

DRG/PPS and DPC/PDPS as Prospective Payment Systems*¹

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Masami ISHII*²

Introduction

Japan introduced a national health insurance system in 1961, subsequently earning a high reputation as the world's most impressive healthcare insurance system thanks to the dedication of its health professionals. Indeed, health indicators published by the WHO and other organizations testify to this achievement.

However, as the birth rate declined and medical care became more advanced, addressing the problem of financing rising medical costs became an urgent issue in 1997. Introducing a prospective payment method for acute inpatient care to the medical fee system was one of the approaches considered to deal with this issue.

In July 2012, the South Korean government adopted a prospective payment system (PPS) based on a diagnosis-related group (DRG) pilot program for its health insurance system. This led to opposition from the medical profession, starting with the South Korean Medical Association, and an urgent symposium was called as medical professions prepared to strike. I gave a lecture on Japan's experiences at the symposium as a case study on a country neighboring South Korea.

This paper, presented to WMA uses the text of that lecture to reexamine DRG/PPS, a prospective payment method for acute inpatient medical care, and DPC/PDPS, Japan's own unique system.

DRG/PPS and DPC/PDPS

To clarify the terminology used here, DRG/PPS stands for diagnosis-related group-based prospective payment system, referring to a flat-rate

payment system for each hospital stay that is based on the diagnosis group. DPC/PDPS stands for diagnosis procedure combination per-diem payment system, a system in which provider reimbursement is calculated based on a flat-rate per-diem fee based on the diagnosis group. In other words, DRG/PPS is a system for prospective payment per inpatient visit for acute inpatient care, and DPC/PDPS is a system for prospective payment on a per-diem basis.

Background to Introduction of Prospective Payment System

Medical costs surged by 1997 due to the rapid aging of the population and dramatic progress and advancements in medicine and healthcare. Combined with a stagnant economy, these rising healthcare costs pressured government finances and threatened the sustainability of the national health insurance program. Responding to this situation, the government began to consider introducing a prospective payment system for inpatient visits as part of changes to the provider reimbursement system in order to ensure that the healthcare insurance program could be maintained into the future.

The government identified its most urgent tasks in controlling rising costs as optimizing healthcare costs, redressing the imbalance with economic growth, and carrying out radical reforms in the healthcare insurance system and healthcare delivery system. One of its specific proposals for revising the provider reimbursement system was to introduce a flat-rate payment program for acute inpatient care (DRG/PPS).

*1 This article is based on the presentation made at Symposium 'DRG/PPS: Issues and Alternatives' in Seoul, Korea, in June 28, 2012.

*2 Executive Board Member, Japan Medical Association, Tokyo, Japan (jmaintl@po.med.or.jp).

JMA's response

From its perspective as a representative of medical care providers responsible for Japan's medical care, the Japan Medical Association (JMA) promptly responded to the government's proposal with the release of "Ideas for Medical Structural Reforms" (first edition).

This paper emphasized the need for further consideration of approaches to social security system in a maturing society, particularly the structure of the medical care system, in light of the rapidly declining birth rate and aging population and the sharp drop in the workforce. The paper stressed that ensuring quality healthcare, securing access to appropriate medical services and maintaining an efficient provider reimbursement system are the basic principles in any approach to provider reimbursement. The problems with DRG/PPS were pointed out, and the following points were raised to warn against this system's introduction.

- Research on the introduction of DRG/PPS, target hospitals and trial periods should be adequately considered.
- In particular, healthcare providers in Japan are very diverse, which means that it is important to closely examine the impact of DRG/PPS's introduction.

JMA also pointed to the following problems with DRG/PPS.

- It would impede the introduction of new advanced technology to healthcare services provided by health insurance.
- It would create the problem of guaranteeing revenue regardless of the treatment provided.
- Individual medical needs could not be addressed appropriately.
- Patient selection would be risky, and medical providers would tend to avoid very ill patients.
- Measures would have to be taken to ensure and improve the quality of healthcare.
- Hospitalization periods would be shortened, which could lead to an increase in in-home care and rehabilitation costs.

In subsequent debates over the introduction of DRG/PPS, JMA endeavored to prevent its introduction through regular press conferences and other opportunities.

DRG/PPS in the Twenty-First Century Healthcare Insurance System

On August 7, 1997, the Ministry of Health and Welfare (current the Ministry of Health, Labour and Welfare) released "The Twenty-First Century Healthcare Insurance System (Ministry Proposal): Directions for Radical Reforms in the Healthcare Insurance and Healthcare Provider System." The Ministry proposed an evaluation system corresponding to the characteristics of the disease in question in which, in the case of acute diseases, "flat-rate payments will be made per case for a certain period from the hospitalization date as stipulated for each disease, in the case of diseases addressed with a standard treatment."

On August 29, the government and ruling party released "National Healthcare in the Twenty-First Century: Guidelines for Ensuring Quality Healthcare and Health Insurance for Everyone." In the section entitled "Building a New Provider Reimbursement System," the paper proposed that "a basic survey on a fixed-rate payment system based on the inpatient's disease should be carried out and its introduction considered."

In response to these two proposals, which both recommended a disease group-based prospective payment system for inpatient treatment, the Ministry of Health and Welfare decided to implement DRG/PPS.

What Can We Learn From the Mistakes of Managed Care in the US?

In July 2001, Kaechoong Lee, then an assistant professor at Harvard Medical School, visited Japan and gave a talk to the JMA entitled "What Can We Learn From the Mistakes of Managed Care in the US?," in which he discussed the effect of the introduction of DRG/PPS in the US and managed care.

According to Professor Lee, since Medicare, a health insurance program that covers people from age 65, was introduced in 1965, medical costs have increased every year, weighing heavily on government finances. DRG/PPS was introduced in 1983 to control Medicare spending.

Professor Lee talked about the problems that occurred at medical institutions under DRG/PPS, including shorter hospital stays, an increase in the number of hospital visits, preference given to patients with mild symptoms at admittance,

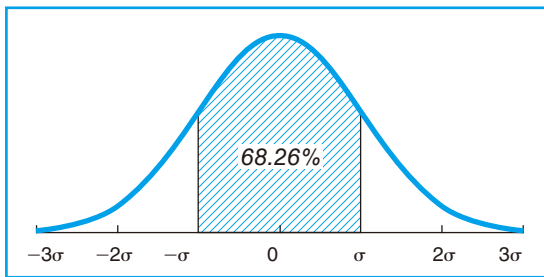


Fig. 1 Standard deviation in normal distribution and DRG/PPS

patient selectiveness to avoid severely ill patients, and stricter management of doctors, as well as incentives for management to reduce the workforce, close hospitals and close down unprofitable divisions.

He used the phrase “sicker and quicker” (patients discharged even though they were not yet well) to describe the impact that the introduction of DRG/PPS had on the clinical side.

The introduction of DRG/PPS created a buyers’ market, strengthened checks from outside on the medical services provided, and caused insurers to interfere with doctors’ professional autonomy. These factors are behind the rise of managed care in the US today.

Standard Deviation in Normal Distribution and DRG/PPS

A standard deviation of ± 1 in the normal distribution includes 68.26% of the total. Since DRG/PPS is a payment method based on standard medical care that does not take into account individual conditions, the area diverging from $\pm 1\sigma$ would not be included (**Fig. 1**).

Study on DRG/PPS

In November 1998, the Ministry of Health and Welfare carried out a survey on the enforcement of DRG/PPS entitled “Study on Trial Implementation of Flat-Rate Payment System for Inpatient Healthcare.” Ten hospitals, including eight national hospitals, were covered in the study, and 183 DRGs were designated. The study results showed that the average length of stay had shortened slightly, and hospital bed usage rates had fallen, but the re-hospitalization rate had increased.

In April 2001, the Ministry carried out a study entitled “Research Using Trial DRGs for Acute Inpatient Healthcare” in which, in addition to the previous 10 hospitals, 56 national and private hospitals were added (although they did not use PPS) for a total of 66 hospitals. A total of 532 DRGs were set for the study.

Study results

The study results were reported at the meeting of the Central Social Insurance Medical Council on January 14, 2004. The study indicated that there were differences between hospitals in terms of indicators for the efficiency of inpatient care, changes in the quality of healthcare, and changes in operations, even when taking into account differences in the makeup of DRGs. Moreover, a range of factors were behind these gaps and disparities, including factors specific to the hospital itself and DRGs that were not adequately elaborated. The study also pointed out that the study content would have to be revised to identify the distinct features of Japan’s inpatient care.

The study also reported the views of these hospitals, including the opinion that disease classifications had not been set for some frequently occurring diseases, the target diseases for which DRGs have been set need to be revised because there are major disparities in treatment methods, problems such as classification methods and classification structure need to be resolved, and the definitions of diagnosis classifications need to be revised, and problems such as calculation methods for the prospective scope should be resolved.

The report noted that average hospital stays for the target hospitals using PPS were reduced 4.4 days, from 28.4 days to 24.0 days, for the hospital with the longest average hospital stays, and reduced 1.8 days, from 16.4 days to 14.6 days, for the hospital with the shortest average hospital stays. However, average hospital stays at other national hospitals not using PPS also decreased, so that the reduction in the lengths of stay at the eight national hospitals using PPS was not very remarkable when compared to national hospitals not using PPS.

Looking at re-hospitalization rates for fiscal 2001 and fiscal 2002, shows that the rate rose 0.7 points, from 13.5% to 14.2%, at target hospitals, and increased 0.3 points at non-target hospitals, from 14.6% to 14.9%.

Of the 24 DRGs, the number of drugs admin-

Table 1 Changes in the number of hospitals adopting DPC

	Less than 100 beds	100–199 beds	200–299 beds	300–399 beds	400–499 beds	500 beds & more	Total
2003	0	0	0	0	1	81	82
2004	2	14	12	15	8	93	144
2006	6	30	47	71	46	159	359
2008	39	103	133	138	85	215	713
2009	130	259	261	231	135	262	1,278
2010	151	295	282	249	144	267	1,388
2011	163	313	295	257	248	271	1,547
2012	181	335	301	265	149	274	1,505
(Ref.) Number of general hospitals (2010 Medical Facility Survey)	3,174	2,343	779	574	298	419	7,587

(Source: Ministry of Health, Labour and Welfare.)

(regrouped)	Medium sized hospitals		Large hospitals	
	Less than 200	200–499 beds	500 & more beds	
2012	516/1,505	715/1,505	274/1,505	

Of the 274 large hospitals with 500 or more hospital beds, 80 were university hospitals.

istered and injections given decreased in 18 DRGs, the number of tests decreased in 19 and the number of procedures decreased in 17 at the target hospitals, which suggests that it is important to examine whether the introduction of DRG led to a reduction in the quality of medical care.

Moreover, the ratio of patients deemed to be cured was not very high even for diseases requiring surgical procedures, which would ordinarily be expected to have a high rate of success, so it is possible that doctors' standards for assessing the outcome at the time of hospital discharge and the place to which patients are discharged are likely inconsistent. The standards for assessment should be clarified when the survey is conducted.

For these reasons, although the average hospital stay was reduced at all of the hospitals participating in the trial study, it was also reduced at non-target hospitals, so we cannot conclude that this was an effect of the introduction of a flat-rate payment system. These target hospitals also saw a rise in patients' re-hospitalization rates and a reduction in drugs administered, injections, tests and procedures in some DRGs, but this requires more detailed analysis. Similar trends

were observed at non-target hospitals, so even this result cannot be considered to be definitive proof of the system's effectiveness.

Background of Introduction of DPC/PDPS

In the trial implementation of the prospective payment system carried out before the system was fully introduced, there were significant discrepancies in the hospitalization period depending on the patient, even when the disease was the same, and there were fewer differences between the prospective rate and the actual treatment rate in the case of PPS compared to DPC, in which payment is made per hospitalization. In addition, PPS offered more incentives to lower the per-diem unit price. Given this, DPC/PDPS in its current form, in which per-diem flat-rate reimbursements are made based on the length of stay, was introduced to 82 advanced treatment hospitals, primarily university hospitals, in April 2003.

After this system was adopted, more hospitals gradually adopted DPC/PDPS, until 1,505 out of 7,509 hospitals, or about 480,000 out of 900,000

Table 2 Changes in number of DPC-assessed hospital beds

	Less than 100 beds	100–199 beds	200–299 beds	300–399 beds	400–499 beds	500 beds & more	Total
2003	0	0	0	0	424	66,073	66,497
2004	177	2,261	3,152	5,088	3,507	75,145	89,330
2006	429	4,701	11,892	24,479	20,343	114,551	176,395
2008	2,820	15,839	33,027	47,505	37,363	149,534	286,088
2009	8,915	39,127	64,908	79,136	59,544	178,594	430,224
2010	10,099	44,196	69,983	85,612	63,548	181,710	455,148
2011	10,869	46,708	73,212	88,320	65,189	184,064	468,362
2012	11,994	50,078	74,571	91,071	65,606	186,219	479,539
(Ref.) Number of general hospitals beds (2010 Medical Facility Survey)	117,401	193,471	111,474	140,441	101,826	239,008	903,621

(Source: Ministry of Health, Labour and Welfare.)

(regrouped)

	Medium sized hospitals		Large hospitals	
	Less than 200	200–499 beds	500 & more beds	
2012	62,072/479,539		231,248/479,539	
			186,219/479,539	

Table 3 Results of DPC revisions

Revisions	Number of MDC	Number of injuries & sickness	Total number of DPC	Number of DPC eligible for prospective payment
April 2003	16	575	2,552	1,860
April 2004	16	591	3,074	1,726
April 2006	16	516	2,347	1,438
April 2008	18	506	2,451	1,572
April 2010	18	507	2,658	1,880
April 2012	18	516	29,727	2,241

(Source: Ministry of Health, Labour and Welfare.)

MDC: Major Diagnostic Category.

Number of DPC eligible for prospective payment: Number of DPC eligible for prospective payment at time of revision.

hospital beds, were expected to have adopted this system by April 1, 2012. This accounts for about 53.1% of beds for general hospitals.

Changes in the number of hospitals adopting DPC

As of April 1, 2012, DPC had been introduced to 1,505 out of 7,509 hospitals, which included 516 small and medium-sized hospitals with less than 200 beds, 715 hospitals with between 200 and 500 hospital beds, and 274 large hospitals with more than 500 hospital beds. Of these, 80 hospitals were university hospitals (Table 1).

Changes in number of DPC-assessed hospital beds

As of April 1, 2012, out of 897,919 hospital beds, 479,539 were in DPC-assessed hospitals, and of these 62,072 beds were in small and medium-sized hospitals with less than 200 beds, 231,248 beds were in hospitals with between 200 and 500 beds, and 186,219 beds were in large hospitals with more than 500 beds (Table 2).

Results of DPC revisions

Moreover, as a result of DPC revisions, there were a total of 2,927 DPC codes as of April 2012,

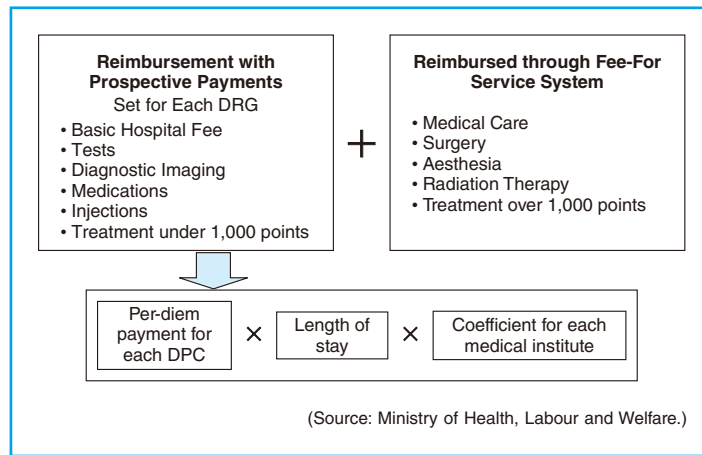


Fig. 2 Provider reimbursement system in DPC system

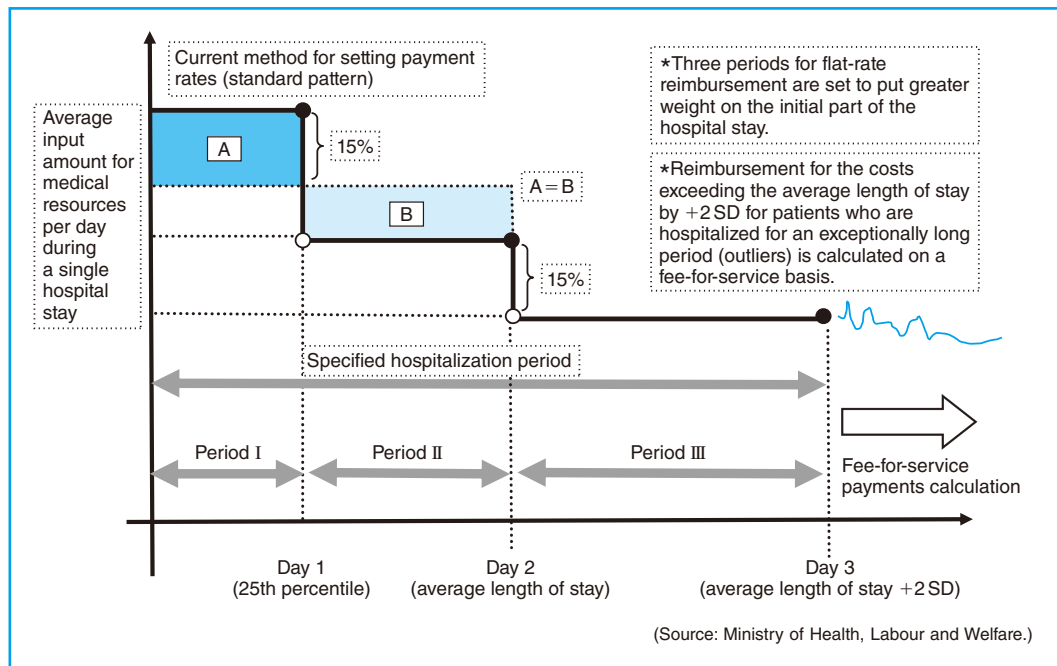


Fig. 3 Method for setting per-diem payment rates in DPC Payment Rate Table

of which 2,241 were included in the system at the time when the revisions were made (Table 3).

DPC System

Provider reimbursement system in DPC system

Under the DPC system, basic hospital stays, tests,

diagnostic imaging, medication and injections, and treatments under 1,000 points (currently 10,000 yen*³ <125 USD>) are reimbursed with inclusive payments set for each DRG, while medical care, surgery, anesthesia, radiation therapy and treatments over 1,000 points (10,000 yen) are reimbursed on the basis of the fee-for-service system (Fig. 2).

*3 US dollar/JPY exchange rate: US\$1=80 yen.

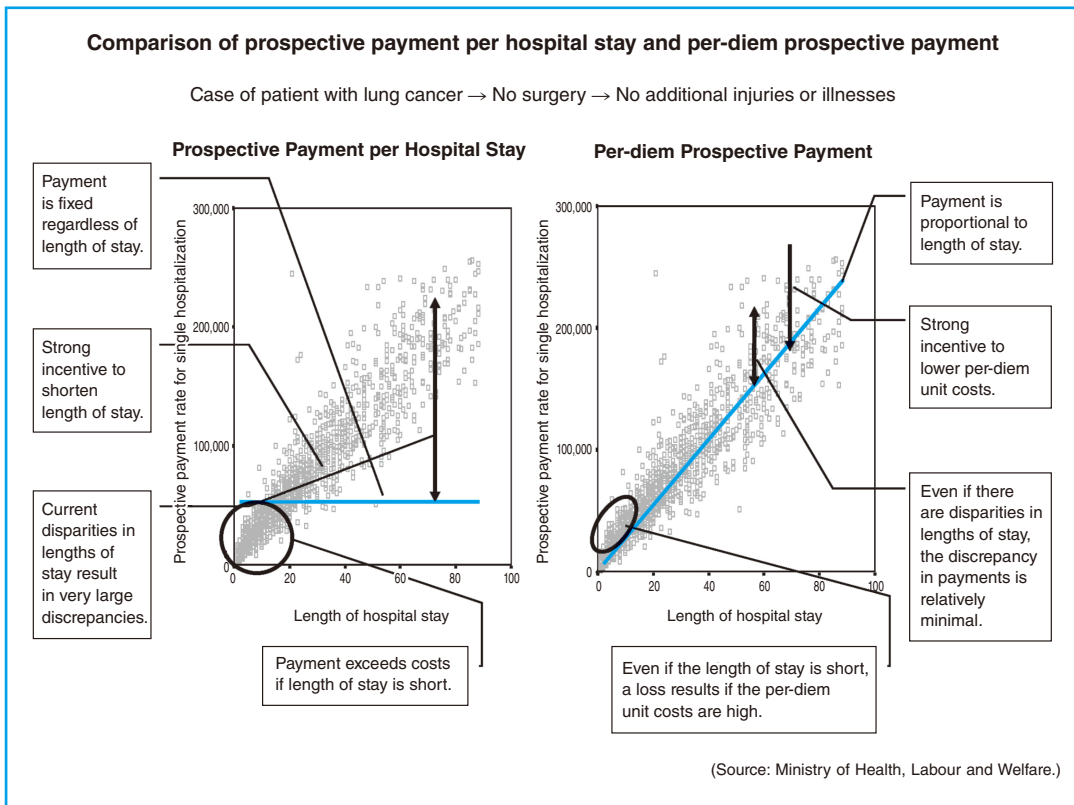


Fig. 4 Comparison of prospective payment per hospital stay and per-diem prospective payment

The inclusive payment is calculated by multiplying the per-diem payment rate set for each DPC by the length of stay and the coefficient specific to each medical institution.

Setting payment rates in DPC Payment Rate Table

The current method for calculating per-diem payment rates in the DPC Payment Rate Table gives more weight to the initial hospitalization period, so the hospitalization period is broken into three stages with flat-rate payment rates set for each one (Fig. 3).

Period I: Per-diem payment is 15% more than the average per-diem payment for the 25th percentile of the length of stay

Period II: The average per-diem payment for hospital stays up to the average length of stay is set so that it is the same as if the average per-diem payment rate were not set in stages—in effect, so that area A equals area B.

Period II: Payment is set at 85% of the previous day’s payment rate when the average length of stay is exceeded.

Payments are calculated on a fee-for-service basis when the length of stay is extremely extended and exceeds that at the advanced treatment hospitals (average length of stay + 2σ).

Special features of provider reimbursement in DPC system

One of the key features of provider reimbursement in the DPC system is that under PPS (blue line in figure), in contrast to PDPS, payments are set at a fixed amount, regardless of length of stay. This means, as indicated by the section under the blue line, the shorter the length of stay, the more profitable it will be for the hospital (Fig. 4).

With so much disparity in lengths of stay at present, this results in extremely large differences in payments. As a result, under PPS hospitals have strong incentives to shorten the length of stay. Next, if we look at the per-diem rate: pay-

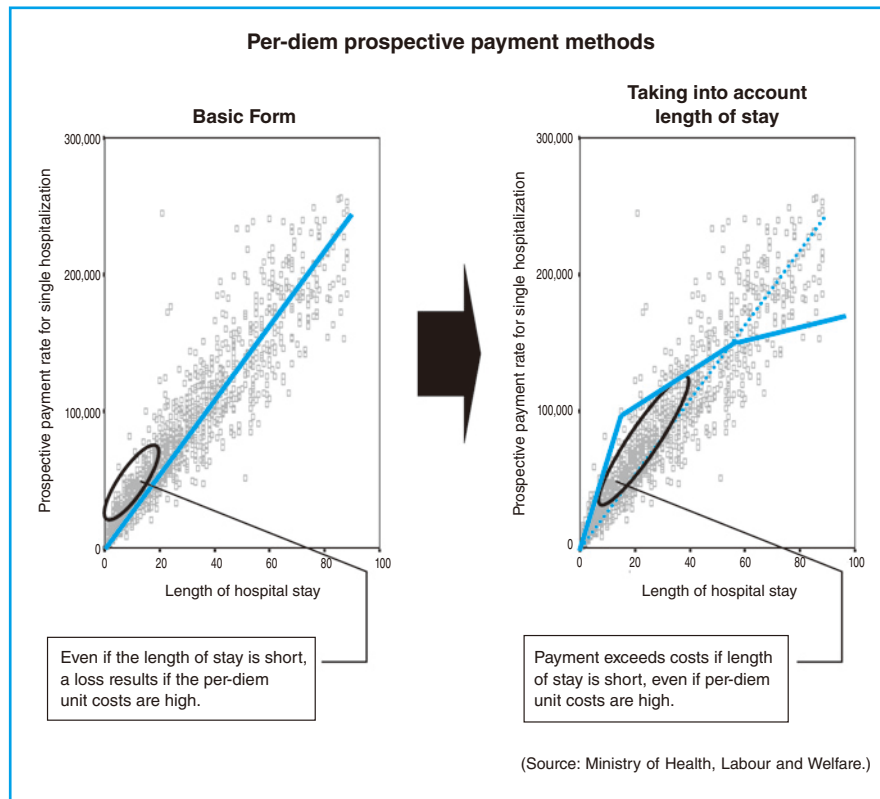


Fig. 5 Per-diem prospective payment methods

ment, we note that it is proportional to the length of stay, as shown by the blue line. This means that even if the length of stay is short, the blue line will rise if per-diem unit costs are high, resulting in a loss for the hospital. Even if length of stay is variable, the difference is relatively minimal, as shown in the figure. In this system, hospitals have incentives to lower per-diem unit costs.

If we look at the case in which the length of stay is taken into account by the method whereby the flat-rate payment is set for each of three hospitalization periods in the figure for per-diem inclusive payment, we note that even when the length of stay is short and per-diem unit costs are high, payment would be plotted under the blue line, resulting in a profit. The current DPC/PDPS system incorporates this method (Fig. 5).

JMA's View on Introduction of DRG/PPS

Since DPC/PDPS went into effect in April 2003, JMA has strongly expressed its opposition in regular press conferences whenever the DRG/

PPS approach is being recommended or considered again.

At a regular press conference held on January 10, 2007, JMA responded to the "Ministry of Health, Labour and Welfare's Introduction of Flat-Rate Payment Method per Inpatient Visit" by once again expressing its clear opposition to the introduction of DRG/PPS with the following points.

- DRG/PPS was introduced on a trial basis in 1998, but it did not achieve a reduction in the average length of stay, and was not introduced on a full scale. There are clearly many problems with re-introducing something that did not have an obvious effect.
- There are reports that DPC/PDPS would be replaced with DRG/PPS, but we are strongly opposed to the rushed introduction of DRG/PPS.
- This would curb medical costs more than necessary, and is simply inpatient management in the name of DRG/PPS. It will result in distortions in healthcare such as an increase in

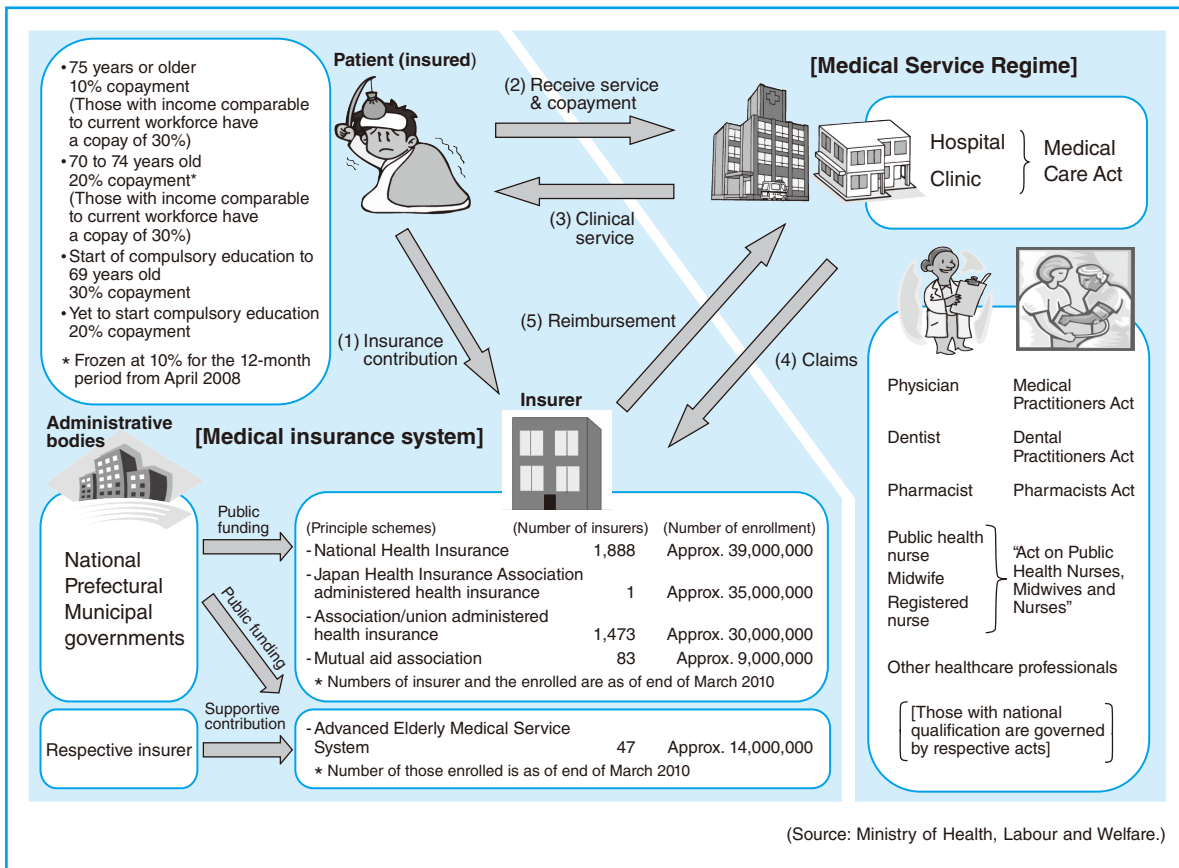


Fig. 6 Overview of medical service regime in Japan

re-hospitalization and excessive treatment on an outpatient basis. These distortions are not only detrimental to patient health but also do not serve the stated purpose of reducing medical expenditures.

Direction of DPC

A meeting of the Central Social Insurance Medical Council’s Subcommittee on Basic Problems on October 22, 2008 examined ways in which the inclusive payment system of DPC could be combined appropriately with fee-for-service payments. As a result of this, a committee of medical professions, including JMA members, made four proposals on the direction of DPC, which were basically approved.

It is particularly worth noting here that new rules for exiting the system were set.

- Direction of DPC**
1. Assessment of reimbursement made to acute care hospitals should be based on both DPC and a fee-for-service system.
 2. An approach to provider reimbursement that appropriately reflects the costs to acute care hospitals will be considered.
 3. Acute care hospitals that adopt DPC and a fee-for-service system will be assessed appropriately on a respective basis.
 4. Both hospitals preparing to adopt and hospitals that have adopted DPC can voluntarily withdraw from the DPC payment system under certain rules.

Japan’s Healthcare System

Overview

Japan’s public healthcare insurance program con-

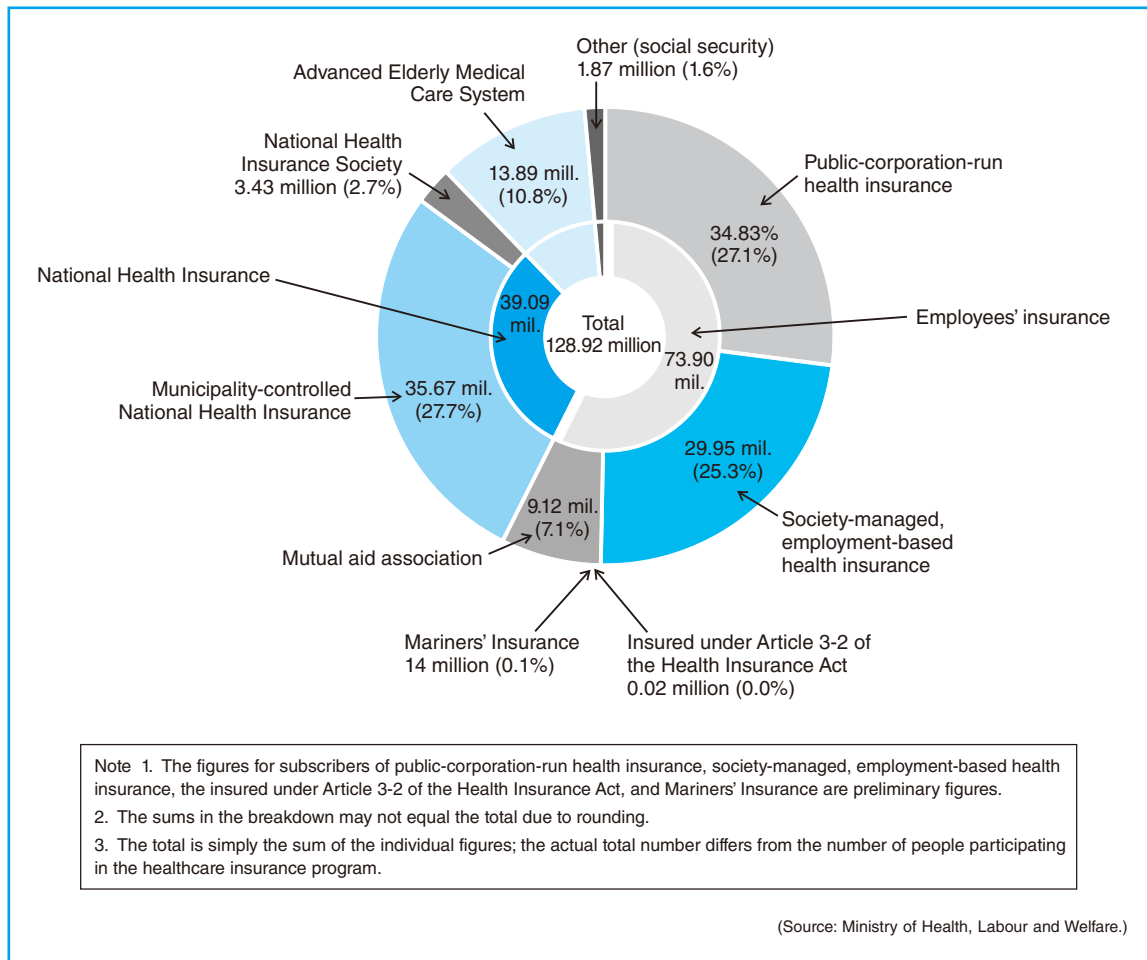


Fig. 7 Enrollees in healthcare insurance schemes (as of March 31, 2010)

sists of National Health Insurance (NHI), and the Japan Health Insurance Association, union health insurance, and mutual aid associations, which provide employee insurance, and the Medical Care System for the Elderly, which covers people aged 75 and over (Fig. 6).

Subscribers

Almost all Japanese citizens must belong to the public health insurance system.

Japan's healthcare insurance system is unique in that it covers all citizens in a plan that gives subscribers the same quality care "whenever, anywhere, for anyone" with equal obligations and fair payments (Fig. 7).

Provider reimbursement system

The reimbursement that the insurer pays to

medical institutions and pharmacies eligible for health insurance in return for medical services are determined by the Minister of Health, Labour and Welfare based on discussions held by the Central Social Insurance Medical Council (Table 4). Reimbursement is divided into assessments of skills and services for procedures, and price assessments for products; the price of pharmaceutical products is set by the National Health Insurance Drug Price Standard. The provider reimbursement payment rate table sets rates for individual technologies and services. One point currently corresponds to ten yen (0.13 USD).

Conceptual diagram of healthcare services provided by health insurance

The conceptual diagram of healthcare services provided by health insurance illustrates

Table 4 Medical service fee systems

(1) Structure of medical service fees	
○	Medical service fees are the fees received by medical institutions and pharmacies serving insured persons, as the price of insured medical services.
○	Determined by the Minister of Health, Labour and Welfare based on discussions in the Central Social Insurance Medical Council (announced by the Minister of Health, Labour and Welfare)
(2) Breakdown of medical service fees	
Medical service fees	{ Evaluation of technologies and services
	{ Evaluation of price of materials (for drugs, prices determined based on standard drug prices)
○	The medical service fees grading table is used to evaluate costs by grading individual technologies and services (10 yen/point; covered in announcements) Types of grading tables: medical, dental, prescription drugs

(Source: Ministry of Health, Labour and Welfare.)

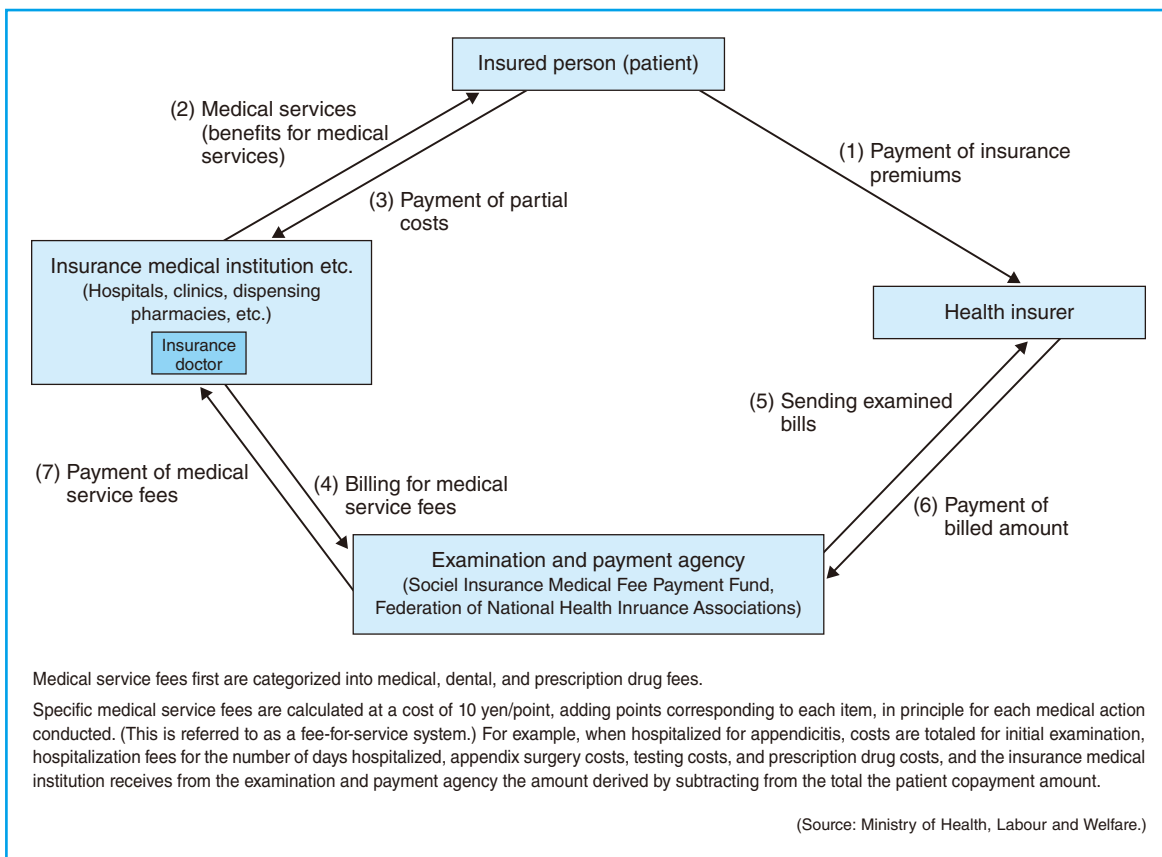


Fig. 8 Outline of insured medical treatment

the follow (Fig. 8):

(1) The insured person pays insurance premiums to the insurer.

(2) The patient visits a medical institution to receive healthcare services.

(3) Patients pay the copayment, a percentage of

Table 5 Central Social Insurance Medical Council

Deliberative body set up by the Ministry of Health, Labour and Welfare	
The Council serves as the Minister's advisory body in discussions on revisions to the medical insurance system and provider reimbursements.	
The Ministry revises insured medical services every two years based on the Council's recommendations.	
The Council is made up of 20 members appointed by the Ministry for terms of two years.	
7 members (payer side)	: Members representing health insurance, mariners insurance, NHI insurers and insured people, business owners and ship owners
7 members (provider side)	: Members representing doctors, dentists, and pharmacists
6 members (public-interest)	: Members who represent the public interest

the medical fees, at the reception desk of the medical institution. The working-age generations, comprised of people from the age of 15 to 64, pay 30% of their medical fees at the time of service.

- (4) The medical institution requests reimbursement from the payment assessor.
- (5) The payment fund submits the reviewed invoice to the insurer.
- (6) The insurer pays the invoiced amount to the payment assessor.
- (7) The payment fund pays the reimbursement to the medical institution.

Central Social Insurance Medical Council

The Central Social Insurance Medical Council is a deliberative body set up by the Ministry of Health, Labour and Welfare (Table 5).

The Council is the Minister's advisory body in discussions on revisions to the healthcare insurance system and provider reimbursement. It is made up of 20 members appointed by the Ministry for terms of two years.

When appointing members on the payer side, the Minister considers the views of people who are acknowledged as appropriately representing the perspective of people paying healthcare costs, and when appointing members on the medical provider side, the Minister considers the views of people who are acknowledged as appropriately representing the perspective of people providing local medical care. Appointments of public-interest members must be approved by both the Upper House and Lower House of the

Japanese Diet.

The council is made up of seven members from the payer side representing health insurance associations, mariners insurance, NHI insurers and insured people, business owners and ship owners. There are seven members from the provider side representing doctors, dentists, and pharmacists. The council also includes six public-interest members who provide a neutral perspective and represent the public good.

The Cabinet Office decides on the revised rate for provider reimbursement, while the Social Security Council's subpanel on medical insurance and subpanel on medical affairs decide on basic policy for provider reimbursement decisions. The Central Social Insurance Medical Council discusses individual changes to medical treatment rates.

Discussions by the Central Social Insurance Medical Council

On January 21, 2011, the Central Social Insurance Medical Council discussed the basic concept behind DPC. The Council discussed the issue proposed by the chairman of the DPC Assessment Sub-Panel: "Some observers have pointed out that the length of stay will actually get longer because it is not profitable for the hospital unless the length of stay exceeds a certain number of days under the current DPC/PDPS, so what do we think about the suggestion that we should shift to a flat-rate payment system based on hospital stays?"

However, since there are still discrepancies

in medical care between hospitals, introducing DRG/PPS would give hospitals strong incentive to discharge patients, leading to major social unrest. Moreover, the average length of stay is falling nationwide. It was reported that, given this, the sub-panel had reached a consensus that there is no need to shift to a per-stay flat-rate reimbursement system.

In the Council discussion, the JMA expressed its opposition to a shift to DRG/PPS on the basis that a method in which reimbursement is based on each stay would lead to the problem of hospitals trying to force reductions in lengths of stay. JMA emphasized instead that the problems with the current per-diem flat-rate reimbursement system should be addressed. Other members did not actively agree, and it was concluded that a shift to DRG/PPS would be premature.

Conclusion

A study of the hospitals implementing DRG/PPS on a trial basis did not confirm any effect in reducing the average length of stay, and the system was not introduced on a full scale. Moreover, JMA stressed its strong opposition in debates over its introduction out of concern that DRG/PPS could result in distortions in healthcare, such as simply inpatient care management, an increase in re-hospitalization and excessive treatment on an outpatient basis.

The current assessment of reimbursements for acute care hospitals is based on DPC/PDPS and fee-for-service. The acute care hospitals that select one of these systems should be appropri-

ately evaluated.

At the same time, rules that allow hospitals to withdraw from the DPC system in the event that standards are not met at hospitals adopting DPC are currently being established, thanks to JMA's advocacy.

However, DPC/PDPS have the following problems.

- DPC/PDPS may be effective in improving the financial stability of medical institutions in the short term, but cutting necessary tests, procedures and lengths of stay more than strictly required could hurt patients by lowering cure rates and raising re-hospitalization rates.
- The “adjustment factor” in the DPC system used to guarantee that revenue would be in line with revenue in the previous fiscal year will be abolished in stages through fiscal 2018. We surmise that this could significantly decrease the number of medical institutions participating in DPC with the aim of generating revenue. At the same time, there are concerns that the attrition of medical teams in acute care hospitals that joined DPC for the sake of revenue alone could increase before it is abolished.
- In contrast to the perspective of hospital managers, representatives from those providing advanced medical care in hyper-acute and acute cases, such as the Japanese Association for Acute Care and the Central Social Insurance Medical Council's DPC Assessment Sub-Panel, are currently speaking up in favor of a return to a fee-for-service system in place of DPC, in order to assure adequate care for patients with the most complex medical needs.