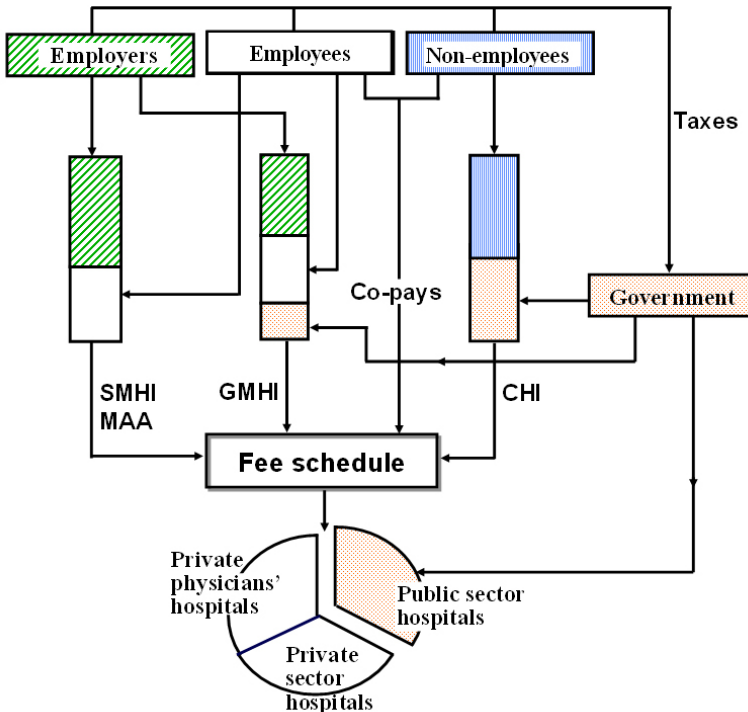
duced to 1%.

The SHI plans could be grouped into three tiers, each enrolling about a third of the population, according to the degree they rely on subsidies from the national government (Fig 1). The first tier consists of plans established by the public sector, Mutual Aid Association (MAA), and by large companies, Society Managed Health Insurance (SMHI). These plans do not receive any subsidies. The second tier is a single plan managed by the MHLW, the Government Managed Health Insurance (GMHI), for those employed in small to medium size companies. The GMHI is subsidized for 13% of its benefit expenditures. The third tier consists of plans established by the municipalities,

the Citizen's Health Insurance (CHI), for those who are self-employed and pensioners. The CHI plans are subsidized on average for 43% of their benefit expenditures (40% if the average income of the enrollees in the plan is high, up to 80% if low). These subsidies, together with the pooling fund to finance the health expenditures of the elderly towards which all plans must contribute on an equal basis, have narrowed the differences in the premium rate among the plans.

However, the financing system is under pressure from the following. The first is the rapid aging of society. The proportion of the population 65 and over has doubled from 10% in 1985 to 20% in 2005, and is projected to

Figure 1: Flow of money in the Japanese health care system



CHI: Citizen's Health Insurance; GMHI: Government-managed Health Insurance; SMHI: Society-managed Health Insurance; MAA: Mutual Aid Association.

be 30% in 2023.⁸ In the employment-based SMHI plans, contributions to the pooling fund compose 34% of their expenditures in 2005.⁹ The second is from the austerity measures of the government. In 1991, Japan entered into a long period of economic depression. The decline in government revenue and the tax cuts to heat the economy have resulted in government debts that total 1.8 times the GDP in June, 2006.¹⁰ The government has pledged that every effort will be made to reduce all expenditures before taxes will be raised. Since subsidies to the SHI constitute one-tenth of the central government's budget,¹¹ there has been strong pressure to contain the amount that is covered by the SHI, which was why the co-payment rate for employees was increased from 10% to 20% in 1997 and then to 30% in 2003, and that for the elderly was also increased to 10% in 2002.

Payment System

The payment system plays a key role in linking the delivery and financing systems by serving as the valve that controls the money flowing from all insurance plans to virtually all providers (Fig 1), and includes physician and hospital services, drugs, devices and so forth. Thus, although Japan has multiple payers, it has only one single payment system that is applied across-the-board. By doing so, equity has been maintained because the benefit package is essentially the same for all SHI plans, and administrative costs have been reduced because insurance plans and providers do not need to negotiate with each other on an individual basis.

Reimbursement is, in principle, on a fee-for-service basis, with the exception

of inpatient care in about one-third of the general beds that are paid by a case-mix based per diem rate. The fees and prices are uniform throughout Japan, are the same for university hospitals and clinics, and are not adjusted for regional differences in the cost of living or wages. While this may seem unfair, it has contributed to a more even distribution of healthcare workers, for the higher wages that the hospital staff are paid in large, urban medical centers is compensated by fact that their physicians are willing to accept lower remunerations for the professional satisfaction of practicing in these settings. On the other hand, the staff in a rural, small hospital, can be hired at lower wages, but their physicians would only be attracted if offered higher remunerations. This is in sharp contrast to the US where specialists in urban medical centers generally earn higher incomes.

Balance billing (charging more than the fees listed) and extra billing (providing services, drugs, etc. not listed together with those listed during the same course of the treatment) are, in principle, prohibited. Should they be provided, then all costs, and not just that of the balanced billed amount and/or the uncovered services, must be paid out-of-pocket. The only exceptions are the services listed in the "Specified Medical Costs", which mainly consist of extra charges for hospital rooms with more amenities and new technology still under development.¹² Thus, this prohibition has served as a firewall that has prevented ratcheting up by providers. Being listed is the prerequisite for the diffusion of a new technology as has been shown for coronary stenting.¹³ Other sources of revenue to providers are restricted to the subsidies to public-

sector hospitals and services that are not part of the statutory benefits such as cosmetic surgery. The existence of the subsidies, as shown by the arrow from the government to the public-sector hospitals in Fig 1, allows them to provide high-tech care that tends to be priced lower than their costs.

Containing Costs

Costs have been contained through the macro and micro management of the reimbursement system. First, at the macro level, every two years, the cabinet makes a political decision on the global rate of revision that includes all services, drug prices and so forth, with the Ministry of Finance demanding a decrease, the JMA lobbying for an increase, and the MHLW playing a key role by providing the data and technical expertise. Setting this global rate effectively determines the next fiscal year's total health expenditures because the volume of services and drugs will remain essentially the same. Since a fixed proportion, one quarter, of the total health expenditures is financed from general revenues, the global revision rate must be set in order to draw the next year's budget.

Second, the price of drugs set by the payment system is revised based primarily on the results of a market-price survey. The government researches the current price of each drug through on-site inspections of the wholesale distributors' books. It normally finds their prices are lower than those set by the insurance company due competition among the distributors. Accordingly, the price of each drug is individually revised to reflect its volume-weighted average market price. It should be noted that, in Japan, drugs are covered

by insurance, and that about half of all prescriptions are dispensed by the hospital pharmacy or by the clinic.¹⁴ Independent of this survey, the price of new drugs that had sales greater than the amount estimated by the manufacturers, and that of brands which have had generics introduced since the previous revision, are both unilaterally decreased. These factors have contributed to a continuous downward spiral of prices and the savings made have been allocated as additional funds for revising service fees. However, drug expenditures have been contained less than one would expect because of the introduction of new drugs. The price of new drugs is set by evaluating the degree of innovativeness and effectiveness with a comparator, and its price in the United States, Germany, France and the United Kingdom. The price of devices is set and revised in a similar way.

Third, service fees are individually revised, within the budgetary limits set by the first two steps, and not by applying a global revision rate across-the-board as a conversion factor. The fees for those that have shown inappropriately large increases in volume may be cut dramatically. For example, in the 2002 fee schedule revision, the fee for a head MRI was reduced from 16,600 Yen (\$157) to 11,400 Yen (\$108). Such examples of containing costs via micro-management of the payment system in the biennial fee revisions have been multiplied many times over and have blunted increases in costs due to the expanded use of high-tech equipment. Incidentally, although cuts in fee for a MRI had also been made in the past, this has not inhibited their dissemination because these cuts have spurred the development of low-priced types of

MRI. Thus, with appropriate price control, advances in technology may actually lead to decreases in cost.

The second and third steps are made by the Central Social Insurance Medical Care Council of the MHLW that is composed of representatives from providers and payers, academics, etc. Objective basis for revising individual fees is provided from the survey of the financial condition of hospitals and clinics made by the MHLW in the year prior to the revision: if a particular type of facility (acute or long-term hospitals, clinics, etc.) is found to be making more profit than others, then fees for services provided by that type of facility are likely to be reduced. In addition, the MHLW conducts a survey of the claims data to estimate the volume of each item, so that the impact of revising any item on the total expenditures can be calculated, and the net effect will be equal to the agreed global revision rate. Although the revision process tends to become heated as the specialty and hospital groups lobby the MHLW and the JMA, care has been taken to maintain the balance among the providers: hospitals versus clinics, acute care versus chronic care and so forth. This balancing principle has inhibited rapid changes and minimized conflict. It has kept important constituents from becoming too dissatisfied and, if dissatisfied, allowed them to hope to do better in the subsequent fee-revision process two year later.

Policy Options for the Future

The American public would envy Japan's universal coverage, low premium rates, and unrestricted access to virtually all providers. In sharp contrast to

the escalating costs in the US, SHI expenditures in Japan actually declined by 0.02% from 2005 to 2006.¹⁵ American physicians would also prefer the single form of payment based on fee-for-service. However, they would probably recoil at the lack of recognition as specialists and the constraints imposed by the micro-managed payment system. Yet, the positive and negative aspects may be inseparable. In order to achieve egalitarian provision of services to all, costs must first remain within the government's budgetary limits; second, in order to reflect volume expansions and declining costs to the provider, the fees and prices must be micro-managed; and, third, providers must be reimbursed the same amount for the same service in order to avoid patients being discriminated according to their insurance plan.

Although the government has managed to meet these conditions, there is mounting pressure for reform as a result of the economic stagnation, the aging of society, and the increasing demand for better quality. In the delivery system, the laissez-faire policy of permitting physicians to open clinics and profess any specialty has led to their uneven distribution. In particular, there is a shortage of hospital-based pediatricians and obstetricians as their work-load is heavy and compensations low, when compared with clinic-based physicians. Moreover, the patient's trust has eroded as medical errors have come to be reported in prestigious hospitals.¹⁶ In the financing system, the aging of society is progressing at the relentless rate of a 1% increase in the ratio of the population 65 and over every two years.

To meet this challenge, in June 2006, the Diet (Japanese Congress)

passed a comprehensive package of reform to make the delivery system more efficient. First, the average length of stay in hospitals is to be decreased. To achieve this goal, the number of long-term care (LTC) hospital beds will be reduced from the 2006 level of 380,000 to 150,000 by the end of fiscal year 2011 and converted to LTC Insurance facility beds and assisted living.¹⁷ Second, the prevention of the metabolic syndrome will be systematized: target goals have been set for the proportion of the general population to be screened, the proportion of those screened positive to receive counseling on their dietary and exercise patterns, and the reduction in the number with pre-morbid metabolic syndrome. Third, hospitals will be required to disclose the number of patients who have been treated for the four target diseases of cancer, stroke, acute myocardial infarction, and diabetes, and the referral networks they have developed with primary care clinics and other providers.¹⁸ The 47 prefectures (states) have been made responsible for meeting these goals.

In conjunction with the above reforms, in the financing system, prefectures will be the geographical unit for the new independent health insurance plan enrolling all elders 75 and over, and also for merging the municipality-based CHI health plans. The former has been implemented in April 2008, and is financed 50% by general revenues, 40% by contribution from all other health plans, and 10% by the elders themselves through deductions from their pensions. In the latter, CHI have been encouraged to merge by lowering the threshold for the amount that is compulsory reinsured (the monthly medical expenditure covered by the reinsurance

scheme among the CHI in each prefecture has been lowered from 700,000 to 300,000 Yen in October, 2006), which would decrease the differences in their premium rate. In addition, the GMHI premium rate will change from a national rate to that which will reflect differences in regional health expenditures, after adjusting for the age structure and income levels of those enrolled in each prefecture, from October 2008. Thus, apart from the large SMHI (such as that of Toyota), the premium levels would start to reflect regional health expenditure levels, which should put pressure on the prefectures to make their delivery system more efficient. Moreover, should the SHI plans not meet the targeted goals, they would face fiscal sanctions by the MHLW in the form of increases up to 10 percent in their contributions to the new insurance plan for elders.

However, whether the prefectures are up to this challenge and whether or not costs can be contained by the planned reform remain questionable. Prefectures do not have experienced staff who can take a proactive role in health policy. Shortening the average length of stay may decrease hospital costs but would be offset by increases in home care and LTC costs. Systematic screening of metabolic syndrome may not lead to the improvement of life style by counseling as envisioned, but to aggressive treatment, which would increase immediate costs without any assurance of containment in the future.¹⁹ Whether or not patients would effectively use the information made available by the hospitals remains in doubt. Some prefectures are dragging their feet on data disclosure, fearing patients would flock to the high volume hospitals.²⁰

The MHLW may have been aware of

the weaknesses in its reform plan but it had been forced to come up with an alternative when the Ministry of Finance proposed that health care expenditures be pegged to the GDP, and the market-based reform, advocated by economists and business leaders in the Deregulation Council of the Cabinet Office, be adopted. The latter would restrict benefits to a basic package, allow extra-billing by providers, and permit the entry of investor-owned for-profit hospitals. By doing so, the Council maintains that the pressure on general revenues to subsidize the SHI plans would decrease and patients as consumers would have more opportunities to exercise their choice. However, this would not only erode the egalitarian provision of services that a greater majority of the general public would prefer,²¹ but also remove the fee schedule's tight control on benefits and reimbursement. By doing so, the door will be opened to an inflationary and inefficient market-oriented system.¹²

As the reform plans of both the MHLW and the Ministry of Finance have their weaknesses, the remaining option is to continue to rely on the fee schedule. In the 2008 revision, for the first time since 2000, as a result of media coverage on the closing of obstetric services in hospitals and the loss of the upper house by the ruling Liberal Democratic Party in the September 2007 election, medical service fees were increased by 0.42%. At the micro level, fees for hospital-based services, particularly obstetric surgical operations and pediatric consultations have been increased, while outpatient consultation fees for clinics have become more restrictive (medical management fees can no longer be billed if the consultation time is less than five minutes). However,

cutting fees in order to absorb increases in expenditures due to population aging and advances in technology would be more difficult as it would lead to a decline in the health care professionals' relative incomes. A fine balance must be maintained between the pressure to increase costs, which comes from the patients' demand for better quality and providers' demand for more income, and the pressure to contain costs, which comes from the public's demand for an egalitarian system and the employers' demand for lower labor costs. Thus far Japan has been relatively successful. Whether such may continue to be so in the future should be closely watched. 🏯

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