HGPI Health and Global Policy Institute

JHPN Japan Health Policy NOW

7. Financing

Updated: December 2018

What is Japan Health Policy NOW?

Created in 2015 by Health and Global Policy Institute (HGPI), Japan Health Policy NOW (JHPN) is the only centralized platform in the world on Japanese health policy available in both Japanese and English.

As the world's attention turns to Japan, one of the world's fastest ageing countries, there is increasing interest in Japanese health policy and a growing need to share information on Japan's health policy with the world. JHPN is committed to addressing this need by delivering factual information about the Japanese health system, Japanese health policy stories of interest, recent Japanese health policy news, and a resource list for those who want to learn more about Japanese health policy.

For more information, please see
http://japanhpn.org/en/jhpn/

7.1 Financing | Trends in Medical Expenditures

Medical expenditures in Japan for FY2016 totaled 41.3 trillion yen (according to preliminary reports), approximately 0.2 trillion yen less than the total from the previous fiscal year. This preliminary figure is also referred to as approximate medical expenditure because it excludes expenditures stemming from work-related injuries or those paid entirely out of pocket by individuals. The growth rate of the approximate medical expenditure compared to the previous fiscal year was -0.4%. Rather than being frequently observed, this negative annual growth rate was an isolated occurrence, likely due to significant increases in expenses, particularly in 2015, related to antiviral drugs for treating viruses such as Hepatitis C, followed by a year in FY2016 that saw such changes as the revision of medical service fees as well as significant decreases in expenses for antiviral drugs.[1]

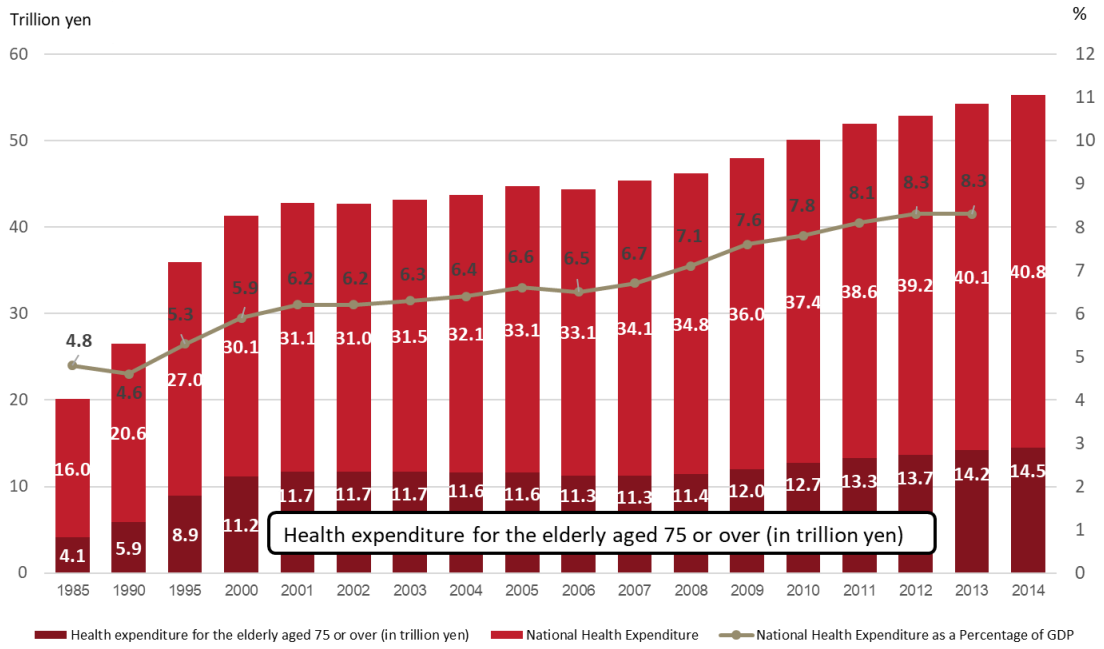
In this section, "medical expenditure" refers to the actual cost incurred at medical facilities for examinations, medications, and treatment for sickness or injury. Note that while "medical expenditure" refers to approximate medical expenditure, "national medical care expenditure" refers to the estimated costs of treating injuries and diseases covered by insurance. Specifically, "national medical care expenditure" includes costs for medical and dental treatment, pharmaceutical dispensing, hospital room and board, in-home nursing care, and treatments such as those from chiropractors/acupuncturists.

[1] Ministry of Health, Labour and Welfare "FY2016 Medical Expenditure Trends-MEDIAS-"
http://www.mhlw.go.jp/topics/medias/year/16/dl/iryouhi_data.pdf (Accessed 2018, Jan.25)

Factors Behind Rising National Medical Care Expenditures

As shown in Figure 7-1-1, national medical care expenditure increases every year. These national medical care expenditure figures represent estimates of the cost of treating injuries and illnesses at medical facilities within each fiscal year. Factors contributing to rising expenditures include those common among developed economies such as population aging, advances in medical technology, and increased demand for healthcare. In 2015, approximately 60% of national medical care expenditure was incurred by people aged 65 and over.[2] This group composed approximately 27.3% of the total population as of October 1, 2016. It is predicted that amidst a shrinking population, the rate of population aging will continue to rise, bringing the percent of people aged 65 or over to 33.3% or 1 in 3 by 2036 and resulting in even higher national medical expenditure.[3]

Figure 7-1-1: Trend in National Medial Expenditure Growth



Source: Created by Specified nonprofit corporation Health and Global Policy Institute based on data from the "Trend of medical expenditures in 2016" report by the Ministry of Health, Labour and Welfare

[2] Ministry of Health, Labour and Welfare "Basic Document on Health Insurance" http://www.mhlw.go.jp/file/06-Seisakujouhou-12400000-Hokenkyoku/kiso_h27.pdf (Accessed 2017, Jan.25)

[3] Cabinet Office "FY2017 White Paper on the Aging Society" http://www8.cao.go.jp/kourei/whitepaper/w-2017/zenbun/pdf/1s1s_01.pdf (Accessed 2017, Jan.25)

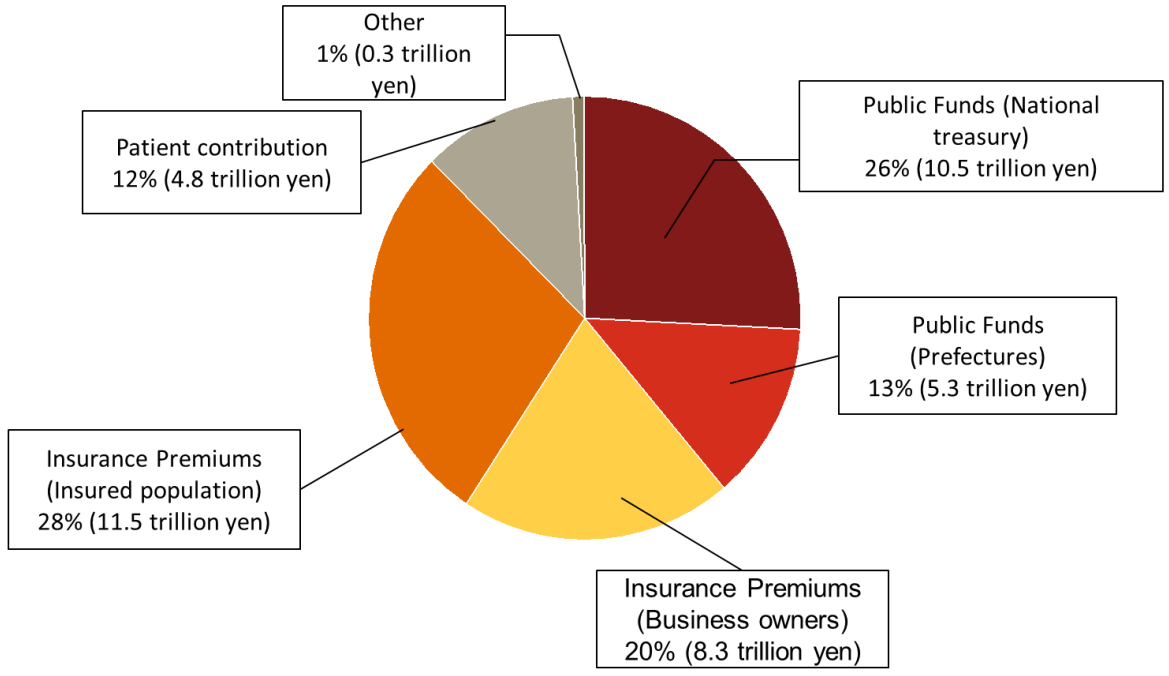
National Medical Care Expenditure by Funding Source

The topic of national medical care expenditure is crucial for considering the sustainability of Japan's universal health insurance system. This is especially clear when viewing national medical care expenditure by funding source—a total of 87% of all expenditures are funded via public sources (government funds and insurance premiums). The complete breakdown of funding sources is shown in Figure 7-1-2.

Compared to other developed nations, Japan spends relatively little on healthcare in absolute terms; however, total spending on healthcare as a proportion of GDP is higher than the OECD average. By this measure, Japan ranks sixth, just behind the United States, Switzerland, Germany, Sweden, and France.[4] That said, it should be noted that the OECD calculates healthcare spending as the sum total of not only national medical care expenditures for treatments reimbursed by health insurance, but also spending on over-the-counter medications (OTCs), long-term nursing care, preventative measures (vaccinations, checkups, etc.), natural childbirth, and optional hospital bed upgrades.

In recent years, total healthcare spending as a proportion of GDP has been increasing. Starting in 2006 and heading into 2016, healthcare spending as a proportion of GDP increased from 7.8% to 10.9%, a number that far surpasses the 2016 OECD average of 9.0%.[5] Japan is one of only a small number of OECD member economies that has reported rising healthcare spending as a proportion of GDP since 2009. However, the OECD does predict that healthcare spending in Japan will gradually level off in the future.

Figure 7-1-2: National Medical Expenditure by Funding Source in FY2014



Source: Created by Specified nonprofit corporation Health and Global Policy Institute and PwC Consulting LLC, Strategy& based on data from the "State of National Medical Expenditure in 2014" report by the Ministry of Health, Labour and Welfare

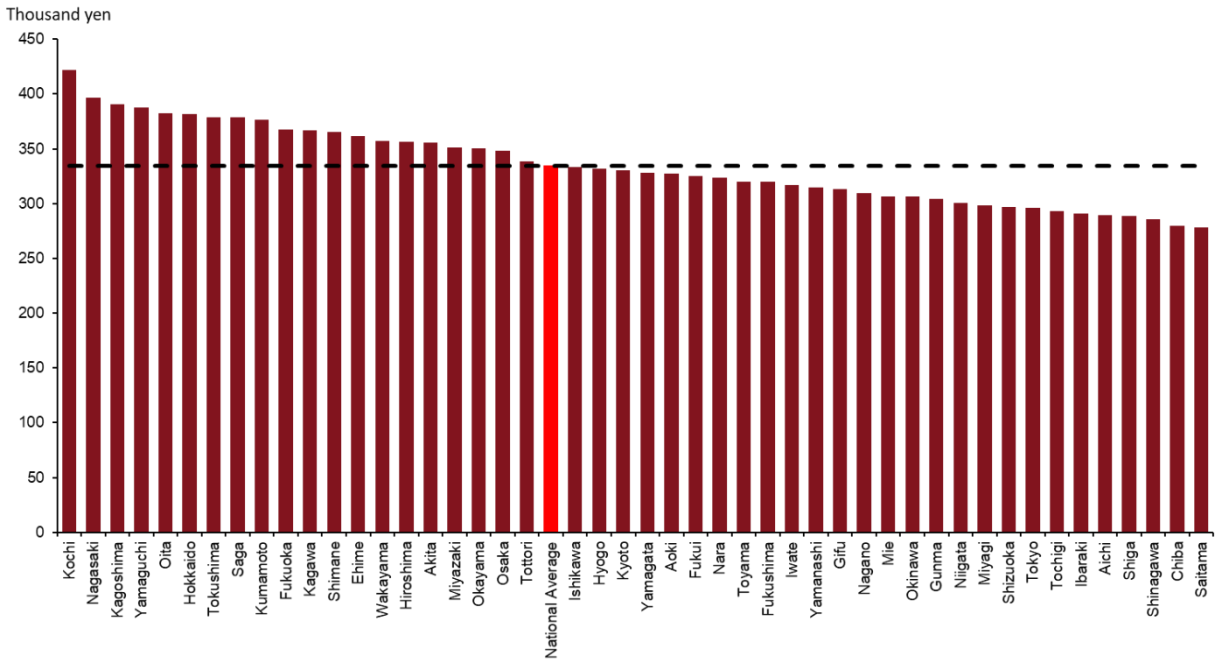
Japan faces regional disparities in national medical care expenditure. As shown in Figure 7-1-3, FY2014 medical care expenditure in Kochi Prefecture, the prefecture with the highest spending, was approximately 1.5 times higher than the expenditure of Saitama Prefecture, the prefecture which spent the least. The national government is currently aiming to reduce the age-adjusted per-capita national medical care expenditure gap by

[4] OECD "Health at a Glance2017: OECD Indicators" http://www.oecd.org/japan/Health-at-a-Glance-2017-Key-Findings-JAPAN-in%20Japanese.pdf (Accessed 2017, Jan.25)

[5] OECD "Health Statistics 2017" http://stats.oecd.org/index.aspx?DataSetCode=HEALTH_STAT (Accessed 2017, Jan.25)

half in response to this issue. Regional Medical Care Visions, Medical Cost Optimization Plans, and the strengthening of incentive measures for health-promotion as discussed in Sections 4 and 5 are all parts of the effort being made to resolve this problem.

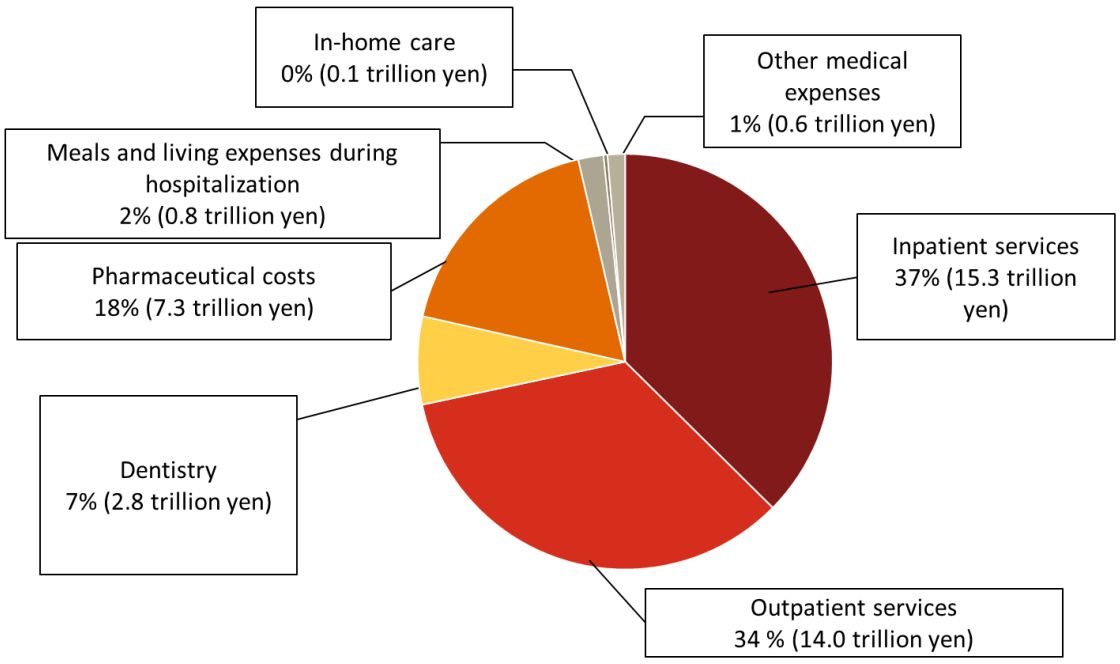
Figure 7-1-3: Per Capita Medical Expenditure by Prefecture, FY2014



Source: Created by Specified nonprofit corporation Health and Global Policy Institute and PwC Consulting LLC, Strategy& based on data from the "State of National Medical Expenditure in 2014" report by the Ministry of Health, Labour and Welfare

In terms of the ranking of national medical care expenditures by type of care, as shown in Figure 7-1-4, in FY2014 inpatient expenditures ranked highest, accounting for 37% of the total, followed by outpatient expenditures at 34%, and pharmacy dispensing expenditures at 18%. As touched upon in Section 4, one factor that has been identified behind the high inpatient expenditures is the longer than average length of hospitalization in Japan compared to other countries.

Figure 7-1-4: National Medical Expenditure by Medical Service Type, FY2014



Source: Created by Specified nonprofit corporation Health and Global Policy Institute and PwC Consulting LLC, Strategy& based on data from the "State of National Medical Expenditure in 2014" report by the Ministry of Health, Labour and Welfare

7.2 Financing | The Medical Service Fee System

"Medical service fees" refers to the fees that healthcare providers charge for medical services and pharmaceuticals covered by health insurance plans. These fees are set through a medical service fee point system in which 1 point equals 10 yen. All healthcare providers throughout Japan are required to comply with the medical service fee points and calculation requirements for health services, medical devices, and pharmaceuticals that are set by the MHLW, and providers are prohibited from charging medical fees in excess of these set amounts. In general, providers may not provide patients with combinations of insurance-covered and non-covered treatments (mixed medical treatments); however, mixed medical treatments are allowed for situations covered by the Special or Specified Medical Care Coverage System. The Special or Specified Medical Care Coverage System applies to situations involving advanced treatments and Patient-Proposed Health Services (PPHS) that are under evaluation for insurance coverage as well as elective treatments not intended for coverage.[6]

<Column> Has episode-based payment resulted in lower costs?

Another goal of the Japanese system of episode-based payment was to drive down costs, but is that goal being achieved? Actually, there is a possibility that health care costs have increased as a result of DPC. While DPC was successful in reducing the average length of hospital stay, an increase in the per-diem rate of inpatient care created an incentive for hospitals to increase the number of inpatients. The introduction of DPC also saw the start of "DPC consulting" services that, in some cases, help facilities manipulate coding, or up-code, in order to yield greater returns per patient.

Structure of the Medical Service Fee System (FFS and DPC)

The medical service fee system includes a Fee-For-Service (FFS) system and a Diagnosis Procedure Combination (DPC) payment system.

Since the foundations of the current health insurance system were established in 1961, medical service fees have come to be based on a Fee-For-Service (FFS) system. The medical service fee system reimburses providers from insurance funds based on medical service fee points, calculated by each medical facility according to the insurance-applicable medical services, pharmaceuticals, and medical devices actually provided.

Introduction of the DPC System

The Diagnosis Procedure Combination (DPC) payment system is a medical service fee framework unique to Japan that emerged in the early 2000's amidst growing concerns over healthcare costs, lengths of hospitalization, and the healthcare demands associated with the rapid aging of the population.

From 1998 to 2004, an episode-based payment system for acute inpatient care was introduced on a trial basis at 10 major hospitals. During this trial period, the current DPC framework using a per-diem payment system (PDPS) was introduced. Among other things, the trial revealed that, regardless of large variations in length of hospitalization among patients with the same disease, compared to fee evaluation based on a retrospective, per-hospitalization method, fee evaluation based on a prospective, per-diem method resulted in smaller gaps between the total service fee points and the actual resource costs and provided an incentive to lower per-diem costs.

Overview of the DPC System

The main purpose of the DPC system is to promote the standardization and transparency of healthcare. This system aims to improve the overall quality of healthcare while also addressing disparities among hospitals

[6] Ministry of Health, Labour and Welfare "Regarding the Uninsured Medical Expense System" http://www.mhlw.go.jp/file/06-Seisakujouhou-12400000-Hokenkyoku/20170925.pdf (Accessed 2018, Jan.25)

through the construction of an objective medical treatment information database that can be used to clarify medical outcomes and improvements. At the same time, the objective data of the DPC system gives patients the benefit of being able to reference standard treatments and pricing information. In addition, the DPC system is expected to contribute to shortening the average length of hospitalizations. As of April 1, 2016, approximately 55% of Japan's general hospital beds (490,000 beds in 1,667 hospitals) were covered by the DPC system.[7] Similar to the diagnosis-related groups/prospective payment system (DRG/PPS) introduced in the United States, the DPC system uses codes based primarily on combinations of diagnoses and procedures. There were a total of 4,244 such DPC codes as of April 2016.[8] The Japanese system is unique in that it includes per-diem, bundled/ episode-based codes that are partially integrated with a fee-for-service (FFS) system. Medical fees for inpatient treatments that correspond to DPC diagnostic groups are calculated using a flat-rate, prospective payment system, while fees for non-corresponding services are calculated using an FFS system.

Fee Calculation Methods in the DPC System

Basic hospitalizations, screenings (including diagnostic imaging), injections, medications, and procedures valued at less than 1,000 points are subject to bundled/episode-based evaluations. Fees for these treatments and services are calculated based on a combination of DPC code-specific per-diem points, lengths of hospitalization, and medical facility coefficients.

Surgeries, radiation therapy, anesthesia, and treatments valued at 1,000 points or more are not subject to bundled/episode-based evaluations. Fees for these treatments and services are calculated using a Fee-For-Service (FFS) system.

In order to eliminate variations in the set coefficients assigned to medical facilities offering similar levels of care, the government reconsidered facility type-specific coefficients. Facility coefficients now include the Basic Coefficient, Function Evaluation Coefficient I, Function Evaluation Coefficient II, and the Provisional Adjustment Coefficient. In the past, there were just three types of facility-specific coefficients—the Adjustment Coefficient and the Function Evaluation Coefficients (I and II), but after the FY2012 revision to the medical fee calculation system introduced the Basic Coefficient, the Adjustment Coefficient began to be gradually replaced by the Basic Coefficient and Function Evaluation Coefficient II. In the FY2018 revision, the Adjustment Coefficient will be eliminated.[9]

[7] Ministry of Health, Labour and Welfare “Outline of FY2016 Revision of Medical Service Fees (DPC System-Related Section)" http://www.mhlw.go.jp/file/06-Seisakujouhou-12400000-Hokenkyoku/0000115023.pdf (Accessed 2017, Oct.27)

[8] Ministry of Health, Labour and Welfare “Outline of FY2016 Revision of Medical Service Fees (DPC System-Related Section)" http://www.mhlw.go.jp/file/06-Seisakujouhou-12400000-Hokenkyoku/0000115023.pdf (Accessed 2017, Oct.27)

[9] Ministry of Health, Labour and Welfare "Future Consideration of DPC System-Related Coefficients by Type of Medical Facility (Draft)" http://www.mhlw.go.jp/file/05-Shingikai-12404000-Hokenkyoku-Iryouka/0000151103.pdf (2018, Feb.2)

Basic Coefficient: Used for basic facility services that cannot be evaluated using Function Evaluation Coefficients.
Function Evaluation Coefficient I: Used when considering the entirety of the medical facility as a service provider, including its personnel organization, facilities, and structure (structural factors).
Function Evaluation Coefficient II: Used when considering incentives (for roles/ functions that medical facilities should take on) to improve medical delivery system efficiency through the use of DPC/PDPS.

Fee calculation methods also vary according to the stage of hospitalization of which there are three. The flat, per-diem fee during Stage I, the earliest stage of hospitalization, is set higher than for Stages II and III. Stage II includes days spent in the hospital past Stage I through the day representing the national average length of stay according to DPC data. Although flat fees within this stage vary according to each diagnostic category, after taking into account the average per-diem medical resources used, fees in this stage are effectively lower than fees in Stage I. In Stage III, the final stage specified within the DPC system, per-diem rates are set even lower than in Stage II.[10] In exceptional cases, when hospitalizations extend beyond the end of Stage III, all additional medical service fees are then calculated using the fee-for-service (FFS) system.
There is much debate within Japan on whether the DPC system is producing results in line with its original purpose. The DPC was created through a unique combination of the United States' PPS and FFS systems. There have been many analyses published concluding that the use of this system cannot be linked to cost reductions as well as many publications arguing that the PPS system needs to be applied to an even greater range of services.

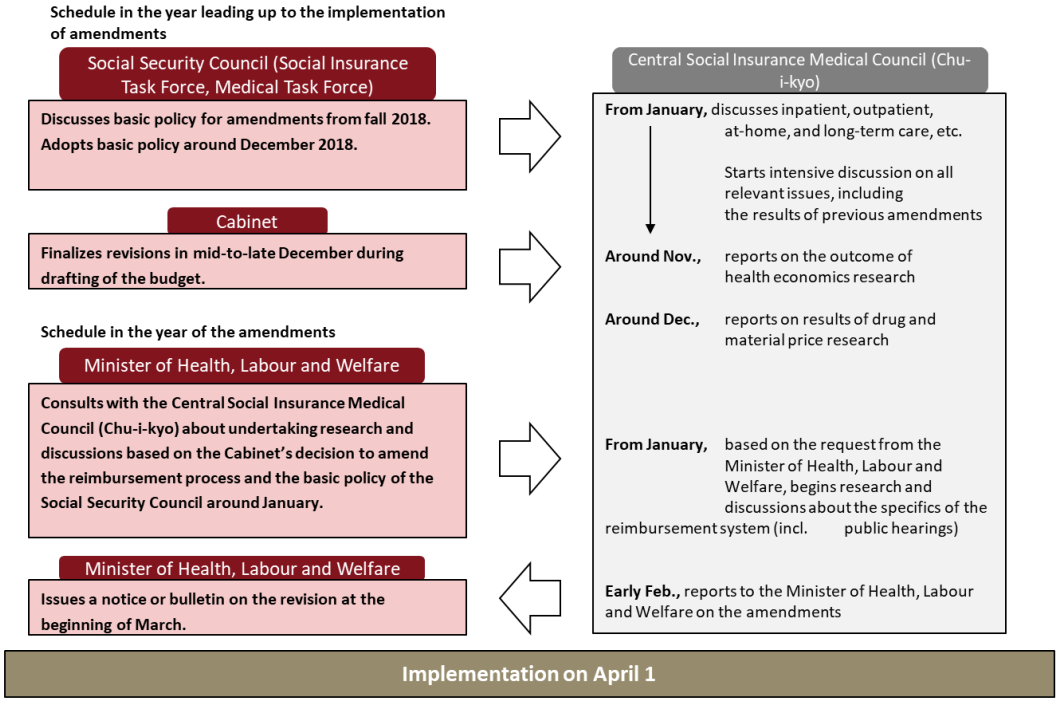
[10] Ministry of Health, Labour and Welfare "Overview and Basic Approach of the DPC System (DPC/PDPS※)) http://www.mhlw.go.jp/file/05-Shingikai-12404000-Hokenkyoku-Iryouka/0000186975.pdf (Accessed 2018, Feb.2)

The Revision Process for Medical Service Fees

(Road to revision approval via the Central Social Insurance Medical Council and Social Security Council)

Japan's medical service fee system is currently revised once every two years. When under revision, discussions are held in a variety of domains. As shown in Figure 7-2-1, over the course of the revision process, the Social Security Council, the Cabinet, the Minister of Health, Labour and Welfare, and the Central Social Insurance Medical Council (Chu-i-kyo) hold discussions and set goals. For instance, the Chu-i-kyo not only makes proposals over the course of this process, it also holds discussions and responds to inquiries from the Minister of Health, Labour and Welfare regarding medical service fees, regulations for medical facilities, and health professionals authorized to accept insurance. The Chu-i-kyo is composed of both members representing insurers, the insured, and employers (on the payer side), as well as members representing doctors, dentists, and pharmacists (on the medical side), and others representing the public interest.

Figure 7-2-1: Schedule for amendments to the medical fee reimbursement process



Source: Created by Specified nonprofit corporation Health and Global Policy Institute and PwC Consulting LLC, Strategy& based on data from the "2018 Timetable of amendment to the schedule of reimbursement of medical fees" (draft) of the Ministry of Health, Labour, and Welfare

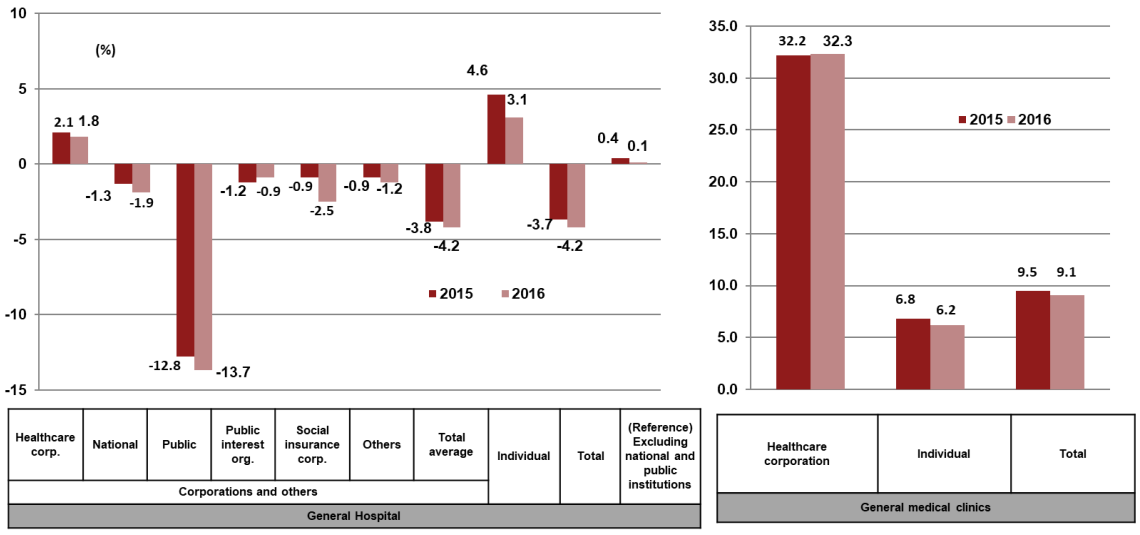
7.3 Financing | Medical Facility Management

Medical facility revenue is composed of the total remainder after subtracting patient copayments and claims paid by insurance examination and payment facilities. This revenue does not go only to physician salaries. It is also used to cover hospital and clinic overhead, as well as the cost of purchasing pharmaceuticals, the cost of purchasing medical supplies, and the cost of facility maintenance.

Data on Japanese Medical Facilities

MHLW conducts a regular Survey on the Current State of Health Economics that examines the state of healthcare management at hospitals, medical clinics, dental clinics, and insurance-covered pharmacies. This survey is conducted every two years, and the results inform future medical service fee revisions.[11]
Figure 7-3-1 shows profits and losses in FY2015 and FY2016 by medical facility type. The profit margin in FY2016 for hospitals overall was -4.2%, although this figure jumps to +0.1% when excluding national public hospitals. This is thanks to the positive effect of the FY2014 medical service fee revision on most hospital profit margins (+0.4%→+0.6%). Many hospital types are losing money overall, with public hospital profit margins being particularly low.

Figure 7-3-1: Comparisons of profits and losses by healthcare facility and management between 2015 and 2016



Source: Created by Specified nonprofit corporation Health and Global Policy Institute and PwC Consulting LLC, Strategy& based on the results of the "21st Survey on economic conditions in healthcare" by the Ministry of Health, Labour and Welfare

Although most public hospitals are in debt, as these hospitals bear responsibility for pro bono care as well as most care in remote areas, a portion of their debts are subsidized by tax revenues. Reasons for the high amounts of debt among public hospitals include cost-related problems as well as shrinking patient numbers. Especially at

[11] Ministry of Health, Labour and Welfare "Survey on the Current State of Health Economics (Survey of medical facilities etc.)" http://www.mhlw.go.jp/bunya/iryouhoken/database/zenpan/iryoukikan01.html (Accessed 2017, Dec.14)

smaller public hospitals, although average service prices are increasing, profits are decreasing due to falling patient numbers.[12]

In addition, salary rates, pharmaceutical costs, and depreciation expenses are higher at public hospitals compared to hospitals in general. In response to this situation, actions are being taken based on the "New Public Hospital Improvement Guidelines" including initiatives for the improvement of healthcare management, adjustments to hospital bed functions in consideration of regional healthcare needs, and downsizing.

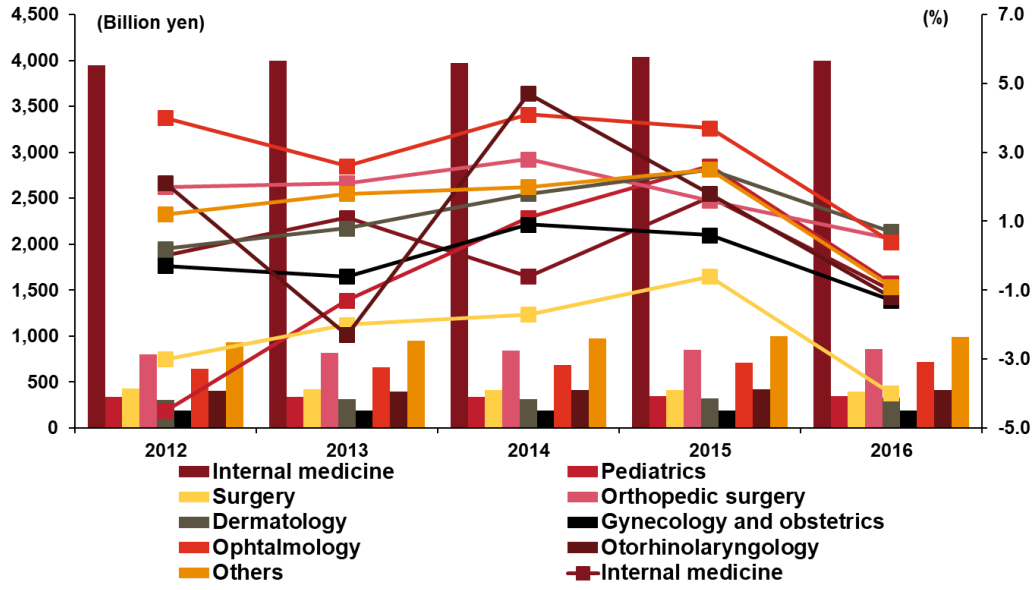
Meanwhile, as in previous years, medical clinics remain profitable. That said, profit margins are shrinking. At the time of the last revision in FY2014, the clinic profit margin was 15.5%, but in FY2016, it was 9.1%.

It's important to keep in mind that the facilities sampled for the Survey on the Current State of Health Economics vary between surveys, so it is not possible to directly compare recent survey results with past results. Furthermore, since the Survey is set to only a sampling of medical facilities, there is always the chance that results do not accurately reflect the true distribution of profit margins across Japan.

[12] Ministry of Finance "Supplementary Explanation Document (FY2018 Revision of Medical Service Fees, 21st Survey on the Current State of Health Economics)" http://www.mof.go.jp/about_mof/councils/fiscal_system_council/sub-of_fiscal_system/proceedings/material/zaiseia291108/01.pdf (Accessed 2017, Dec.14)

Figure 7-3-2 shows medical expenditures by specialty. Expenditures vary among specialties, with otolaryngology and otolaryngologic surgery expenditure trends differing most greatly from trends related to other specialties. Pediatrics, pediatric surgery, and obstetrics/gynecology have consistently shown negative growth rates. Internal medicine ranks highest in terms of total expenditures due to recent measures such as the promotion of primary care, and because this specialty treats the largest number of patients. In comparison, expenditures were more than four times lower for orthopedic surgery, the specialty with the second-highest expenditures.

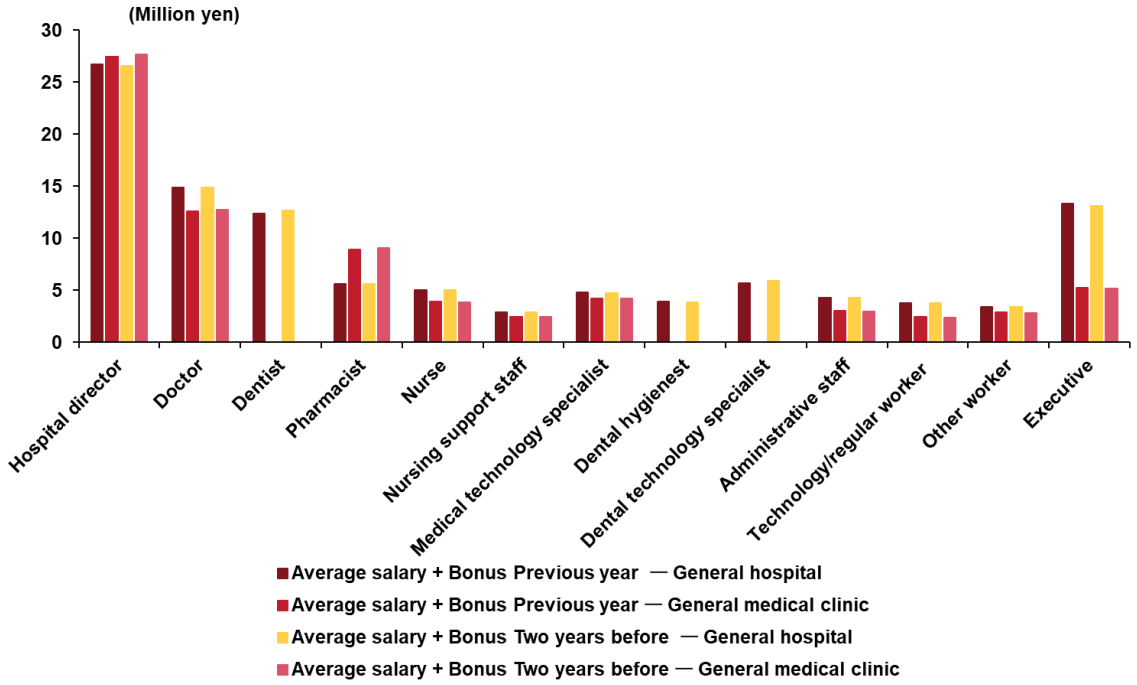
Figure 7-3-2: Clinical, inpatient, and outpatient medical fees, and fee growth rates per major medical specialization



Source: Created by Specified nonprofit corporation Health and Global Policy Institute based on the "2016 – Trends in medical expenditure" report by the Ministry of Health, Labour and Welfare

Looking at average remuneration (salaries and bonuses) for full-time employees working at medical facilities, as shown in Figure 7-3-3, totals are particularly high for hospital directors and physicians at both hospitals and medical clinics, especially compared to other full-time employees. Other than full-time pharmacists and executives, there are not large differences within professions depending on the facility type. This was true of hospitals and medical clinics in general even when comparing data from one fiscal year to the next.

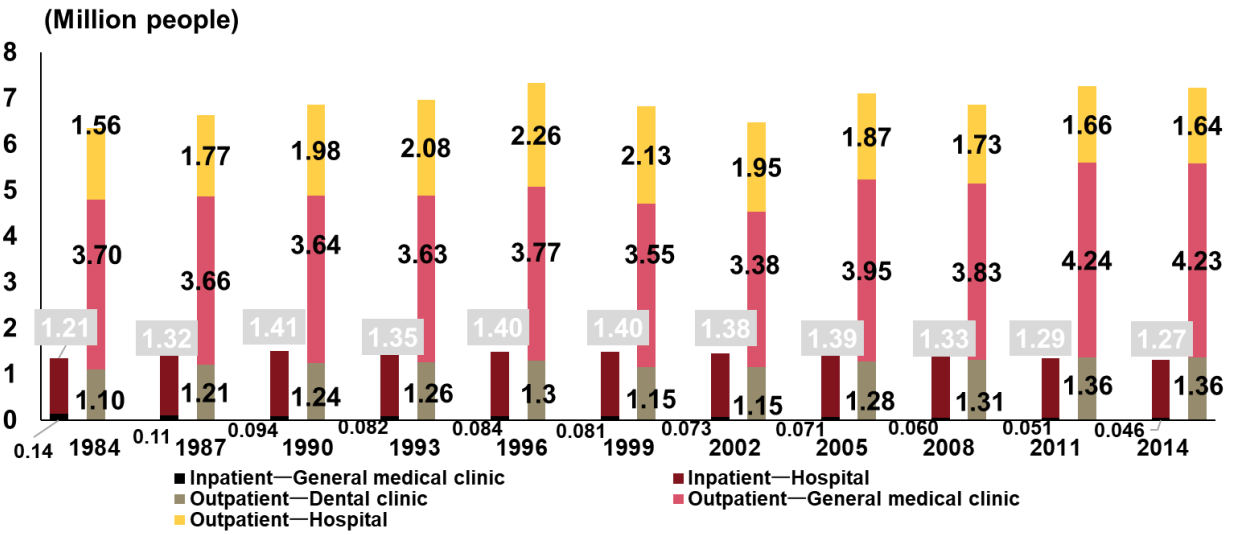
Figure 7-3-3: Per-capita salary and bonus for full-time workers in medical-related fields (FY2015-FY2016)



Source: Created by Specified nonprofit corporation Health and Global Policy Institute based on the results of the "21st Survey on economic conditions in healthcare" by the Ministry of Health, Labour and Welfare

Looking at the annual trends in terms of estimated numbers of patients per facility type (as shown in Figure 7-3-4), outpatients exceed inpatients. This is to be expected since the incidence of serious diseases requiring hospitalization is low compared to that of diseases for which outpatient care is sufficient. Both inpatient and outpatient numbers increased slightly from 1984 to 1996, but thereafter the number of outpatients leveled off. Since 2011, the number of hospitalized patients has reached a level nearly equivalent to the level in 1984.

Figure 7-3-4: Annual Trends in number of patients per facility type



Source: Created by Specified nonprofit corporation Health and Global Policy Institute based on the results of the "2016 survey on patients" by the Ministry of Health, Labour and Welfare