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HEALTH-CARE REFORM IN JAPAN: CONTROLLING COSTS, IMPROVING QUALITY AND ENSURING EQUITY

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ABSTRACT/ RÉSUMÉ

Health-care reform in Japan: controlling costs, improving quality and ensuring equity

Japan's health-care system has provided universal access to care and contributed to the outstanding health status of the Japanese. Public spending has been kept below the OECD average through high co-payment rates and reductions in medical fees. However, with continued upward pressure on expenditure, in part due to rapid population ageing, reforms are needed to limit spending increases through greater efficiency, while improving quality. It is essential to shift long-term care out of hospitals, reform the pricing mechanism away from pay-for-visit, increase the use of generic drugs, encourage healthy ageing and promote restructuring in the hospital sector. Quality should be improved by increasing the availability of effective new drugs and medical devices. In funding spending increases, it is important to limit the share borne by employees to avoid negative effects on the labour market. Japan may need to allow more mixed billing to enhance access to some advanced medical treatments.

This Working Paper relates to the 2009 *OECD Economic Survey of Japan* (www.oecd.org/eco/surveys/Japan).

JEL classification: I1

Keywords: Japanese health care; health insurance; long-term care; medical expenditures; hospitals; Diagnosis Procedure Combination; generic drugs; healthy ageing; drug lag; mixed billing; universal coverage; National Health Insurance; PMDA; medical devices.

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La réforme des soins de santé au Japon :
maitriser les dépenses, améliorer la qualité et préserver l'équité

Le système de santé japonais assure l'accès universel aux soins, contribuant à l'excellent état de santé de la population du pays. Le niveau des dépenses publiques a été maintenu au-dessous de la moyenne de l'OCDE en demandant aux assurés une participation élevée aux coûts et en réduisant les tarifs médicaux. Toutefois, comme les dépenses subissent toujours des pressions à la hausse, en partie du fait du vieillissement rapide de la population, il faut procéder à des réformes pour limiter leur accroissement par le biais d'une meilleure efficacité, tout en améliorant la qualité. Il est indispensable de transférer les soins de longue durée en dehors des hôpitaux, de réformer le système de rémunération en abandonnant le paiement à l'acte, de développer l'utilisation des médicaments génériques, d'encourager un vieillissement en bonne santé et de promouvoir la restructuration du secteur hospitalier. La qualité doit être améliorée en développant l'offre de nouveaux médicaments et dispositifs médicaux efficaces. Pour financer les dépenses supplémentaires, il importe de limiter la part assumée par les salariés de manière à éviter des retombées négatives sur le marché du travail. Le Japon devra peut-être permettre encore plus la facturation groupée pour améliorer l'accès à certains traitements médicaux de pointe.

Ce Document de travail se rapporte à l'*Étude économique de l'OCDE du Japon*, 2009 (www.oecd.org/eco/etudes/japon).

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Mots clés: système de santé au Japon ; assurance maladie ; soins de longue durée ; dépenses médicales ; hôpitaux ; Diagnosis Procedure Combination ; médicaments génériques ; vieillissement en bonne santé ; retard dans le domaine des medicaments; facturation groupée ; couverture universelle ; assurance santé nationale ; PMDA ; dispositifs médicaux.

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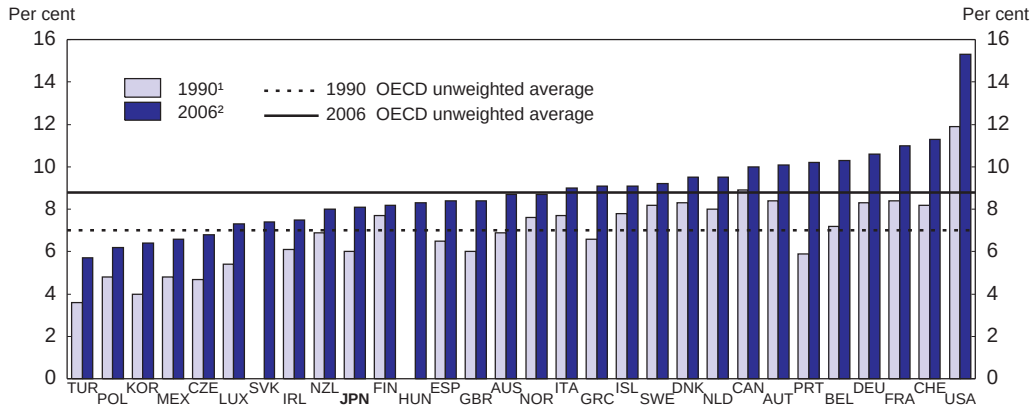
HEALTH-CARE REFORM IN JAPAN: CONTROLLING COSTS, IMPROVING QUALITY AND ENSURING EQUITY

By Randall S. Jones[1]

Japan's health-care system stands out as one of the best in the world in a number of respects, including access, effectiveness and efficiency. *First*, it provides universal access, allowing everyone to receive care at any institution at any time, subject to a co-payment at the time of service. *Second*, it has contributed to the outstanding health status of the Japanese, which ranks at the top of OECD countries in a number of categories. *Third*, it is relatively efficient, as Japan's favourable health status has been achieved with total health-care spending that is below the OECD average as a share of GDP (Figure 1), despite factors that tend to boost spending, notably Japan's relatively high income and large proportion of elderly.

Figure 1. Health-care spending as a share of GDP in OECD countries



1. Except for Slovak Republic and Hungary, for which data are not available.

2. Except for Norway (2003), New Zealand (2004) and Turkey (2005).

Source: OECD Health Database (2008).

The paper begins by presenting the challenges facing the health-care system, followed by an overview of the system. The major challenges – containing the growth of spending, enhancing quality, addressing imbalances in the system and maintaining universal coverage – are analysed in the subsequent sections. The paper concludes with a summary of recommendations, which are shown in Box 3.

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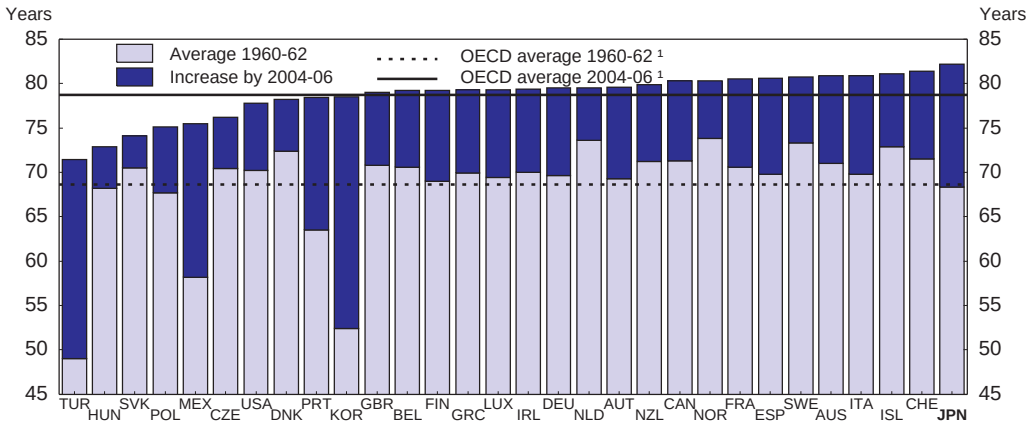
1. Randall S. Jones is head of the Japan/Korea Desk in the Economics Department of the OECD. This paper initially appeared as a chapter in the *OECD Economic Survey of Japan* published in September 2009 under the authority of the Economic and Development Review Committee (EDRC). The author would like to thank Andrew Dean, Jørgen Elmeskov, Robert Ford, Rie Fujisawa, Peter Hoeller, Isabelle Joumard, Vincent Koen, Valérie Paris and Masahiko Tsutsumi for valuable comments on earlier drafts. Special thanks go to Lutécia Daniel for technical assistance and to Nadine Dufour and Lillie Kee for technical preparation.

Major challenges facing the Japanese health-care system

The Japanese population enjoys an excellent health status. Life expectancy is the longest in the OECD area, thanks to significant gains since 1960, when it was slightly below average (Figure 2).[2] In addition, the infant mortality rate is the second lowest. Health care is a major determinant of health status: for the OECD area as a whole, the rise in health spending is estimated to have boosted life expectancy by slightly more than one year for both men and women between 1991 and 2003, accounting for one-third of the overall increase over that period (Joumard *et al*., 2008). Lifestyle factors, notably tobacco and alcohol consumption and diet, socio-economic factors, such as income per capita and education, and pollution also influence health status. Most of these factors have contributed to Japan's good performance: Japan has the lowest obesity rate[3] and calorie intake in the OECD, one of the highest levels of education and above-average per capita income, while alcohol consumption is relatively low. However, the percentage of adults who smoke currently is the fifth highest in the OECD, reflecting a high rate for men.

Figure 2. International comparison of life expectancy at birth



1. The OECD average is weighted by the population of all of the countries shown above, excluding Japan.

Source: OECD Health Database (2008).

Japan's health-care system is now facing a number of serious challenges:

- Rising income, technological change and rapid population ageing are putting upward pressure on health-care spending, which is increasing much faster than output. With the public sector responsible for 86% of health spending, the government has attempted to limit outlays as part of its strategy for coping with the serious fiscal situation (see 2009 *OECD Economic Survey of Japan*).

- There is increasing dissatisfaction with the quality of health care, in part because it takes two to three times longer than in other OECD countries for newly-developed pharmaceuticals to be introduced in Japan. The December 2008 plan approved by the Cabinet calls for upgrading Japan's social welfare system, including health care.

2. Longevity indicators do not fully reflect a country's health status as they do not take account of the severity and prevalence of sickness and functional disability.

3. The rate of obesity, defined as a body mass index over 30, was only 3% in Japan in 2004, compared to an OECD average of 15% (OECD, 2007).

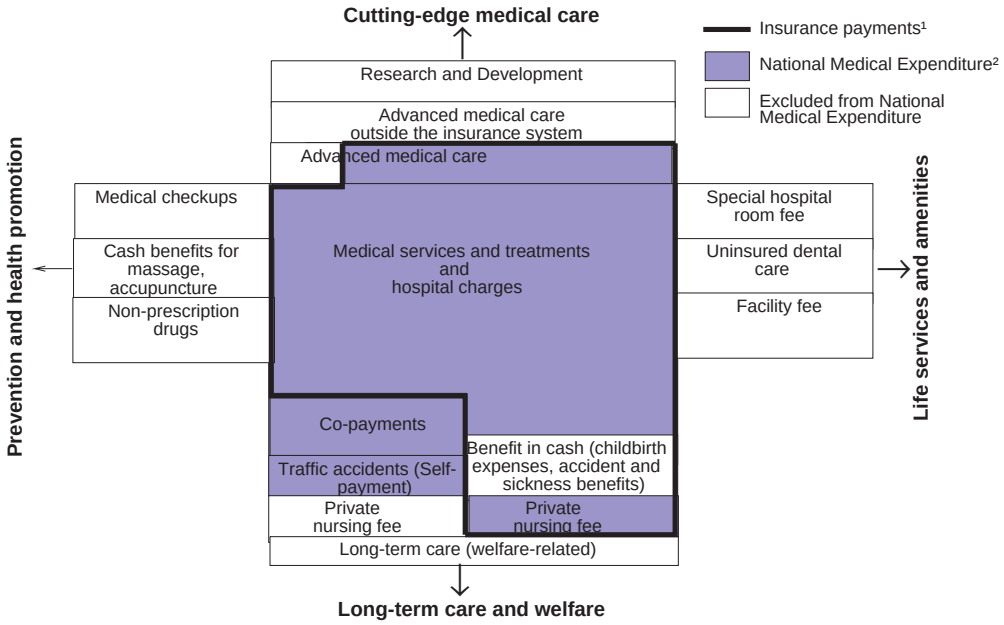
- The system suffers from a number of imbalances, such as shortages of emergency care and paediatricians, as well as regional disparities.

- Universal coverage requires improving compliance in paying premiums, as a significant share of the population does not pay. In addition, the burden of co-payment raises concern.

An overview of Japan's health-care system

The government's objective is to provide equitable access to "necessary and adequate" medical services to the entire population at a relatively low cost. This approach has led to some advanced medical care services being excluded from the system (Figure 3). Indeed, the depth of public insurance coverage in Japan appears to be relatively low compared to other OECD countries. In addition, health insurance reimburses only the treatment of disease and excludes preventative care, including medical check-ups. Nor is normal childbirth covered, although a lump-sum payment is provided. In line with the stress put on equality, each institution provides essentially the same treatment to patients with the same medical problem, with little scope for purchasing premium medical services or differentiated treatment. According to the landmark study by Campbell and Ikegami (1998), "The underlying principle of the Japanese health-care system is equality, among patients and providers, and equality and quality tend to contradict".

Figure 3. The coverage of Japan's health-care system



1. The area inside the line is paid for by health insurance. Some health costs, such as those related to traffic accidents, are not covered by health insurance but are still considered to be part of National Medical Expenditure (NME), calculated by the Japanese government. Conversely, maternity and childbirth expenses are covered by health insurance but are not part of NME.
2. NME is about 80% as large as health expenditure calculated by the OECD, as it excludes maternity and childbirth expenses, preventative health care and non-prescription drugs.

Source: National Institute of Population and Social Security Research (2007).

The health insurers and their financing

Japan's health-care system is fragmented and complex, with payments by employers, employees, the non-employed and the government to 3 600 health insurers (Figure 4). The system combines primarily private provision of services[4] with mandatory insurance in one of four systems (Figure 5):

- **Society-Managed Health Insurance** (SMHI) is for employees of large companies (more than 700 workers) and their dependents, including some elderly who are dependent on their children. It consists of 1 541 insurance societies, which are managed by employers and employees and are primarily funded by their premium payments. The premium rates charged by the insurance societies range from 3% to 10% of wages (Table 1), reflecting differences in medical needs and the income of the insured in each SMHI. In FY 2007, the SMHI sector as a whole recorded a surplus equal to more than 5% of its revenue. However, around 40% of the insurance societies were in deficit and have limited scope in practice to improve their situation.

- **Japan Health Insurance Association-Managed Health Insurance** (JHIAHI) covers employees of small companies in a single nationwide pool administered by a public corporation. Government subsidies fund 13% of its health payments and the premium, paid by employees and employers, is set at 8.2% of wages.

- **National Health Insurance** (NHI) is the residual category for non-employees, such as the self-employed and retired persons. It consists of 1 818 insurance pools administered by municipal governments and 165 occupation-based societies for the self-employed. Premiums, which are based on income and the number of persons insured in a household, are typically around 2% of the average wage, although there is wide variation. Indeed, the highest premium, in the town of Rausu in Hokkaido, is 4.7 times higher than that in the lowest.

- **Mutual Aid Associations** (MAA) number 76 and cover civil servants and teachers.

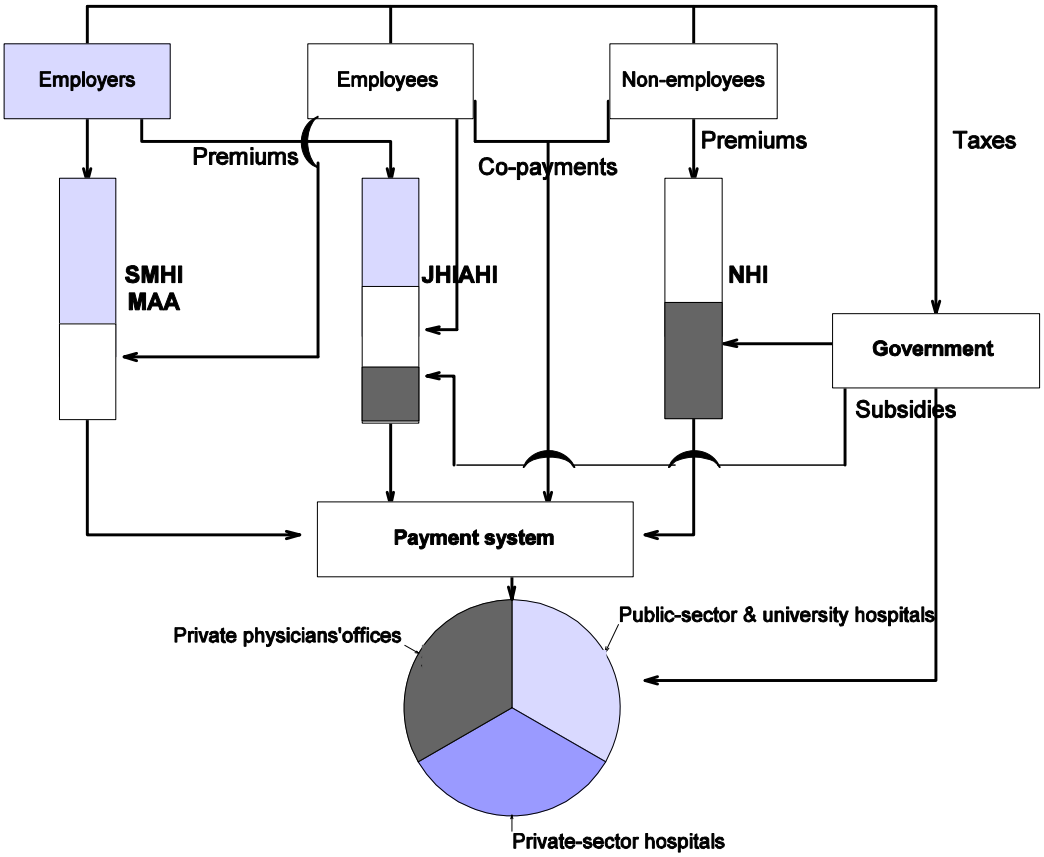
Table 1. The distribution of contribution rates across Society-Managed Health Insurers in 2007

	Per cent	Number of insurers	Share of insurers (%)
Contribution rates	3.0 – 6.0	210	13.6
	6.0 – 6.9	381	23.7
	7.0 – 7.9	544	35.3
	8.0 – 8.9	363	23.6
	9.0 – 9.4	33	2.1
	9.5 – and up	10	0.6
Total		1 541	100.0
Employers' share of contribution	50 – 59	1 182	76.7
	60 – 69	339	22.0
	70 – 79	20	1.3
	80 –	0	0.0
Total		1 541	100.0

Source: Ministry of Health, Labour and Welfare.

4. The government provides health care directly through public doctor's clinics, which number around 5 000 (5% of the total) and are located primarily in rural areas. Three-quarters are run by local governments.

Figure 4. Japan's health-care system is complicated and fragmented[1]



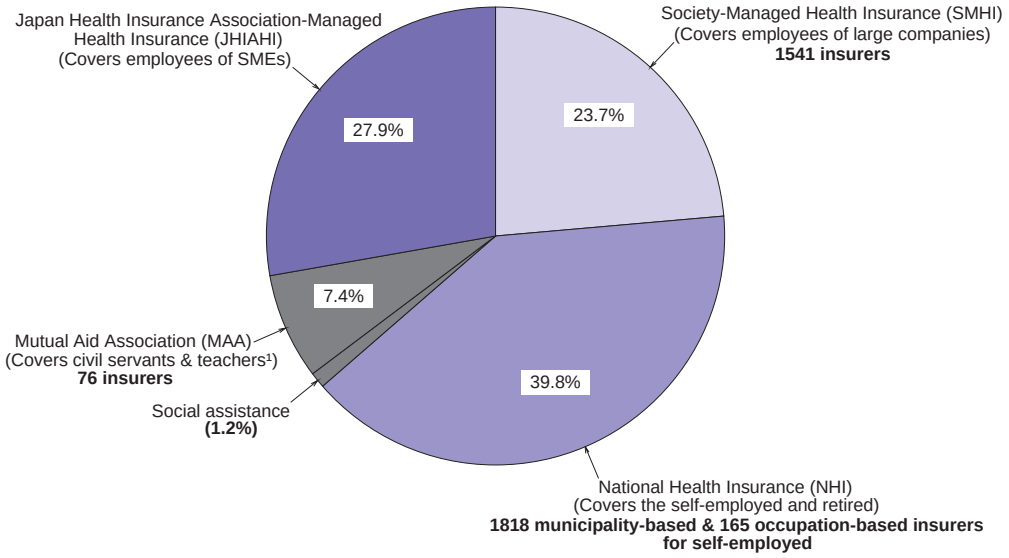
1. The lines represent financial flows. The three rectangles at the top represent the entities paying health premiums (employers, employees and non-employees) to the health insurers (SMI, MAA, JHIAHI and NHI), who are represented by the thin rectangles. The funds, including taxes, flow from the insurers into the payment system, which distributes payments to health-care providers.

Source: Ikegami (2008a).

The fragmented system results in a high variation in premium rates and horizontal inequality as health insurers are too small to effectively pool health risks. Japan thus tolerates considerable inequality through the variations in health-care premiums. Addressing these imbalances would be an effective means to promote equality. The insurers are quasi-autonomous bodies that are heavily regulated by the government and are not allowed to earn profits. No competition between insurers is allowed, thus weakening incentives to increase efficiency or innovate. Instead, insurers provide access to the same package of services at the same prices, which are set by the government. Membership in health insurance is mandatory and strictly determined either by employment or place of residence, with no choice allowed either to citizens or insurers.[5] Private insurance companies play an insignificant role in health care and generally do not provide insurance for co-payments. Private health insurance products tend to provide lump-sum payments for treatments not covered by public insurance and for amenities.

5. Claims are reviewed by a committee, which denies payment for inappropriate or fraudulent claims and ensures that all reimbursements are for services covered by insurance. Around 1% of claims are refused.

Figure 5. Health insurance schemes in Japan in 2007



1. This includes Seamen's Insurance, run by the government, which insures 0.1% of the population.

Source: Ministry of Health, Labour and Welfare.

Although Japan has many health insurers, all reimbursements pass through a single payment system. In FY 2006, the financing of health care was provided by:

- **Insurance payments:** 49.0% of total outlays, split between employers and employees.

- **Government subsidies:** 36.6% of total outlays, with the central government share set at 25% of total health costs. Subsidies account for 43% of outlays by the NHI.

- **Co-payments by patients:** 14.4% of total outlays, which is only one-half of the co-payment rate of 30% for those between the ages of six and 70 for both outpatient and hospital care. The gap is due to the lower co-payment rate for the elderly and very young and a monthly ceiling on an individual's co-payments. In addition, the limited role for mixed billing of services covered by mandatory health insurance and those that are not (Box 2) may reduce out-of-pocket payments below those in other countries.[6] Consequently, the share of out-of-pocket payments in total health spending is below the OECD average of 18%, despite a co-payment rate in Japan that is one of the highest in the OECD area.[7]

6. In other OECD countries, medical treatments that are not covered by public health insurance are financed by out-of-pocket payments. In Japan, patients that combine new medicines or treatments that are not included in the prescribed treatment of a certain illness in the health insurance package with services that are included must pay not only the cost of the additional treatments but also the cost of services in health insurance. In fact, there are no data on the amount of spending on uncovered services as they do not pass through the public health insurance system.

7. Only one-third of OECD countries require co-payments by patients for hospital care. Of those that do, all except Korea and Japan set a fixed amount as co-payment rather than a percentage. For ambulatory care, two-thirds of countries require co-payments. Japan's rate of 30% is the second highest.

As employees retire and leave the employee-based insurers (SMHIs, the JHIAHI and MAAs), the burden on the NHI is increasing over time. To cope with the rising cost of health care for the elderly, Japan re-introduced co-payments for the elderly in 1983 and created an "equalisation fund" that transfers revenue from employee-based schemes to the NHI. Each insurer makes a payment to the fund based on what it would pay if its number of elderly matched the national average. Despite these transfers and the government subsidies, almost three-quarters of municipal health insurers recorded a deficit in FY 2007.[8]

High co-payments are one of several mechanisms that limit health-care spending.[9] A second factor is supply constraints; the number of physicians, at two per thousand population, is one of the lowest in the OECD area (Table 2).[10] The number of medical students is set by the government. However, the most important factor limiting health spending is the government's control over prices for all procedures, drugs and devices, which apply uniformly to all physicians and hospitals. In revising the fee schedule every two years, the government first sets the overall size of health-care spending based on expected revenues and the fiscal situation. Changes in relative prices within that envelope are decided by the government, in line with basic policy set by an advisory board and the result of discussion in the Central Social Insurance Medical Care Council[11] among the health insurers, health-care providers and public-interest representatives. The government has significantly reduced medical prices in recent years.

Table 2. International comparison of health-care services in 2006[1]

	Number of hospital beds[2]	Average hospital stay (in days)	Number of long-term care beds[3]	Number of physicians[2]	Number of physicians[4]	Number of nursing personnel[2]	Expenditure on drugs[5]
Japan	**14.0**	**34.7**	**15.0**	**2.0**	**14.9**	**9.0**	**405**
OECD average	3.7	9.6	6.3	3.3	65.6	8.8	342
Highest country	14.0	34.7	25.6	4.9	109.6	15.4	525
Lowest country	1.7	4.1	0.0	1.5	14.9	1.8	110

1. Or latest year available.
2. Per 1 000 persons.
3. In hospitals.
4. Per 1 000 hospital beds.
5. Per capita in US$ PPP.

Source: OECD Health Database (2008).

The suppliers of health care

Given the low regulated fees and a fee-for-service payment system, physicians generate a high volume of services to boost their income. Indeed, the number of consultations per capita in 2005 was 14, double the OECD average, while the number per doctor was three times higher (Figure 6), suggesting that consultations tend to be rather short. One common complaint is that patients spend three hours waiting for three minutes with the doctor, although long waiting times occur primarily in university hospitals. The large number of appointments per physician results in very long working hours, which has become a serious problem. Allowing physicians to sell pharmaceutical drugs boosted their income as well as the

8. In some rural areas where more than half of the population is over age 65, municipal insurers record losses even with subsidies amounting to 80% of their costs.

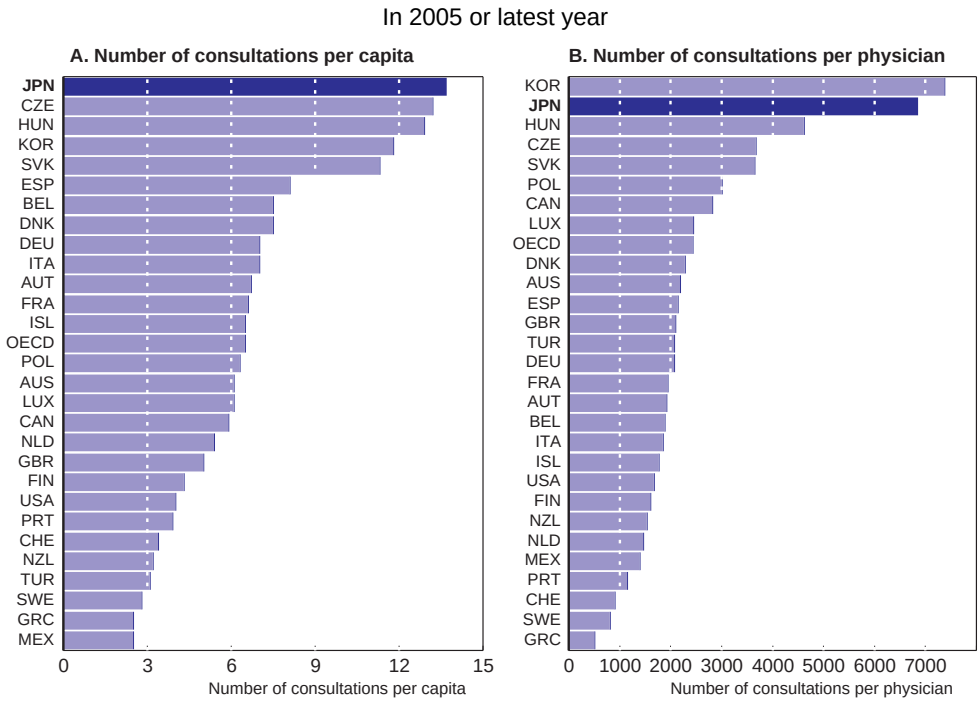
9. A number of econometric studies have found that higher co-payment rates restrain health spending (Kumagai, 2007). Assuming the standard price elasticity of 0.1 to 0.2, health-care spending would have been 3% to 6% higher in the absence of the 30% co-payment.

10. One study (Kumagai, 2007) found that an increase in non-monetary costs, such as waiting time, reduced demand for health care.

11. It consists of seven representatives each from providers and payers, as well as six academics. In addition, there are a maximum of ten specialist members who are allowed to express their views when requested.

level of overall drug consumption. Indeed, Japan had the highest level of drug consumption in the OECD area in 1996. Despite reductions in drug prices during the past decade, per capita drug consumption in 2006 was $405, 18% above the OECD average (Table 2), though no longer the highest.

Figure 6. International comparison of the number of consultations with physicians



Source: OECD Health Database (2008).

One exceptional feature of the Japanese health care system is the number of hospital beds and the length of the average stay, which are both about four times longer than the OECD average (Table 2). One reason is the role of hospitals in providing long-term care (see below). However, even after excluding long-term care beds, the number of acute-care hospital beds remains double the OECD average despite a significant drop since 1996 (Figure 7). Moreover, the length of stay in acute-care hospitals, even though it also declined substantially, is around three times the OECD average.

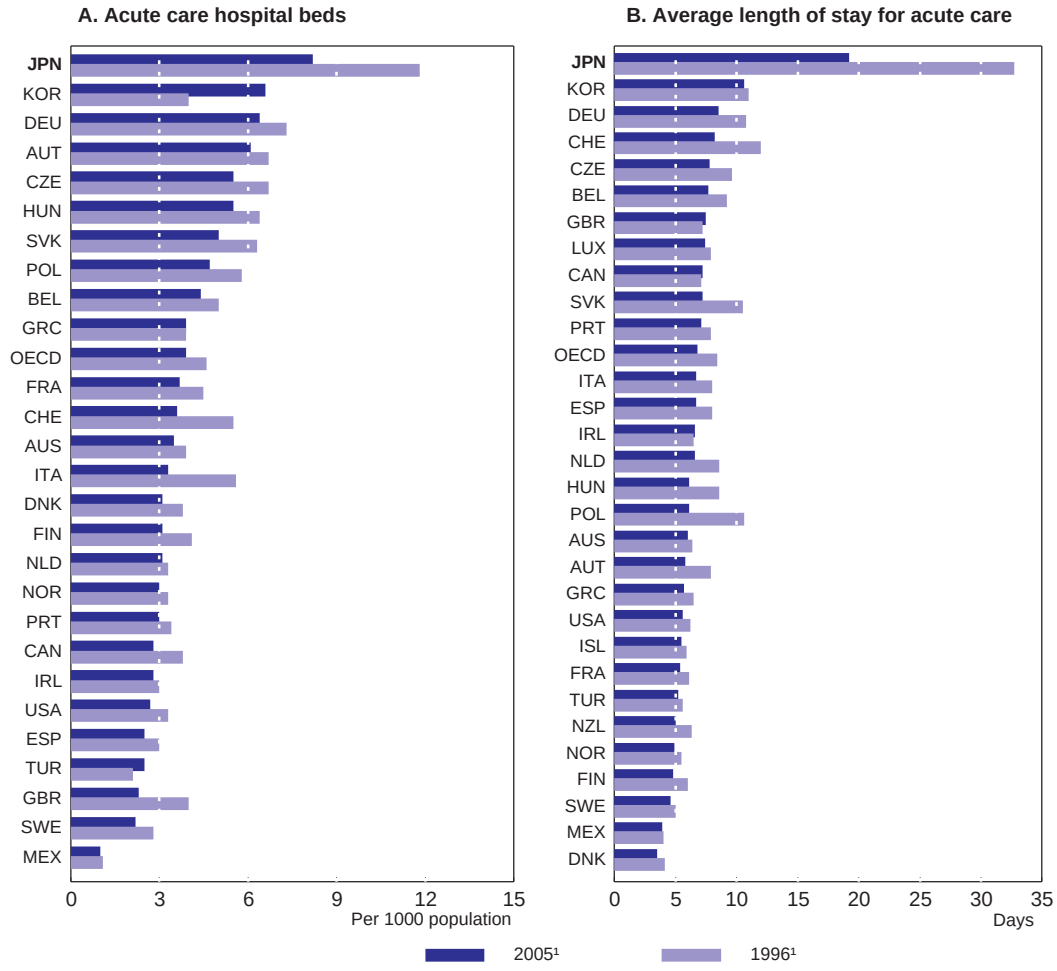
Private hospitals account for two-thirds of hospital beds, with physician-owned clinics providing another 3% in 2007. All hospitals and clinics are non-profit organisations that must be directed by a medical doctor. The ban on profit-seeking hospitals, introduced in 1948 on the grounds that they lower the quality of service, effectively prevents equity financing.[12] Private hospitals and clinics instead rely on borrowing and bond issuance to finance capital costs, which are not explicitly covered by the fee schedule. Given that bank financing is constrained by their limited collateral, the *de facto* ban on equity financing limits the size of private hospitals, which may tend to reduce efficiency. Private hospitals tend to be small, with an average of 160 beds (excluding clinics with beds), compared to 286 beds in public hospitals in 2007. In practice, physician-owned hospitals seek profits, while being taxed at the same rate as commercial companies (Rodwin and Okamoto, 2000). The joint role of physicians as clinicians and owners of hospitals and clinics with beds contributes to the long average stay of 34.7 days in hospitals in 2006, almost four times higher than the OECD average (Table 2). Keeping patients in beds is an easy way to gain revenue.

12. Payment of dividends and the distribution of assets are prohibited, making equity financing irrational.

One study reported a direct relationship between the number of free beds and the average length of stay (Henke *et al*., 2009). Nevertheless, most hospitals operate at a loss and the total number fell by 6% to just under 9 000 during the decade to 2009.

Public hospitals, which account for around one-third of hospital beds, have the dual mission of providing high-tech care – they perform around three-quarters of operations requiring general anaesthesia – and serving isolated areas. Most run deficits, despite government subsidies amounting to 11% of hospital revenue, and are exempt from all taxes.

Figure 7. International comparison of acute-care hospitals



1. The most recent year for which complete data are available is 2005. For Panel A, data are not available for Iceland, Luxembourg and New Zealand.

Source: OECD Health Database (2008).

Long-term care

The large number of hospitals beds and the long average stay in Japan are partly explained by the role of hospitals in providing long-term care to the elderly. The removal of co-payments for health-care services in 1973 for persons over the age of 70 had the unintended effect of turning hospitals into *de facto* nursing homes. Indeed, the proportion of elderly among hospital patients rose from 16.2% in 1970 to 46.3% in 1990 and to 64.1% in 2005. Japan had 15 long-term care beds in hospitals per thousand elderly

in 2005, compared to an OECD average of six. The important role of hospitals in providing long-term care, which is referred to as "social hospitalisation", also reflects a number of other factors. *First*, there was an absolute shortage of formal long-term care, both institutional and community-based. *Second*, small hospitals have experienced trouble in filling their beds, as patients increasingly prefer large medical centres, giving small hospitals an incentive to provide long-term care. *Third*, health and long-term care costs for the elderly are open-ended and not capped by the budget, in contrast to other social welfare programmes. *Fourth*, ageing increased the number of elderly people while reducing the availability of family care as the caregivers themselves age (Ikegami, 2009b).

To reduce the burden on the health-care system, Japan launched the Long-Term Care Insurance System (LTCI) for the elderly in 2000 as a third pillar of social security along with pensions and health care. This mandatory insurance is operated by municipalities and provides benefits to persons over the age of 65 who are certified as eligible based on an objective assessment of their physical and mental condition by the municipality in which they live. In principle, neither the willingness nor the ability of family and friends to provide care are taken into account in deciding eligibility, but there are complaints that budget constraints influence the level of care provided. Once eligibility is determined, a "care manager" employed by a welfare or health-care facility develops an appropriate plan of care. The system allows consumer choice of services and providers and covers both institutional and home-based care. The prices for LTCI services are set by the government and apply to all providers, who are subject to nation-wide quality standards. Patients are required to pay 10% of the cost out-of-pocket, with the remainder split equally between the government and insurance contributions by those over age 40. Premiums for persons between the ages of 40 and 64 are set by health insurers, while those paid by persons over the age of 65 are set by municipalities so as to cover their costs and thus vary widely. The number of persons receiving long-term care services (institutional and home-based) rose from 1.5 million in 2000 to 3.8 million in 2009.[13]

Containing the growth of health spending and financing it efficiently

Japan's budget deficit is projected to widen to 10% of GDP by 2010, boosting gross public debt to 200%. The upward trend in health spending has been a key factor in the deterioration in the fiscal situation. National medical expenditure has increased at a 3.0% annual rate since 1990, far outstripping the 0.9% expansion in nominal output (Figure 8), in contrast to the 1980s when their growth rates were comparable. The rise in health spending is explained by four factors (Table 3):

- *Population ageing* accounted for 1.6 percentage point of growth, reflecting the rise in the share of the elderly from 12% of the total population in 1990 to 20.8% in 2006.
- *Population growth* explained 0.2 percentage points. Following the 2007 peak in total population, population growth is making a small negative contribution to the growth of health spending.
- Changes in the *fee schedule* decreased outlays by 0.1 percentage point, reflecting significant cuts in medical fees and prices since 2000.
- *Other factors*, defined as the residual, accounted for 1.3 points. It includes changes in the volume of health services and technology, which is the key driver of health spending in most countries.[14] While it is not possible to calculate its precise impact in Japan, it is estimated that the rise in spending due to technology was less than the growth of GDP (Ikegami and Campbell, 2004).

13. In-home services accounted for most of the increase, rising from 0.9 million in 2000 to 3.0 million in 2009. The increase in in-facility services was much more modest, from 0.5 million to 0.8 million over that period.

14. According to one study (Mehrotra *et al*., 2003), "When surveyed, 81% of health-care economists stated that technological change in medicine was the primary reason for the rise in health expenditures".

As a share of GDP, the OECD measure of health spending expanded from 6% of GDP in 1990 to 8.1% in 2006 (Figure 1).[15] The 2.1 percentage point increase was slightly above the 1.8% point average rise in the OECD area, despite the cuts in medical fees and prices.

Table 3. Factors contributing to the growth of national medical expenditure[1]

Percentage points

	Population ageing	Population growth	Fee schedule	Other factors[2]	National medical expenditure	GDP (nominal)
1990-2000	1.6	0.3	0.5	1.5	3.9	1.3
2000-2006	1.6	0.1	–1.2	1.0	1.6	0.1
1990-2006	1.6	0.2	–0.1	1.3	3.0	0.9

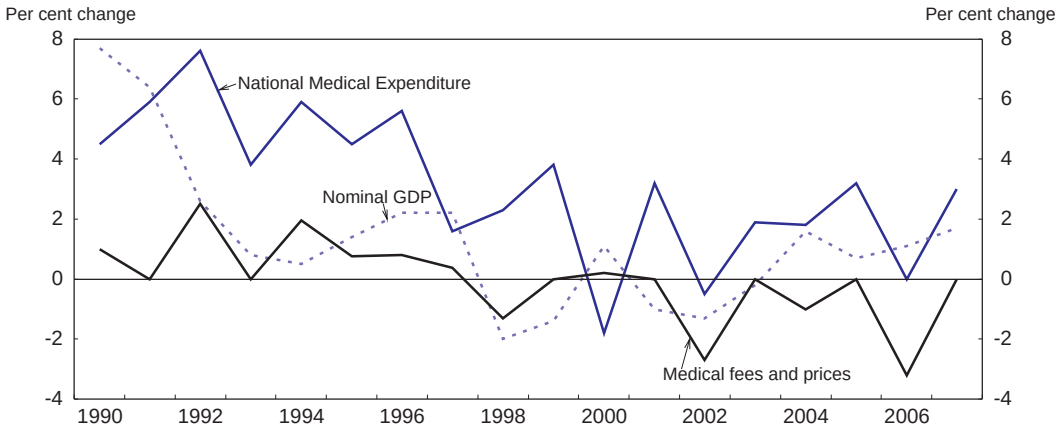
1. Defined as medical services funded through public health insurance, including the associated co-payments by patients.
2. Residual includes changes in volume (the number of patient visits and hospital admissions) and other factors, which are generally associated with technological progress.

Source: Ministry of Health, Labour and Welfare.

Looking ahead, population ageing is likely to put further upward pressure on health spending. Between 2000 and 2006, health spending increased at a 2.2% annual rate for the elderly, while it declined at a 0.6% rate for the rest of the population, reflecting the growing number of persons over 65 and the falling number under that age. Ageing will accelerate in the years to come, with the share of the population over age 65 projected to reach 26.9% by 2015 and 30.5% by 2025. The increase will be concentrated among the very old and will thus have a major budgetary impact. Indeed, the over-75-age group, which already accounts for almost one-third of health spending, will double from 9% to 18% of total population, while the share of the population in the 65-to-74 age group will rise only slightly from 11% to 12%.

Figure 8. Cuts in medical fees and prices have reduced the growth of medical expenditure

Percentage change each year in nominal terms



Source: Ministry of Health, Labour and Welfare.

The National Commission on Social Security's report in 2008 projected that spending on health and long-term care combined will rise by about 3% of GDP to around 11% by 2025 under the current framework and utilisation patterns and by about 4% if reforms to improve quality and expand capacity

15. The OECD measure of health spending is broader than Japan's "national medical expenditure" (NME) as it includes preventative health care and over-the-counter drugs. NME is about 80% of the OECD measure.

were implemented.[16] According to an OECD study (Oliveira Martins and de la Maisonneuve, 2006), public health and long-term care spending combined in Japan will rise from 6.9% of GDP in 2005 to 9.4% by 2050 due to demographic changes alone. Other factors, including technological advances and rising income and wealth, which make individuals seek more frequent and higher-quality treatment, are projected to boost spending by another 1.5 to 4 percentage points of GDP, depending on the degree of cost containment. As a result, public expenditures on health and long-term care are projected to rise to between 10.9% and 13.4% of GDP by mid-century, a larger increase than the OECD average.[17]

The central government, which finances a quarter of health spending directly from general tax revenue, has made it a priority to contain total outlays on health, particularly as the fiscal situation deteriorated. This has been accomplished primarily by controlling medical fees rather than reducing the coverage of public health insurance, which would be inconsistent with its goal of providing "necessary and adequate" medical care through public health insurance. Limiting the coverage of health care conflicts with Japan's emphasis on equality, with access to health services based on need and not on the ability to pay. The biennial revision of health-care fees has resulted in a cumulative reduction of 8.4% since 1997 (Figure 8), much more than the 1% fall in the consumer price index over that period. According to a projection by the Ministry of Health, Labour and Welfare (MHLW), reforms will limit the rise in public spending on health and long-term care from 6.8% of GDP in FY 2006 to 7.4% in FY 2015, well below the 8.3% expected under an unchanged policy baseline. A number of reforms have been launched in recent years, including a programme to reduce "metabolic syndromes", a new health-care system for those over 75 and a plan to decrease the number of long-term care beds in hospitals (Box 1). Another major step is the recent decision to increase the ceiling on the number of medical students by 50%.

Policies to limit the growth of health-care spending

Japan's strategy of repeatedly cutting the fees for physicians and hospitals and the price of drugs and equipment cannot continue forever. Prices can fall only so far before products become unavailable and the quality of care suffers; some would argue that this point has already been reached (McKinsey, 2008). The challenge is to increase the efficiency of health-care spending, thereby limiting the need for additional revenue, and to raise any additional revenue in the least distortive way possible. An OECD study (Joumard *et al*., 2008) found that the efficiency of Japan's health-care sector, although determined only with considerable uncertainty, has scope to catch up with the most efficient countries and thereby reduce health spending. Even in the absence of a serious budgetary situation, the large and growing amount of resources devoted to health care underscores the importance of ensuring efficiency in this sector.

Shifting long-term care from hospitals

The reliance on hospitals to provide long-term care – the so-called social hospitalisation – is a major source of inefficiency, as it creates a mismatch between the needs of hospitalised persons and the services provided. This mismatch increases health spending per patient through inappropriate care, notably the excessive use of laboratory tests and medication under the fee-for-service method of payment and higher numbers of medical personnel (Ikegami, 2009a). Indeed, hospital beds covered by LTCI must have three

16. The improvement scenario is based on "bold reform with a view to realising the ideals of health and long-term care service".

17. The demographic effect for the OECD area is less at 1.8% points. Consequently, the rise in health and long-term care spending, from 6.8% of GDP to between 10.1% and 12.9%, is less than that for Japan.

physicians per 100 beds, while a LTCI facility only requires one. Consequently, large savings could be achieved by shifting long-term care to specialised nursing institutions and home-based care.[18]

Box 1. The government's recent initiatives in health care

The government launched a programme in FY 2008 to reduce the number of persons suffering from or at risk of "metabolic syndromes" – hypertension, cancer, ischemic heart disease, cerebrovascular disease and diabetes – by one quarter by 2015.[1] This is to be accomplished through more effective and extensive health check-ups, individual counseling to support lifestyle changes for those suffering from or at risk of metabolic syndromes and the provision of more information by health insurers and communities. A quarter of the 56 million persons between the ages of 40 and 74 are to be screened. To encourage health insurers to pay for check-ups, a reward system that adjusts their contribution to the health care of those over age 75 (see below) will be implemented in 2013.

The government implemented a new health insurance system in 2008 for those over age 75, who account for 9% of the population and 30% of health outlays. The co-payment rate is kept at 10% and insurance premiums continue to cover 10% of the total costs of the over age 75 population. The remainder will be covered by insurance premiums from people under 75 (40%) and government subsidies (50%).[2] The new system makes the subsidy for elderly health-care costs more explicit. As the population ages, the share of contributions by the elderly will increase. The new system should reduce the large inter-municipal differences in premiums noted above by moving to a prefectural basis, with premiums based on how much was spent on health care for the elderly in each prefecture during the preceding two years (Tomizuka and Matsuda, 2008). The incentive of prefectures to limit the level of their premiums is likely to promote efficiency, while ensuring that each prefectural insurer achieves a balanced budget. Premium payments, which are deducted from pension benefits to increase compliance and reduce administrative costs, have fallen for about two-thirds of this age group as a result of the new system. In addition, it introduces a specific benefit package for the elderly based on a comprehensive payment, rather than the usual fee-for-service system. The new system for the "old elderly" was to be accompanied by an increase in the standard co-payment rate for those between the ages of 70 and 74 from 10% to 20% and to 30% for those with incomes matching the average for the population under the age of 70, but it has been delayed.

In 2005, MHLW announced a plan to restructure the 380 000 long-term care beds in hospitals by FY 2011, based on targets set by local governments. Of those beds, 250 000 were financed by public health insurance and the remainder by LTCI.[3] The distinction between the two insurance systems is blurred as there are beds in the same hospital unit financed by the different insurance systems. The objective is to reduce the number of long-term care beds to 150 000, devoted entirely to the treatment of patients with chronic medical conditions and financed by health insurance. After FY 2012, no long-term beds in hospitals will be financed using LTCI. This is to be accomplished through differentiated *per diem* payments for long-term care beds in hospitals according to medical need and an increase in co-payments. Public financial assistance, including subsidies, and deregulation will help shift the remaining 230 000 beds into other uses, notably a new type of long-term care facility that will be subject to relaxed regulations on manpower and facilities.

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1. This initiative is similar to the Health Care for the Aged legislation in 1981, which established screening, prevention and education for everyone over the age of 40.
2. Previously, the government subsidy financed 30%, with health insurance premiums accounting for the remainder.
3. In addition to the 130 000 beds in hospitals, LTCI financed 400 000 in nursing homes and 270 000 in intermediate care facilities.

With the introduction of LTCI in 2000, it was expected that long-term care units in hospitals would all be transferred from health insurance to LTCI. In the event, less than half of the beds were transferred. Moreover, the number of long-term care beds financed by health insurance increased by almost one-half to around a quarter million, more than double the number financed by LTCI (Table 4).

18. The government, though, has no estimates of the extent of the cost saving. Of course, some long-term care patients with chronic medical problems need to remain in hospitals, as envisioned in the government plan.

Table 4. Long-term care beds in hospitals

In thousands

Year	Financed by long-term care insurance	Financed by health insurance	Total
2001	120.4	175.5	295.9
2002	138.0	187.8	325.7
2003	139.6	227.5	367.2
2004	138.9	234.9	373.8
2005	129.9	254.0	383.9
2006	119.8	252.0	371.8
2007	110.7	251.7	362.4

Source: Ministry of Health, Labour and Welfare.

The government's 2005 plan (Box 1) projects that the number of long-term care hospital beds (financed by health insurance) will fall to 150 000 by FY 2011. This decline is one of the means to accomplish its objective of shortening the average hospital stay from 36.3 days to 31.5 by 2015.[19] However, there has been little progress in the past few years in moving toward the FY 2011 objective. Municipalities, which manage LTCI, did not want to have the hospital-based beds transferred because it would raise spending on long-term care. In addition, physician-owners of hospitals had second thoughts about transferring beds from the profitable service of providing long-term care under health insurance to LTCI. Moreover, there was a general concern that long-term care beds in hospitals might be shifted to other uses, thus reducing the overall capacity to care for the rising number of elderly. In 2008, the government announced a more modest objective, based on the targets set by the prefectures, to reduce the number of long-term care beds in hospitals to 210 000 in FY 2011, well above its 2001 level.

The failure to make significant progress in shifting long-term care out of hospitals also reflects policy mistakes in introducing a case-mix based payment beginning in 2003. A government-organised committee defined three levels of medical need that would determine the payment from health insurance. In 2006, the payment for those at the lowest care level in health insurance (known as Level 1), who then accounted for a little more than one-half of all patients in long-term care beds financed by health insurance, was set below the cost of providing care. The 2006 reform was intended to give hospitals an incentive to either become a LTCI facility themselves or transfer such patients to LTCI facilities. However, the hospitals did not respond as expected. Rather than discharge the patients to long-term care facilities, hospitals up-coded them to higher medical care levels in order to receive larger payments from health insurance. Indeed, during the five months following the change in the tariff, the proportion of Level 1 patients in health insurance-financed long-term care beds fell from 50% to 33% (Ikegami, 2009a).

Hospitals' strategy of retaining their long-term care patients by re-defining their medical needs reflects the high profitability of long-term care; hospitals with more than 60% of their beds in long-term care had a profit margin of 7.9% in 2004 compared to 0.7% for all hospitals (excluding psychiatric). Many hospitals therefore have transformed acute-care units to long-term care. With the reductions in insurance payments, the profit rates declined, to 3.7% and negative 2.3%, respectively, with long-term care remaining much more profitable on average, despite the policy changes to make it less attractive (Ikegami, 2009a). Clearly, the goal of reducing long-term care in hospitals cannot be met as long as it remains the most profitable service for hospitals. Changes in the reimbursement structure must be

19. The objective is to reduce it to the point midway between the national average of 36 days and the average of Nagano prefecture, which is the shortest in the nation at 27 days.

accompanied by steps to prevent up-coding of patients, notably through a comprehensive patient-level database, which in turn requires electronic record-keeping and on-site inspections, preferably through the insurers or third-party experts chosen by them.

Despite the problems in shifting long-term care out of hospitals, the experience with LTCI does demonstrate the positive benefits from an opening a publicly-provided service to private firms. Prior to 2000, the coverage of long-term care by public health insurance was restricted to the public sector, reflecting concern that allowing for-profit firms in the health-care sector would result in opportunistic behaviour (Noguchi and Shimizutani, 2005). The introduction of LTCI allowed for-profit firms to compete in the provision of at-home long-term care (but not medical care). By 2006, the number of private companies providing such care had surpassed 11 000, accounting for more than one-third of the total.

Reforming the pricing mechanism away from pay-for-visit

The government's objective of providing "necessary and adequate" health care is a vague concept that depends, in part, on the payment system. The current fee-for-service approach tends to expand the "necessary treatment", while an inclusive payment would reduce it. Introducing a "diagnostic-related group" (DRG) approach, which sets an overall fee according to the illness, would help reduce the number of consultations per physician and the length of hospital stays in line with the government's objective. It may also help lengthen the relatively short consultations with physicians, which is a major complaint of patients. One solution would be to reimburse physicians on the basis of the number of patients during a year rather than the number of visits. A less radical reform would be to modify the reimbursement rate in some cases, such as a second visit for a cold or another minor ailment. The government took a step in this direction in 2008 by reducing reimbursement of medical consultations of less than five minutes.

For hospitals, the government introduced in 2003 a case-mix based payment, the Diagnosis Procedure Combination (DPC), which classifies patients according to their diagnosis and required treatment.[20] This new approach, which adapts the DRG systems used in a number of OECD countries to Japanese practices, was initially limited to 82 university and public hospitals. Japan's case-mix payment is unusual in that it includes both a DPC component and a fee-for-service component. The DPC part includes the hospital's basic charge, medicine and supplies used in wards, laboratory tests, radiology and any procedures costing less than 10 000 yen (around $100). The fee-for-service component covers surgical procedures, medicine and supplies used in operating rooms and procedures that cost more than 10 000 yen. For the DPC component, a *per diem* payment schedule is applied that declines as the length of the hospital stay increases. It is important to note that there is a "conversion factor" for the DPC payment, which varies from 0.85 to 1.32, thus lowering the payment by as much as 15% or raising it by up to 32%. This payment eases the impact on the income of individual hospitals that have introduced the DPC system.

The DPC has led to some reduction in the length of hospital stays, but not in overall costs. The average stay in the 82 hospitals using the DPC fell from 20.4 days in the summer of 2002 to 18.8 days in the summer of 2003 after the introduction of the DPC (Wang *et. al*, 2008). The fact that the DPC is paid on a *per diem* basis, in contrast to DRG systems in some countries, limits its impact on the length of hospital stays. However, overall medical costs rose relative to the fee-for-service method, with increases recorded for eight of the 16 Major Diagnosis Categories. The failure to reduce costs reflects in part hospitals' strategies to "game the system". *First*, the re-admission rate of patients increased from 4.7% in 2002 to 9.7% in 2004, primarily due to planned re-admissions. *Second,* hospitals have "up-coded" patients by classifying them for more intensive (and expensive) treatments (Ikegami, 2009a). Another factor is that the use of conversion factors to set the *per diem* rates of individual hospitals weakens pressure to increase

20. There are 16 Major Diagnosis Categories that are divided into 1 727 diagnostic groups, which in turn, are subdivided into 2 552 DPC groups.

efficiency. In addition to failing to reduce hospital costs, the DPC also increased outpatient medical costs. Hospitals concentrated clinical tests in their outpatient departments before admitting patients, thus allowing them to charge extra on a fee-for-service basis rather than having the tests covered by the DPC (Wang *et al.*, 2008). Indeed, there are examples of revolving door practices as hospitals discharge patients and perform expensive tests on them in their outpatient departments before re-admitting them.

While the DPC is aimed at controlling costs, another important objective is to upgrade the quality of hospital care by enhancing standardisation, transparency and accountability. The DPC system makes hospital services and outcomes measurable, thus providing a basis for improving treatment.[21] It also strengthens competition by providing patients with information to help choose hospitals. The website of the MHLW shows the outcomes at hospitals using DPC, including treatment rates, length of stay and re-admission rates. Such transparency can mitigate concerns that case-base mixed payments could lead to lower quality of treatment by prompting suppliers to skip important tests and examinations.

The coverage of DPC spread with the inclusion of 360 hospitals, both public and private in 2006.[22] By July 2009, it included 1 283 hospitals with almost one-half of acute-care beds. The conversion factors are to be phased out beginning in 2011. To make the DPC effective in containing costs, it is essential that the DPC rates be set closer to the cost in the best-performing hospitals rather than the worst to encourage less-efficient institutions to improve their performance. In addition, it is important to establish rules to prevent hospitals from taking advantage of the DPC system. For example, DPC rates should be reduced in the case of re-admission, and clinical tests and imaging performed in outpatient departments should be covered at least in part by the DPC if those patients are later admitted.[23] On-site inspections need to be expanded to prevent the up-coding of patients.

Expanding the use of generic medicine

The profits available to doctors from prescribing and selling pharmaceutical drugs had made the level of drug consumption in Japan the highest in the OECD area by 1996. Since then, the government has taken measures to reduce expenditures on drugs, notably by bringing drug prices closer to wholesale prices,[24] encouraging the separation of prescribing and dispensing and imposing penalties on over-prescription. Reimbursement is cut by 10% if seven or more drugs are prescribed. This has helped to halve physicians' share of the total number of drug prescriptions from 80% in 1996 to 41% in 2008. Combined with cuts in drug prices, this reduced total drug costs from 29% of health spending to 21%.

However, there is potential for additional savings in this area, as drug costs per capita were still 18% above the OECD average in 2006 (Table 2). One key is to increase the use of generic medicine. Japan accounts for only 3% of the world market in value terms, well behind North America (52%) and the major five European countries (30%) (EGMA, 2008). In volume terms, generics accounted for 19% of Japan's pharmaceutical market in 2007, well below the 59% share in the United States. Moreover, generics cost

21. However, realising such a benefit requires that hospitals do not "game the system".

22. Given that the DPC started in 82 prestigious university and public hospitals, other hospitals were anxious to acquire this mark of prestige.

23. In the case of re-admission within three days, the length of hospital stay is calculated as the total of both periods in the hospital.

24. Providers can buy drugs and medical devices from wholesalers at prices below those in the fee schedule due to competition. When revising the fee schedule, the government sets prices 2% above the market price. For example, if the price of a drug set at 110 yen is available at 100 yen in the market, its price in the fee schedule would be cut to 102 yen. In 2008, the prices of 88.7% of the 12 740 listed drugs were decreased, 10.7% were left unchanged and only 0.5% increased. The average was a 5.2% decline.

around one-half of the price of the original branded drug, compared to 20% to 30% in the United States. Their use in Japan was not allowed unless the physicians stated on the prescription form that generics are acceptable. In a 2006 poll by the Healthcare Policy Institute, Japan (HPIJ), 97% of the public were aware of generics and 80% wanted to use them. However, only 14% had asked physicians to prescribe generics, reflecting the traditional deference to the judgment of physicians. Furthermore, only 9% of physicians agreed to prescribe generics, given the negative financial impact on physicians' income and their distrust of their quality. The use of generics is further complicated by the lack of supply at pharmacies; in the 2006 poll, only 8% of the public reported that pharmacies were able to provide generics.

Increasing the market share of generics and reducing their price relative to branded drugs to US levels would cut Japan's drug bill by one-third (Kadonaga and Kanzler, 2007), thus reducing total health spending by 7% (0.5% of GDP). The government has a target of expanding the market share of generics to at least 30% by 2012 by making them a more attractive option for patients and health-care providers. In the new prescription form, generics are acceptable unless the physician explicitly states otherwise. In addition, the fee schedule will provide supplementary fees to compensate pharmacists for the burden of stocking and selling generics. While these measures are likely to have a positive impact, the government should boost the use of generics by requiring pharmacies to fill prescriptions using generics when they are available, and, for example, moving towards making them the standard for reimbursement. According to a 2007 HPIJ poll, 61% of the public favoured such an approach.

Promoting healthy ageing

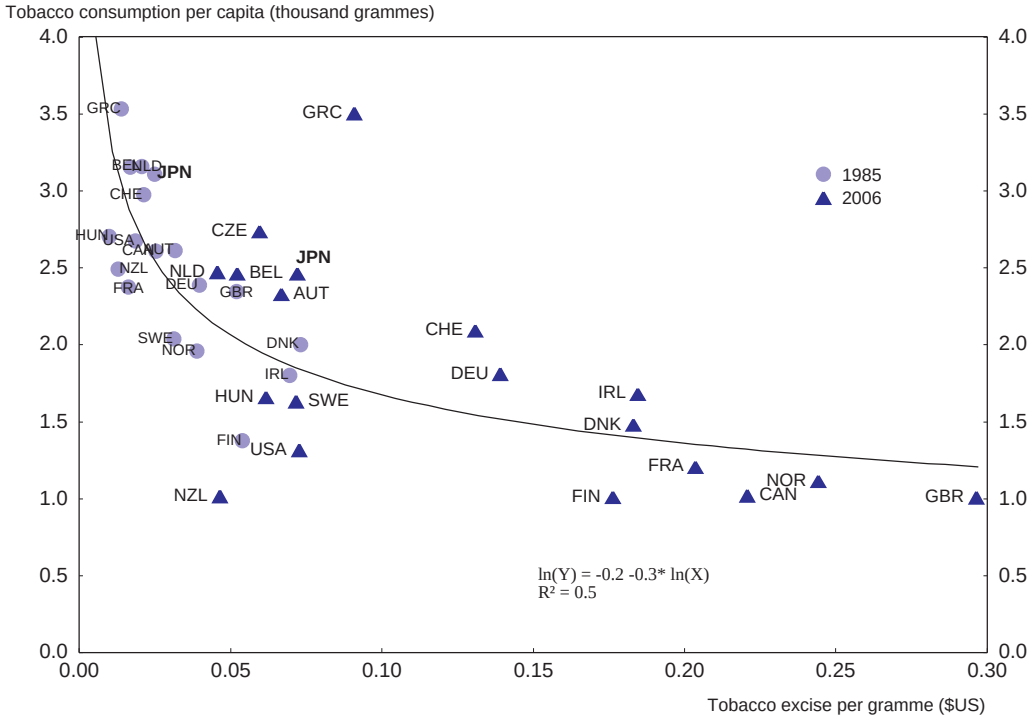
With the number of persons over the age of 65 rising rapidly, reducing the relatively high expenditures on health care for the elderly is essential to restrain total health spending. In 2006, health expenditures (excluding pharmaceuticals and dental care) per person over 65 were 4.5 times higher than for those under that age. The government estimates that lifestyle-related diseases, defined as those resulting from improper diet, smoking, alcohol consumption, lack of physical exercise and excessive stress, accounted for almost one-third of all health spending in FY 2005 and about 60% of deaths. Moreover, the outlook for "healthy ageing" is weakened by changes in the lifestyle that has helped Japan achieve the longest life expectancy in the world (Kadonaga *et al*., 2008). With the westernisation of the diet and less physical activity, the incidence of obesity and diabetes is rising.

It is uncertain to what extent individual check-ups and counselling as well as the provision of additional information under the "healthy ageing" initiative (Box 1) will lead to lifestyle changes. In the short run, it may even boost health spending by encouraging aggressive treatment, in addition to the cost of up to 14 million additional health check-ups per year. Greater use of monetary incentives to encourage healthier living would likely be more effective in changing behaviour. In particular, the tax on cigarettes, which are responsible for one in eight deaths in Japan (WHO, 2002), is well below that in a number of other OECD countries despite an increase since 1985 (Figure 9). Higher taxes are linked with lower rates of smoking. A recent study of the price elasticity of cigarette demand suggests that raising the tax from its currently low level would significantly reduce the high rate of smoking in Japan (Wan, 2006). This should be accompanied by tightening the regulations on tobacco, which are less restrictive than in other industrialised countries in the areas of advertising and sponsorship, sales and distribution and smoke-free air restrictions (WHO, 2003).

There is popular support for increased taxes on products damaging to health. According to an HPIJ poll in January 2007, two-thirds of the public support the introduction of economic incentives to discourage behaviours that lead to lifestyle-related diseases. The most popular measure (74% support) would be to increase the cigarette tax to boost the price of a pack above its current level of around 300 yen. In the survey, more than half favoured raising the retail price to at least 600 yen by a tax hike. Other options include refunding a portion of insurance premiums to those who have not become ill over a certain

period of time (67% support) and boosting the tax on liquor (55%). However, raising insurance premiums or co-payment rates for those who do not improve their lifestyles was favoured by only 42% in the poll.

Figure 9. Tobacco tax and consumption[1]



1. Converted into US dollars using purchasing power exchange rates for 1985 and 2006.

Source: OECD Health Database (2008).

Introducing a gate-keeping system

In many OECD countries, patients must see a general practitioner (GP), who provides primary care, to obtain a referral to see a specialist. Such an approach limits health costs by reducing the number of unnecessary medical appointments. In Japan, however, there is no gatekeeper. Instead, patients are free to consult any provider – primary care or specialist – at any time without proof of medical necessity and with full insurance coverage. Consequently, persons with a cold can seek treatment at a university hospital, assuming they are willing to wait a long time, when they could be treated more efficiently at a clinic or with over-the-counter medications.

Patients tend to prefer large hospitals over clinics and do not trust clinic physicians to make timely referrals to hospital specialists. Consequently, they go directly to hospitals without referrals. Although a one-time fee was introduced at some hospitals for newcomers without a referral, the fee was kept small for equity reasons and has not significantly reduced demand thus far. This fee should be raised to a level that discourages patients from going to hospitals without referrals and should be applied to each visit. Over the long run, creating an effective gatekeeper system would require increasing the number of GPs and clearly identifying specialists. Although the number of GPs is increasing, there are limited opportunities for systematic student and resident training in general medicine or primary care as few medical schools have departments in these areas. Most physicians identify themselves as specialists – any physician can profess any specialty in Japan – and tend to expand their coverage over time to attract more patients. The fee

schedule should be gradually adjusted to encourage the practice of primary medicine by GPs. At the same time, this would encourage hospital physicians to focus on their respective specialties.

Implementing electronic billing and consolidating insurers to reduce administrative costs

Traditionally, medical bills have been mailed from providers to insurers for payment. In 2006, the government introduced an on-line system for payment, which will be phased in for all hospitals and pharmacies by 2013 and is expected to enhance the efficiency and quality of health care (Chino, 2008). Electronic processing of bills will facilitate the review of all reimbursements to weed out fraud and abuse and reduce administrative costs. However, there is opposition from the medical profession on the grounds that older physicians, who are prevalent in rural areas, do not have the necessary computer skills. Less than 8% of the approximately 54 thousand hospitals and pharmacies that were required to make the transition to electronic billing by April 2009 failed to meet the deadline. The government has announced that it will provide subsidies to help introduce the on-line system for payments. It is important to carry out this plan.

Insurers entrust the reviewing and payment of claims to other organisations – prefectural organisations established by the NHIs and the Social Insurance Medical Fee Payment Fund for SMHIs and the JHIAHI. Strengthening effective competition in this market would increase incentives for these organisations to carefully review medical bills for fraud and abuse, thus making them effective in promoting electronic billing and cutting unnecessary expenditures. Encouraging insurers to sub-contract the reviewing of bills to other organisations would help enhance efficiency through competition.

Consolidating the fragmented system of health insurers should also help to limit administrative costs, while reducing horizontal inequality and strengthening the government's monopsony power. *First*, the NHI is to be shifted from a municipal to a prefectural basis, which is expected to reduce the variation in premiums. In 2006, the premium in the highest municipality was almost five times higher than in the lowest as noted above.[25] *Second*, beginning in 2009, JHIAHI premiums are set on a prefectural basis rather than nationwide, thus introducing competition. *Third*, in the SMHI, a large number of small insurers are in financial difficulty. The government is allowing the creation of regional insurers including all types of companies to improve their financial situation. Reducing the number of insurers from the current number of 3 600 improves efficiency.

Restructuring the hospital sector

The fragmentation of the hospital system has a negative impact on its financial situation and the quality of care. In 2007, 75% of municipality-managed public hospitals had a negative current balance and 83% had a negative cumulative balance, placing a significant burden on local governments (NLI Research Institute, 2009). Research has shown that outcomes for a given procedure are better when hospitals and doctors perform it on a large scale. However, the average Japanese hospital performs only 107 percutaneous coronary interventions compared to a range of 381 to 775 in other OECD countries (Henke *et al*., 2009). Private-sector hospitals tend to be small, with an average of only 160 beds in 2007.[26] In addition, Japan does not systematically collect data on outcomes for individual hospitals, thus limiting the scope for evaluating their performance. Having such performance data would help ensure that the necessary reduction in hospital beds would be focused on low-quality institutions. Removing the rules that prevent hospitals from using equity financing would facilitate the creation of larger hospitals as well as M&As of hospitals and clinics. Well-managed hospitals would then be able to take over poorly-managed hospitals, resulting in greater efficiency in the hospital sector. Finally, easing the requirement that hospitals be directed by medical doctors would likely lead to more professional management and better outcomes.

25. On a prefectural basis, the difference was less than two based on the simple average of premiums.

26. In addition, 4 885 of the 49 010 private doctor clinics have beds, but the average is only 10.8 beds.

Raising more revenue

Health spending tends to grow faster than income; indeed, the elasticity of health expenditure per capita with respect to income across OECD countries has been estimated at 1.4 (Carey *et al.*, 2008), as rising incomes increase the relative benefits of investing in health care to extend life and improve its quality. A key problem is how to finance the rising cost of health care for the elderly while limiting the burden on younger generations. The new system for the over-75 age group (Box 1) has proven to be politically unpopular, in part due to the automatic collection of insurance premiums. Moreover, the separation of the "old elderly" in a distinct scheme is criticised as tantamount to "leaving them to die", reflecting a fear that it will facilitate cuts in their health care in the future. For those in employee-based insurance systems, the new scheme appears to increase the burden of paying for elderly health care. Payments to the equalisation fund already amounted to 38% of total premium revenues in FY 2007. Employee-based insurers complain about such subsidies as the self-employed in the NHI tend to under-report their income (2008 *OECD Economic Survey of Japan*).

Funding for increased health spending will have to come from some combination of co-payments, insurance premiums and general tax revenue. Substantially increasing the co-payment rate, which is already high at 30%, would undermine the concept of health insurance and limit the access of low-income households to health care. Relying primarily on premiums would sharply increase the tax wedge on labour, causing an adverse impact on labour supply. According to one estimate, the average health insurance premium would have to rise from 8% at present to 24% of wages by 2035 if there were no increase in tax financing (McKinsey, 2008). That leaves tax revenue from a relatively non-distortionary tax, such as the consumption tax, as the best option.

Enhancing the quality of health-care services

Meeting demand for higher-quality health care is expensive in a system based on the egalitarian provision of services to all. The challenge of increasing quality has been exacerbated by the slow growth of output and government revenues over much of the past two decades. Cutting medical fees and prices, the key strategy used in recent years to meet budget constraints, tends to limit quality. The fee schedule discourages high-quality care by making "inexpensive primary care relatively profitable and expensive high-tech procedures unprofitable" (Campbell and Ikegami, 1998). Furthermore, some "advanced medical care" is excluded from the public health insurance (Figure 3). Areas for reform to improve quality include more use of evidence-based medicine, accreditation standards, reducing the "drug lag" and allowing more mixed billing.

Evidence-based medicine to promote best practices

The transition to electronically-provided data in a standardised format provides an important resource that should be used to raise the quality of health care by promoting evidence-based medicine to help identify best practices.[27] This needs to be accompanied by an independent analysis of hospitals' performance, which should be publicly-available to promote competition based on the quality of service.

Accreditation standards

There tends to be less trust in clinic doctors than in hospitals, which may reflect the lack of accreditation standards. The increasing frequency of medical errors, even in prestigious hospitals, has eroded patients' trust in hospitals as well (Ikegami, 2008b). As noted, physicians are allowed to claim any

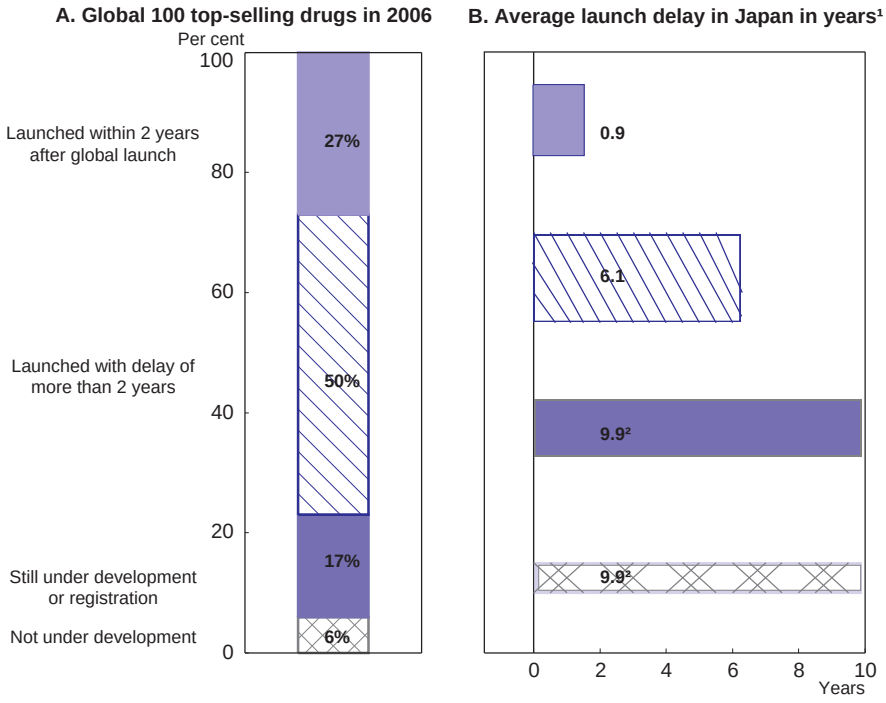
27. For example, the average hospital stay for Major Diagnosis Category 1 (nervous system diseases) ranges from 14.6 days to 27.4 days (Wang *et al.*, 2008).

speciality, even without training in that area. Consequently, about two-thirds of physicians are classified as specialists even though only one-half have undergone formal training for that purpose. Hospital accreditation was introduced in 1996, but only a quarter of hospitals are accredited, in part because it does not confer tangible benefits. An HPIJ poll found that the proportion of persons who think that they will be a victim of medical malpractice jumped from 25% in 2007 to 33% in 2009. Strengthening certification and accreditation of health-care providers would enhance quality. Accreditation of technical expertise would be best left to professional associations, while consumers or insurers could evaluate consumer satisfaction.

Reducing the medical drug and device lag

Japan accounts for about 10% of the world pharmaceutical market, making it the second-biggest consumer after the United States. Access to the world's newest drugs, though, lags behind most other OECD countries. According to one study, one-quarter of the world's top-selling drugs in 2006 had not been introduced in Japan, while one-half were only available six years on average after their global launch (Figure 10). A study by the Office of Pharmaceutical Industry Research in Japan found that the world's 88 top-selling drugs in 2004 were introduced in Japan 1 417 days on average (almost four years) following their global launch, compared to around 500 days in the United Kingdom and the United States (Table 5). Furthermore, only 60 of the 88 top-selling drugs had been introduced in Japan, the lowest number among the top 40 countries.

Figure 10. The drug lag in Japan



1. Compared to the earliest launch in the United States or Europe.
2. As of 2007.

Source: PhRMA (2008).

Moreover, there has been a marked slowdown in the introduction of new drugs in Japan, as the average delay rose 39%, from 1 020 days in 1994 to 1 417 in 2004, while the average delay of the top 40 countries fell 9% to 758 days.[28] In addition, there has been a deterioration in availability. In 1994, all but four of the top 33 top-selling drugs had been introduced in Japan in contrast to 2004. The relatively long delay in introducing new drugs and reduced availability diminishes the quality of health care in Japan.

Table 5. Delays in the introduction of new drugs

1994				2004			
Rank	Country	Delays in days	Number of drugs introduced	Rank	Country	Delays in days	Number of drugs introduced
1	United Kingdom	658	29	1	United States	505	88
2	Ireland	736	26	2	United Kingdom	512	87
3	Germany	764	30	3	Switzerland	538	85
4	Netherlands	764	28	4	Sweden	583	81
5	Canada	805	28	5	Germany	620	86
6	Italy	841	30	6	Netherlands	666	76
7	Belgium	896	27	7	Canada	715	83
8	Finland	901	28	8	Finland	727	85
9	United States	928	29	9	Denmark	757	83
10	Sweden	956	29	10	Ireland	766	79
11	Denmark	966	30	11	Argentina	786	88
12	**Japan**	**1 020**	**29**	12	Italy	802	85
13	Spain	1 119	29	13	Mexico	815	84
14	South Africa	1 129	28	14	Austria	832	84
15	Mexico	1 170	31	15	Puerto Rico	870	62
16	Switzerland	1 177	28	16	Spain	895	77
17	New Zealand	1 187	25	17	France	915	79
18	Portugal	1 243	28	18	Brazil	933	80
19	Columbia	1 280	30	19	Greece	951	85
20	Argentina	1 291	30	20	Australia	979	67
21	Austria	1 294	29	21	South Africa	1 010	73
22	Malaysia	1 313	24	22	Columbia	1 016	83
23	Greece	1 339	28	23	Philippines	1 034	78
24	Brazil	1 343	28	24	Hong Kong	1 084	70
25	Thailand	1 351	29	25	Singapore	1 084	66
26	Israel	1 397	28	26	Belgium	1 096	77
27	France	1 452	27	27	New Zealand	1 134	71
28	Chile	1 454	29	28	Thailand	1 144	79
29	Philippines	1 457	29	29	Portugal	1 153	67
30	Venezuela	1 460	29	30	Venezuela	1 195	79
31	Hong Kong	1 465	25	31	Chile	1 198	80
32	Korea	1 516	33	32	Peru	1 213	73
33	Australia	1 522	23	33	Malaysia	1 249	61
34	Central America	1 574	31	34	Central America	1 254	80
35	Equator	1 672	29	35	Israel	1 258	70
36	Turkey	1 676	29	36	Indonesia	1 410	69
37	Saudi Arabia	1 774	29	37	Turkey	1 411	79
38	Peru	1 917	29	**38**	**Japan**	**1 417**	**60**
39	Dominican Republic	1 986	29	39	Korea	1 427	83
40	Indonesia	2 107	29	40	Uruguay	1 457	78
	Average	936	29			836	78

1. The time lag between a drug's global launch and its introduction in other countries. The survey covers 33 drugs in 1994 and 88 in 2004.

Source: Office of Pharmaceutical Industry Research (2006).

28. Among Asian countries, Japan had the shortest delay in 1994. In 2004, in contrast, its delay was longer than in such developing countries as the Philippines, Thailand, Malaysia and Indonesia.

Despite the size of the Japanese market, the time and cost of the drug development process and the application review tend to discourage manufacturers from entering. To some extent, this reflects physiological factors; given the variation in drug response in patients from different ethnic backgrounds, the government requires some clinical trials to be conducted in Japan, while accepting foreign clinical data based on the ICH-E5 guideline.[29] Indeed, about one-third of the drugs marketed in Japan, Europe and North America have different approved doses, with the dose in Japan usually smaller (Tominaga, 2008). In addition, it appears that the cost of clinical trials in Japan is high because of a number of factors such as less standardised clinical trial procedures, smaller hospitals and clinics, and a limited number of physicians and staff to conduct trials. However, there are a number of other factors that discourage and delay the launch of new drugs in Japan. *First*, physicians and patients have less incentive to take part in trials as they are not allowed to be compensated by the manufacturers. Consequently, an increasing number of Japanese companies have opted to conduct clinical trials overseas. *Second*, the PMDA, the agency that reviews new drugs, has faced capacity problems since its inception in 2004. *Third*, some foreign pharmaceutical companies complain that cuts in drug prices make the Japanese market unattractive.

In response to complaints from doctors and patients, the government has pledged to reduce the lag in introducing drugs in Japan following their launch elsewhere. The key is for global companies to include Japan in their initial development of drugs, rather than to use a bridging study after the drug's development is completed elsewhere in the world. One positive step is the decision to increase the number of reviewers in the PMDA from 200 as of 2007 to more than 400 in 2010 by hiking user fees. This should result in a substantial reduction in review times. The government has also been implementing the "Clinical Trial Activation Plan" since 2003 for improving the cost, speed, and quality of clinical trials. A number of other steps are important as well to facilitate the entry of new drugs with clear health benefits. *First*, the cost of clinical trials should be reduced, while expanding the scope for using results from clinical trials in other Asian countries where costs are lower. *Second,* it is important that the PMDA expand its capacity to advise foreign pharmaceutical companies on clinical trials and approval applications in Japan. *Third*, while reducing drug prices is an important part of Japan's policy to limit health costs, it is important that prices properly reflect the cost of drugs and promote innovation.

There are similar problems for medical devices. According to a recent study (ACCJ, 2008), the number of medical devices available in Japan is substantially less than in the United States and Europe. As in the case of drugs, there is a significant time lag between the time that products are first approved elsewhere and when they are accepted in Japan. According to a study by the PMDA, which is also responsible for evaluating medical devices, the lag between approval in the United States and Japan averaged between 34.2 months and 43.6 months during FY 2003-05 (Table 6). A study by a private firm for FY 2005-07 found similar results. While there has been a reduction in the time needed for approval, it has been offset by a lengthening of the submission lag, leaving the overall lag unchanged, although it may be too early to make a firm judgement on the reforms introduced in 2005.

29. The International Conference on Harmonisation of Technical Requirement for Registration of Pharmaceuticals for Human Use (ICH) is a project that brings together the regulatory authorities of Europe, Japan and the United States and experts from the pharmaceutical industry in the three regions to discuss scientific and technical aspects of product registration.

Table 6. The delay in approving medical devices in Japan

In months

	Submission lag[2]			Approval lag[3]			Total device lag[4]		
Product type[1]	PMDA[5]	L.E.K.[6]	Differences	PMDA[5]	L.E.K.[6]	Differences	PMDA[5]	L.E.K.[6]	Differences
PMA equivalent	17.4	24.0	6.6	16.8	11.0	-5.8	34.2	35.0	0.8
510(k) equivalent	18.0	31.3	13.3	25.6	12.1	-13.5	43.6	43.4	-0.2

1. A PMA-equivalent product is one that was approved in Japan after having been approved through the "Premarket Approval Application" process in the US. A 510(k)-equivalent product is one that has been approved in Japan that has been cleared through the 510(k) (Premarket Notification) process in the US.
2. The period of time between when a product is submitted to the USA FDA and when it is submitted to Japan's PMDA.
3. The differences in the period from the submission of the application to approval between Japan and the US.
4. The sum of the submission lag and the approval lag.
5. This study by the PMDA, which is responsible for product review and evaluations, covers FY 2003-05.
6. This study by L.E.K. Consultancy covers FY 2005-07.

Source: ACCJ (2008).

One survey (ACCJ) found that firms did not submit devices for approval in Japan because of insufficient demand (24%), the high cost of doing business (10%) and a lack of resources (7%). However, a number of other reasons cited by firms could be addressed by policy reforms; *i)* 28% cited high regulatory costs, including requirements for additional clinical trials and data and application fees; *ii)* another 13% mentioned the time lag until approval (Table 6); and *iii)* 7% cited unattractive reimbursement as a result of significant cuts in the prices of medical devices. High regulatory costs are related to the submission lag.[30] In sum, the regulatory structure and reimbursement levels deprive Japanese consumers of access to medical devices available in other OECD countries.

In 2007, the government established a task force, including domestic and foreign industry representatives, to reduce the time lags and improve the efficiency of reviews. The task force recommended that Japan; *i)* simplify information requirements; *ii)* harmonise testing procedures with international standards; and *iii)* reduce the need to have minor changes that do not affect the safety or effectiveness of products approved by the government. The government published an action programme in 2008 to accelerate the review of medical devices. This includes expanding the capacity of PMDA by increasing the number of reviewers from 35 in 2008 to 104 in 2013 and by enhancing the joint efforts of the authority and the industry based on scientific measures. Such reforms would increase predictability about the length of the approval process. As for reimbursement, prices should reflect the sophistication of the product and its costs. While the MHLW and PMDA have a key role in ensuring safety, reforms are crucial to allow patients to benefit from the most advanced medical drugs and devices.

Relaxing the ban on mixed billing

Health-care providers can only be reimbursed by public health insurance if they limit their care to the treatments listed in the public insurance package, given the ban on mixed billing (Box 2). This constraint limits the input choices of providers and makes it difficult to keep up with the rapid pace of technological development in health care (Chino, 2007). At the same time, the prohibition on mixed billing makes high-quality services more expensive, as patients have to pay both for the services normally covered by health insurance, as well as the uncovered, higher-quality services, thereby reducing their use. While the

30. For PMA-equivalent products, 32% mentioned non-clinical trial data required in Japan and 27% cited additional clinical trials required in Japan. For 510(k) equivalent products, the proportions were 40% and 10%, respectively (ACCJ, 2008).

"specified medical costs" (SMC) list allows mixed billing in specific cases, there are complaints that the SMC has failed to keep up with the pace of technological change in some areas, such as new cancer treatments (Ikegami, 2006). Inclusion in public health insurance, which is adjusted every two years when the Central Social Insurance Medical Council revises medical fees, is a prerequisite for the diffusion of new health-care treatments.

Box 2. The issue of mixed billing of covered and non-covered health treatment

Patients wishing to combine a new medicine or treatment that is not included in the prescribed treatment in the health insurance package with services that are included must pay not only the cost of the additional treatment but also the cost of services that would normally be covered by health insurance. This discourages patients from choosing new drugs and treatments that have not been listed in public health insurance by making them more expensive. From the perspective of doctors, they can only be reimbursed by health insurance if they limit their care of a particular ailment to the treatments prescribed in the fee schedule. This regulation is sometimes referred to as the ban on mixed or balance billing. In addition, "off-label prescribing" – the use of drugs covered by public health insurance for a reason other than their accepted purpose – is also forbidden in Japan. These regulations are enforced by the committee that reviews insurance claims sent by providers and refuses to reimburse those that include the joint provision of covered and non-covered services and drugs and off-label prescribing.

However, the benefit package cannot fully keep pace with the emergence of new medical technologies and drugs and the changing needs of patients. To address this gap, some exceptions to the ban on mixed billing have been listed in the "specified medical costs" (SMC or *Tokutei Ryoyouhi*). *First*, some highly-advanced medical treatments that are under development in 128 designated hospitals have been exempted. Thus far, hospitals have requested that 165 services be added to the SMC. Of these, 58 were later added to the insurance package and ten were discontinued, leaving 97 on the list. *Second*, services chosen by the patient, notably amenities such as extra-charge hospital rooms, appointments for consultations and initial visits to large hospitals have been exempted.

In 2001, the government established the Council for the Promotion of Regulatory Reform with the goal of accelerating reforms. In the area of health, the Council proposed allowing mixed billing of covered and non-covered services as it would promote the infusion of private funding that would encourage the supply of high-quality services and meet the individual needs of patients (Ikegami, 2006). In addition, it would promote competition based on the quality of services rather than the current practice of increasing revenue by maximising quantity. The emergence of a private market for health care could be a positive factor for economic growth.

The proposed reform was strongly opposed by the MHLW and the Japan Medical Association, primarily on grounds of equity. The debate over mixed billing led to a compromise in 2004 between the MHLW and the minister for regulatory reform to expand the list of treatments in the SMC. In particular, a committee was formed to expedite the launch of clinical trials of drugs, during which time the drugs would be listed on the SMC, if the manufacturer indicates that it plans to market the drug in Japan after approval. In addition, 100 additional treatments were added to the SMC and the number of hospitals allowed to offer these treatments was expanded to about 2 000, although still subject to prior approval in each case. Following the 2004 agreement, spending on treatments for which mixed billing was allowed more than doubled to 4.9 billion yen in 2007, although the total amount (0.01% of total health spending) is small.

In November 2007, an individual successfully sued the government in the Tokyo District Court by claiming that the government violated his constitutional rights by refusing to allow him to apply his public health insurance to any of his cancer treatment because his treatment included uncovered services. The Japan Medical Association opposed this decision on the grounds that it would make the provision of medical care dependent on patients' financial status. The appeal by the government is still pending.

The ban on mixed billing is aimed at equality in health care. It clearly does promote equality between those who could afford to pay the non-covered services and those who cannot. On the other hand, it creates inequality between those who can afford to pay for both covered and non-covered services and those who are only able to pay for non-covered services, and therefore do not have access due to the prohibition on mixed billing. It could also be argued that the ban on mixed billing does not address more important

sources of inequality: those with higher incomes tend to work in healthier occupations, drive safer cars, live in safer neighbourhoods, eat healthier food and make other choices that have larger and more predictable effects on their health than the level of medical services (Fuchs, 1996).

Perhaps the most serious risk attached to removing the ban on mixed billing of covered and non-covered services is that it could undermine support for public health insurance in the long run. As upper-income households came to rely increasingly on the private market to meet their health-care needs, they may become less supportive of public health insurance, causing its coverage to shrink. A number of other concerns about mixed billing have been raised. *First*, it might promote the use of unsafe treatments and drugs, although, in practice, mixed billing could be limited to drugs and treatments that have been approved as safe and effective, as is the case with the SMC. *Second*, low-skilled physicians would lose patients to hospitals capable of providing more advanced non-covered services. However, such competition would encourage higher quality health care. *Third*, physicians may neglect basic care in favour of more profitable non-covered services in the absence of regulations requiring them to provide a certain quantity of basic services in order to be eligible for providing advanced care. *Fourth,* physicians and hospitals may foist unnecessary treatment on risk-averse patients, taking advantage of the knowledge asymmetry. Avoiding such an outcome would require having health insurers check billing statements for abuse and perhaps limiting the provision of uncovered services to certain doctors and hospitals.

It is important to consider the impact of any reforms on the growth of public health-care spending. On the one hand, easing the ban on double billing would promote the use of new treatments and drugs, and may thus accelerate the expansion of the public insurance package through the demonstration effect. The result would be to put upward pressure on public health spending, while enhancing the quality of care. On the other hand, some countries attempt to control public spending on health by excluding some treatments from public insurance, leaving them to be funded by out-of-pocket payments and private insurance. The rapid development of drug treatments over the past 20 years is likely to continue, particularly for conditions that have been difficult to treat in the past. Advances in knowledge of genetics and biochemical pathways are allowing the creation of drugs targeted at small groups of patients with a particular genetic characteristic (Richards, 2008). However, including expensive new drugs in public health insurance would divert resources away from other health-care priorities, raising difficult decisions. Allowing individuals to purchase such treatments out of their own pockets is one possible compromise.

In sum, allowing more mixed billing for a wider range of uninsured treatments to reflect the diversifying needs of patients and the rapid advance of technology would raise the quality of health care by making advanced treatment and drugs more accessible. It would also strengthen competition as health-care providers begin to offer such services. The ban on mixed billing appears to be unique to Japan (Saito and Suzuki, 2008), as the United Kingdom, which had a similar regulation, recently abolished it.[31] In Japan, there appears to be support for relaxing the ban on mixed billing. A 2008 HPIJ poll found that 77% of respondents agreed that mixed billing should be allowed for a wide range of treatments to broaden treatment options for the public. At the same time, patient groups expressed concern about rapid reform. The benefits need to be weighed against the long-term risk of undermining public health insurance noted above. The issue continues to be discussed by the Council for the Promotion of Regulatory Reform.

Addressing imbalances in the provision of health-care services

A number of shortages have emerged in recent years in the health care system. According to a January 2009 HPIJ poll, the most serious shortages are emergency care and obstetrics/paediatrics, cited by 19% and 18% of respondents, respectively. In 2007, more than 14 000 emergency patients were rejected

31. This is discussed in a report , "Improving Access to Medicines for NHS Patients" to the Secretary of State for Health (Richards, 2008). NHS and private treatments must be separated.

at least three times by hospitals before receiving treatment, according to a government survey.[32] The number of obstetricians fell by 12% between 1994 and 2006. The large stock of advanced medical equipment also indicates problems in the pricing system. Indeed, Japan has five times more MRI units relative to the population than the median OECD country and six times more CT scanners, nearly three times more than the United States (Carey *et al*., 2009). Not surprisingly, most of these machines are underutilised (Henke *et al*., 2009). The over-capitalisation of small medical clinics, with high-tech facilities and low utilisation, is found in other regulated sectors.

The supply of specific health services is determined by prices, which in Japan are set by the government as described above. Imbalances in health-care supply essentially reflect the failure of the government to set prices at the level necessary to elicit the appropriate level of supply for each type of treatment and drug. Admittedly, setting prices for thousands of medical treatments and more than 10 000 drugs is no easy task.[33] The fee structure is shaped by several principles (Ikegami, 2009a); *i)* maintaining the income balance among providers (for example, hospitals versus clinics) and clinical specialties; *ii)* reducing the fees for services that have experienced an increase in revenues or volume,[34] while raising fees for services that the government wants to encourage, such as home visits by doctors; *iii)* making relatively inexpensive procedures profitable for the providers and expensive procedures unprofitable; and *iv)* favouring primary care at the expense of high-tech care. Not surprisingly, health providers complain that the fee schedule does not correspond to the real cost of medical services (Matsuda, 2007). Given the *ad hoc* and arbitrary method of revising health-care fees, it is important to adopt a more rigorous and scientific system that gives more importance to cost/productivity studies showing the standard time that medical personnel need to perform each task. Moreover, the Council should be held accountable to provide information on the rationale for its decisions and analysis of its expected impact.

Regional imbalances in the availability of physicians and hospitals are another concern, particularly in the context of Japan's relatively low number of doctors. There are few mechanisms to achieve a balance, apart from regional limits on hospital beds to avoid over-supply. Physicians have the freedom to choose where to practice. In a system where medical fees are identical throughout the country, non-price mechanisms are needed to achieve regional balance. This could be accomplished by measures linking medical university education and the future working location of physicians.

Maintaining universal coverage in a context of rising relative poverty

A significant share of the population does not pay health insurance premiums. The share of households that is supposed to be covered by NHI but are delinquent in their premium payments increased from 19% in 2006 to 21% in June 2008, according to the Ministry of Health, Labour and Welfare. Given that the NHI is supposed to cover 40% of the population (Figure 5), more than 8% of the population is delinquent in their premium payments. One-third of this group has a short-term insurance card (up to three months) or a "qualifying certificate". Households with certificates are responsible for all of their medical bills. These costs can later be reimbursed but overdue premiums can be subtracted from the reimbursement. The remaining two-thirds (almost 6% of the total population) have normal insurance. In

32. In one incident in January 2009, an elderly Japanese man with head injuries after getting struck by a motorcycle was rejected by 14 hospitals, which cited a lack of specialists, equipment and staff. The man died 90 minutes later of blood loss at a facility that finally accepted him (*Japan Times*, 5 February 2009).

33. Cases of bribery involving members of the Council further complicate the task of making scientifically-based revisions of prices (*Japan Times*, 3 December 2004).

34. For example, the cost of a head MRI was reduced by almost one-third in 2002 when overall medical fees and prices were cut by only 2.7%.

2007, most of the 1.2% of the population (or 2.3% of households) receiving public assistance also received health benefits via public assistance.

Universal coverage requires improving compliance in paying premiums through a number of steps. *First*, including more non-regular workers, who are currently covered by the NHI, in employee-based health insurance would improve compliance. Moreover, it would reduce the incentives that have prompted firms to increase the share of non-regular workers in recent years, which poses both equity and efficiency problems (2009 *OECD Economic Survey of Japan*). *Second*, ensuring that low-income households – even if they do not qualify for public assistance – receive health insurance benefits in practice should be a priority, perhaps through a means test that allows low-income persons to be promptly exempted from premiums even if they do not qualify for public assistance. *Third*, better enforcement of premium payments would increase compliance.

In addition, a significant proportion of households limits the use of health care for financial reasons. According to an HIPJ poll in 2007, 26% of respondents had a specific medical problem during the preceding year but elected not to visit the doctor because of the cost (Table 7). Not surprisingly, the proportion is higher among low-income households (40%) than those with high incomes (16%). Moreover, it is high compared to other countries with similar data (Panel B), perhaps due to the relatively high co-payments in Japan, despite the ceiling. If monthly payments surpass 80 000 yen per month (about a quarter of the average wage), the co-payment rate for additional treatment falls to 1%. However, this ceiling may not be fully understood by the population. A January 2009 HPIJ poll found that 81% of the population has heard of the "High Cost Medical Treatment System", which places a limit on co-payments, but that only 55% understand at least part of it. It is important to lower the ceiling on co-payments to increase access to health care. This is particularly important as there is rising concern about being able to pay for health care in the context of the recession. In another HIPJ poll, the proportion of the population that is "very worried" that they will not be able to pay their medical bills in the event of serious illness jumped from 28% in 2007 to 43% in 2009, while another 44% are "somewhat worried". The share that is "very worried" is highest among those under age 40 (over 50%) and among part-time workers (55%).

Conclusions

The health-care system, which offers a standard level of care while keeping total health spending relatively low, appears consistent with the current preferences of the Japanese.[35] However, the pressure to increase health spending, dissatisfaction with quality, imbalances in the system and the significant number of persons who do not pay health insurance premiums point to the need for broad-based reforms, summarised in Box 3.

35. According to a January 2007 HPIJ poll, 57% favoured a "low-burden, low-benefit, equity-oriented" system that provides a standard level of health care to all citizens, while maintaining a low level of tax and social security premiums. Only 12% preferred a "high burden, high-benefits, equity-oriented" system. Another 25% opted for a "low-burden, low-benefit, self-choice" system in which health care exceeding the standard level is offered to individuals at their own expense, thus allowing the level of services to vary by income and preferences.

Table 7. Access to health care

Proportion that did not seek health care due to the cost[1]

A. In Japan

Income class[2]	Did not visit doctor for a medical problem[3]	Did not purchase a prescription drug[4]	Did not get follow-up recommended by doctor	Did not visit a dentist for dental care
High	16	4	9	13
Middle	25	11	16	23
Low	40	18	26	40

B. International comparison

	Japan	Australia	Canada	New Zealand	United Kingdom	United States
Did not visit doctor for a medical problem	26	11	5	20	3	24
Did not purchase a prescription drug	11	19	13	15	7	26
Did not get follow-up recommended by doctor	17	15	6	14	2	22
Did not visit a dentist for dental care	24	33	26	37	19	35

1. During the preceding 12 months. Based on a January 2007 poll of 1 076 persons.
2. High income (corresponding to top 20%) is defined as annual household income of more than 8 million yen and net financial assets over 20 million yen. Low income (corresponding to the bottom 20%) is defined as annual household income of less than 3 million yen and net financial assets of less than 3 million yen.
3. A follow-up survey in January 2008 reported similar figures of 18% (high income), 29% (middle income) and 39% low income.
4. A follow-up survey in January 2008 reported 2% (high income), 11% (middle income) and 16% (low income).

Source: Healthcare Policy Institute, Japan and 2001 Commonwealth Fund International Health Policy Survey.

Box 3. Summary of recommendations to reform the health-care system

Containing the growth of spending and financing it efficiently

- Promote the shift of long-term care away from hospitals toward more appropriate mechanisms using the fee schedule and closer monitoring of the classification of patients in hospitals.
- Improve the payment system by reforming the Diagnosis Procedure Combination to strengthen incentives for hospitals to increase efficiency and extending the case-mix based approach more broadly and by modifying the reimbursement rate for outpatient treatment in some cases to reduce the large number of consultations.
- Expand the use of generic medicine, for example by moving towards making them the standard for reimbursement.
- Use monetary incentives, notably higher tobacco taxes, to encourage healthy ageing.
- Introduce gatekeepers to reduce the number of unnecessary consultations with specialists.
- Implement electronic billing and consolidate health insurers as scheduled to reduce administrative costs and increase quality, while strengthening effective competition for the Social Insurance Medical Fee Payment Fund.
- Implement measures to collect and analyse hospital performance.
- Relax the rules that prevent equity finance to facilitate the restructuring of the hospital sector.
- Implement reform initiatives to address the fragmentation of insurers.
- Shift toward general tax revenue to finance health care for the elderly to avoid unduly increasing labour

costs.

Enhance the quality of health care

- Reduce the drug and medical device lag by reducing the cost of clinical trials in Japan, accepting more results from other countries, particularly in Asia, and ensuring that reimbursement levels are appropriate.
- Expand mixed billing to make treatments not yet covered by public health insurance more affordable, while addressing the inequality in premium payments to promote equality.

Addressing the imbalances in the health-care system

- Base the fee-setting process on rigorous cost and productivity studies.
- Reconsider wide usage of measures linking medical university education and the assignment of working places for doctors.

Ensuring universal coverage in the context of rising relative poverty

- Improve compliance in paying premiums.
- Ensure that low-income households – even if they do not qualify for public assistance – receive health insurance benefits in practice.
- Increase the participation of non-regular workers in employee-based insurance systems.

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