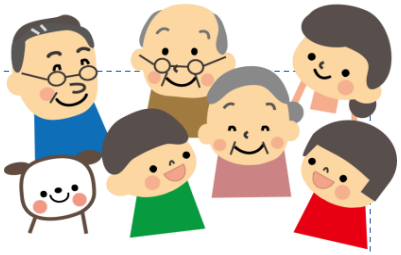
The history and role of Japan's public health care system
: Looking ahead to addressing aging



September 3

Boston Consulting Group Senior Advisor
Iwate Medical University Faculty of Medicine Visiting Professor
Former Policy Advisor, Cabinet Secretariat, Health and Medical Strategy Office
Former Director-General of the Medical Affairs Bureau of the Ministry of Health, Labour and Welfare
Toshihiko Takeda

The history and role of Japan's public health care system
: Looking ahead to addressing aging

INTRODUCTION:
CHARACTERISTICS OF JAPANESE MEDICAL CARE

JAPAN'S HEALTHCARE SYSTEM AND MEDICAL INSURANCE SYSTEM ARE UNIQUE WORLDWIDE

Japanese medical care

- Japanese “Universal Health Insurance” system
  (With “Health Insurance Card”, anyone can go any madical institutions at any time)

- Medical Care Delivary System, mainly by private medical institutions

(“Free Practice System”: It is a sytem which allows any physician can establish a practice, provided that they submit a notification to the local government.)

- “Free Medical Specialty Advertising System”

(It is a system which allows physicians to claim any specialty regardless of their field of expertise or years of experience.)

- Free Access

Management of medical care in Japan

- Introduced and raised patient copayments under free access
- Financial incentives to promote differentiation of functions under the “Medical Fee Schedule” (incentives)
- Promotion of local autonomy and introduntion of local medical plan to limit hospital beds
- Providing information for patients’ selection
  (deregulation of advertising restrictions, prodiving information to the public)

The basics of Japan's healthcare policy

- Keep ensuring access to medical care <Top priority>
  (e.g., ensuring a stable supply of medicines)

- Improving the quality and efficiency of medical care (=pursuing optimal medical care)

- Emphasis on prevention
  (prevention of lifestyle-related diseases + prevention of “frailty”)

- From medical care that “cures” to medical care that “cures and supports” (promoting and establishing community-based comprehensive care systems)

(Personally, I would also like to add, "From medicine to food" and
"The three “life”s = as “life”, as “livelihood”, as “lifetime = emphasizing “IKIGAI” :sense of fulfillment in life.")

The basics of Japan's healthcare policy

- Ensuring access to medical care
  (e.g., ensuring a stable supply of medicines)

・Stable supply of pharmaceuticals
・Countermeasures for uneven distribution of doctors

- Improving the quality and efficiency of medical care (=pursuing optimal medical care)

- Emphasis on prevention
  (prevention of lifestyle-related diseases + prevention of frailty)

- From medical care that “cures” to medical care that “cures and supports”
  (promoting and establishing community-based comprehensive care systems)

(Personally, I would also like to add, "From medicine to food" and
"The three “life”s = as “life”, as “livelihood”, as “lifetime = emphasizing “IKIGAI” :sense of fulfillment in life.")

Can it be integrated and systematized?

The basics of Japan's healthcare policy

- Ensuring access to medical care
  (e.g., ensuring a stable supply of medicines)

- Improving the quality and efficiency of medical care (=pursuing optimal medical care)

- Emphasis on prevention
  (prevention of lifestyle-related diseases + prevention of frailty)

- From medical care that “cures” to medical care that “cures and supports”
  (promoting and establishing community-based comprehensive care systems)

(Personally, I would also like to add, "From medicine to food" and
"The three “life”s = as “life”, as “livelihood”, as “lifetime = emphasizing “IKIGAI” :sense of fulfillment in life.")

・The basic of “Medical Fee Schedule” is based on the new “Medical Fee Schedule" 1958.
・For in-patient care, DPC (Diagnosis Procedure Combination) was introduced in 2004.

The history and role of Japan's public health care system
: Looking ahead to addressing aging

OVERVIEW
OF JAPAN'S MEDICAL INSURANCE SYSTEM

LET'S TAKE A LOOK AT AN OVERVIEW OF JAPAN'S MEDICAL INSURANCE SYSTEM.

Overview of Medical Service Scheme in Japan

•75 years or older
10% copayment
Those with income equivalent to that of working people will bear 30% of the cost, and from October 1, 2022, those with income above a certain level other than working people will bear 20% of the cost.

•70 to 74 years old
20% copayment
Those with income equivalent to that of working people will bear 30% of the cost

・From compulsory education to age 69
30% copayment

•Yet to start compulsory education
20% copayment

Patient (insured)

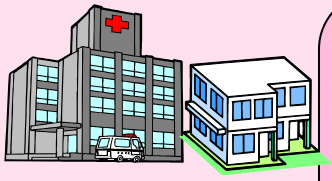
Patient burden: 5.4 trillion yen

(2) Receive service & pay copayment

(3) Provide Clinical service

Medical expenses 46.7 trillion yen

[Medical Service Providing Scheme]



Hospital 8,122 1,481,183 beds
Clinic 104,894 75,780 beds
Dental clinics: 66,818
Pharmacies: 62,828
*Figures are as of October 1, 2023 (Source: 2023 Medical Facility Static & Dynamic Survey)*Pharmacies are as of the end of March 2024 (Source: 2023 Health Administration Report)

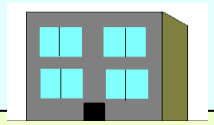
Insurance premiums 23.4 trillion yen

(1) Insurance contribution

(5) Reimburse-ment

(4) Claims

Insurer



Physician 343,275
Dentist 105,267
Pharmacist 323,690
Registered nurse 1.32 mil
Public health nurse 0.67 mil
Midwife 0.42 mil

* Doctors, dentists, and pharmacists are as of December 31, 2022 (2022 Statistics on Doctors, Dentists, and Pharmacists).* Nurses, public health nurses, and midwives are based on the number of employed persons, compiled by the Nursing Division of the Medical Affairs Bureau, Ministry of Health, Labour and Welfare, based on the "2020 Medical Facility Dynamics Survey" and the "2020 Health Administration Report (Biennial Report)" of the Ministry of Health, Labour and Welfare.

[Medical insurance system]

Administrative bodies

National
Prefectural
Municipal governments

Public funding

Public funding

Insurers

Supportive contribution

(Principle schemes)	(Number of insurers)	(Number of enrollment)
-"National Health Insurance"	1,716	Approx. 24 million
-Japan Health Insurance Association administered health insurance	1	Approx. 39 million
-Association/union administered health insurance	1,383	Approx. 28 million
-Mutual aid association	85	Approx. 10 million
-Advanced Elderly Medical Service System	47	Approx. 19 million

Japanese “Universal Health Insurance” system

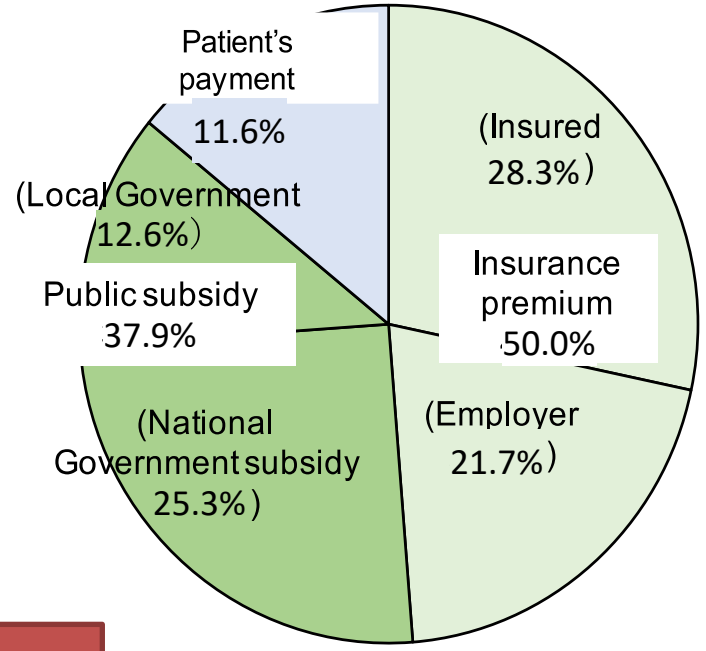
- Our country has realized the world's highest level of life expectancy and healthcare standards through the Japanese “Universal Health Insurance” system.
- It is necessary to ensure a safe and secure living of the citizens continuously by firmly maintaining the Japanese “Universal Health Insurance” with the current social insurance system.

Characteristics of Japanese “Universal Health Insurance” system

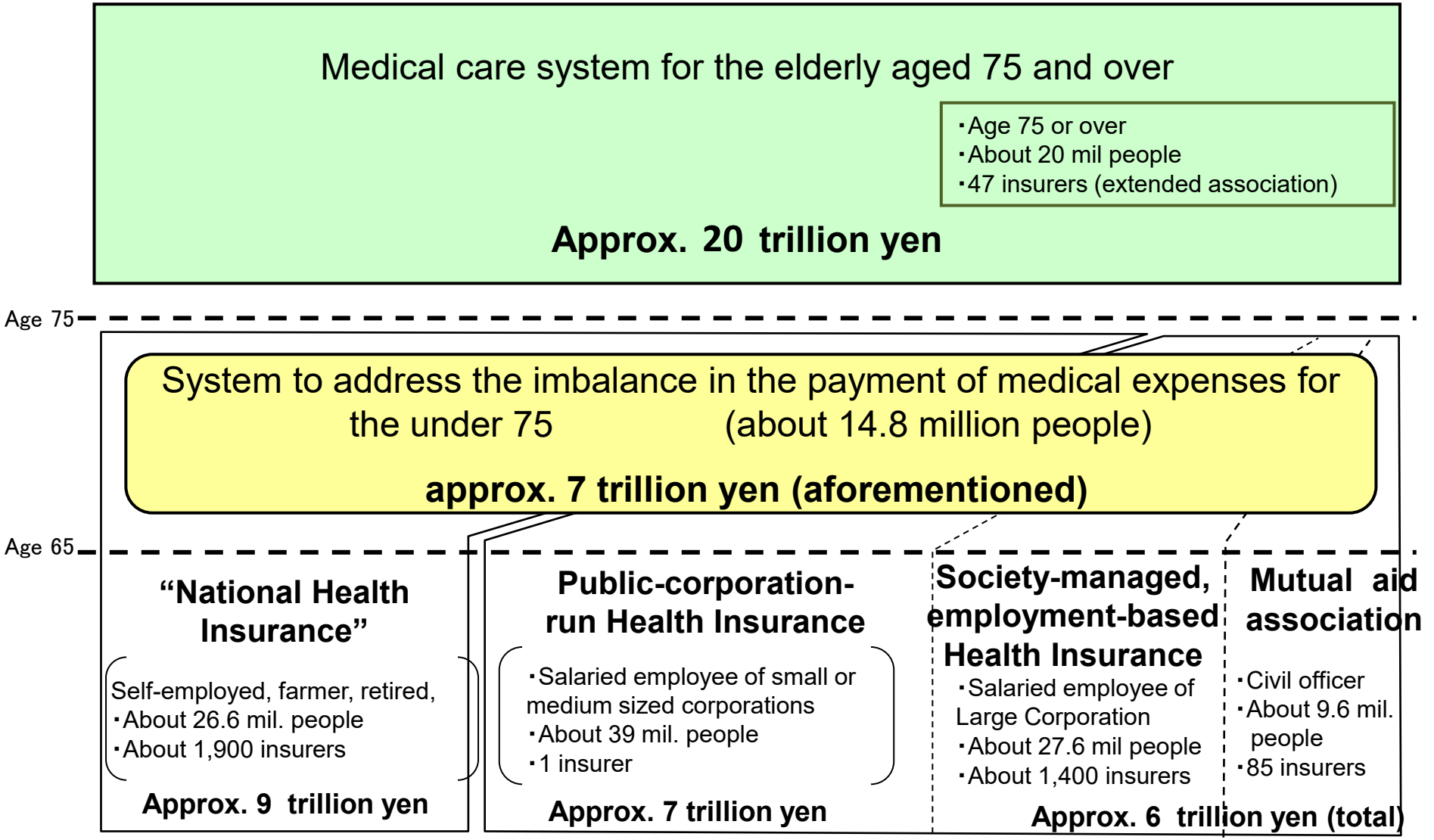
1. **Covering all citizens** by public medical insurance
2. Freedom of choice of medical institution (**free access**)
3. **High-quality** medical services with **low costs**
4. The social insurance system, **with large Government subsidy** to maintain the “Universal Health Insurance”

This is official explanation.
Sounds good… But is it sustainable?

Proportion of the burden of national medical expenses in Japan (by resource) (FY2016)

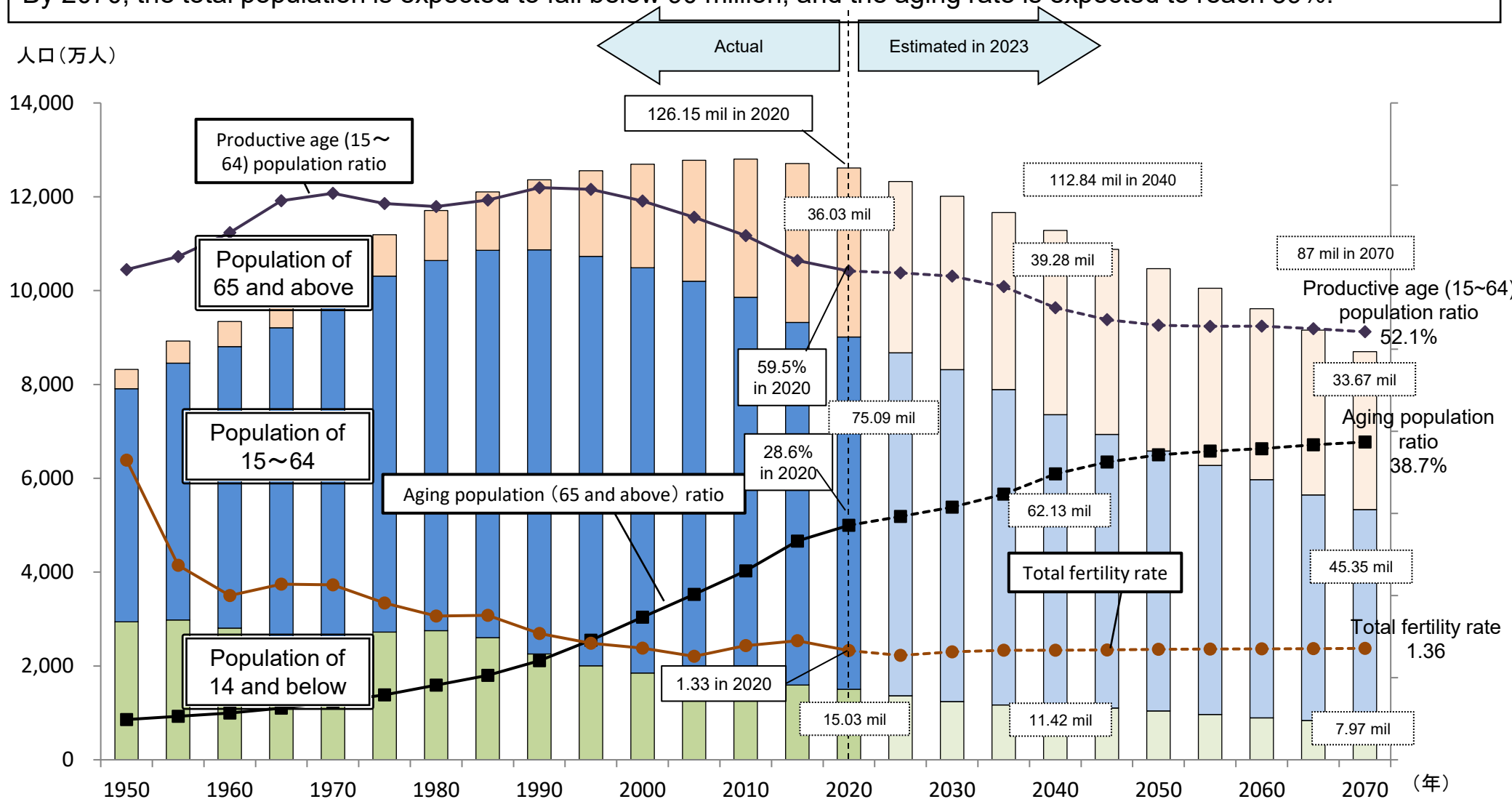


[Outline of the Healthcare Insurance System]



Population trends in Japan

○ Japan's population has been declining in recent years.
By 2070, the total population is expected to fall below 90 million, and the aging rate is expected to reach 39%.



(Source) Population figures up to 2020 are from the Ministry of Internal Affairs and Communications' "National Census," and total fertility rates are from the Ministry of Health, Labor and Welfare's "Population Dynamics Statistics."From 2025 onwards, figures are from the National Institute of Population and Social Security Research's "Future Population Estimates for Japan (Reiwa 5 Estimates)" (medium fertility (medium mortality) estimates).

Japan's future estimated population (2023 estimate)

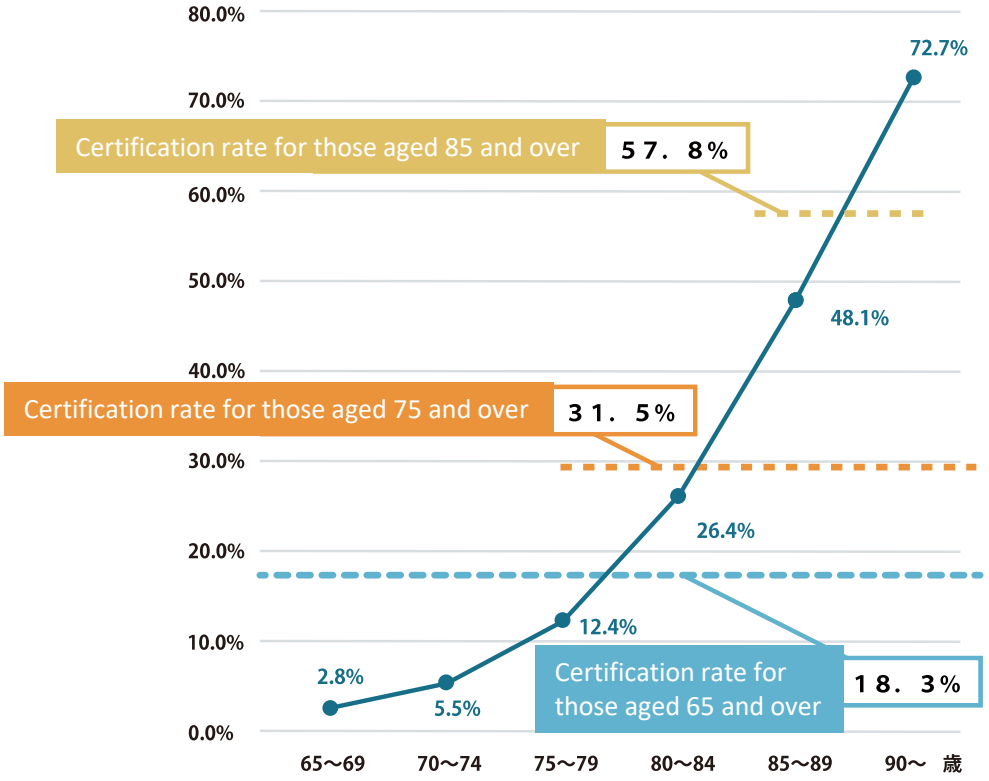
From a lecture by Miho Iwasawa, Director of the Population Trends Research Department at the National Institute of Population and Social Security Research (Social Insurance Weekly, August 21, 2023 issue)

- In terms of social security and healthcare, the year 2040 is significant.
- In that year, the number of deaths in Japan will peak at 1.67 million.
- In 2038, the number of births in Japan will fall below 700,000.
- The population aged 65 and over will peak in 2043.

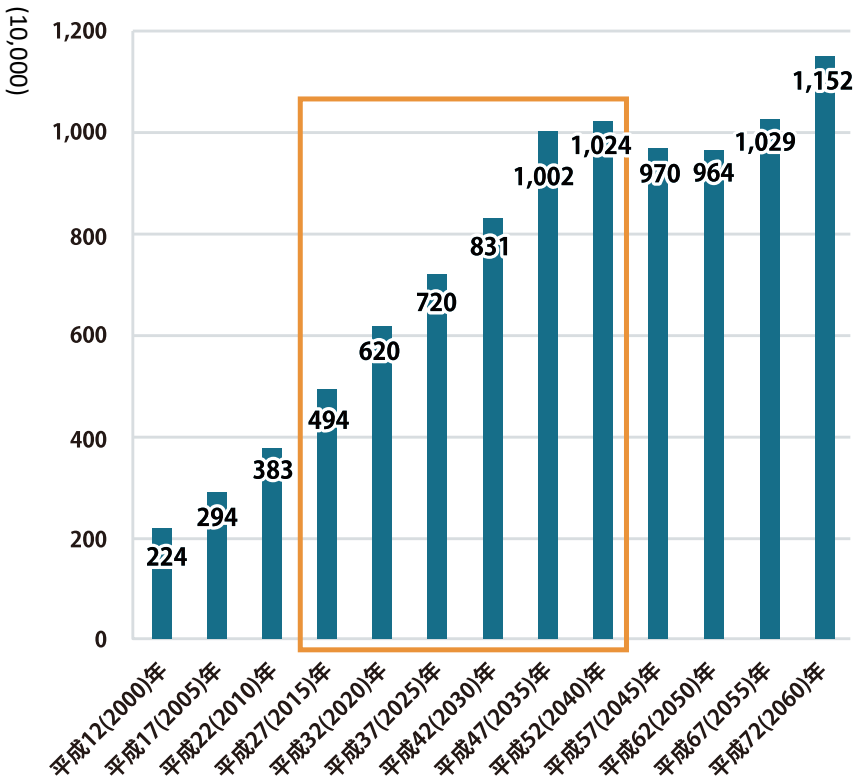
The need for integrated medical and nursing care will increase

The rate of people requiring nursing care increases with age, especially among those aged 85 and over.After 2025, the increase in the number of elderly people will slow down, but the population aged 85 and over is expected to continue to increase toward 2040, and the number of people requiring integrated medical and nursing care is expected to increase.

Care needs certification rate by age group

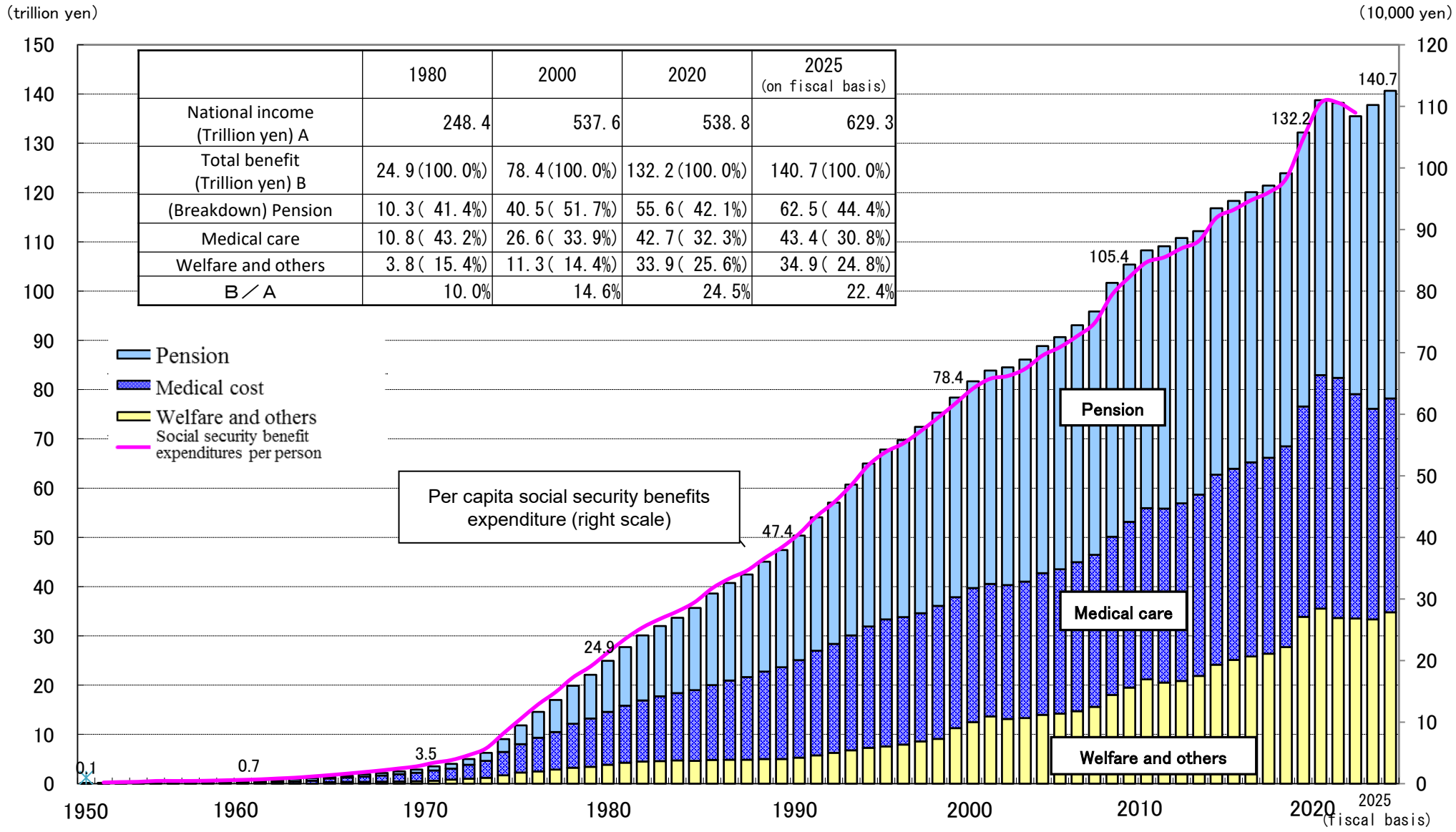


Trends in the population aged 85 and over



Source: Created based on the number of certified persons as of the end of September 2020 (Long-Term Care Insurance Business Status Report) and the population as of October 1, 2020 (Population Estimates by the Statistics Bureau, Ministry of Internal Affairs and Communications). Future projections are based on the National Institute of Population and Social Security Research's “Future Population Projections for Japan” (April 2017 estimates) using the medium birth rate (medium death rate) projection. Actual figures are based on the Ministry of Internal Affairs and Communications Statistics Bureau's “Census” (population adjusted to account for unknown nationality and age).

With population aging, social security expenditures grow



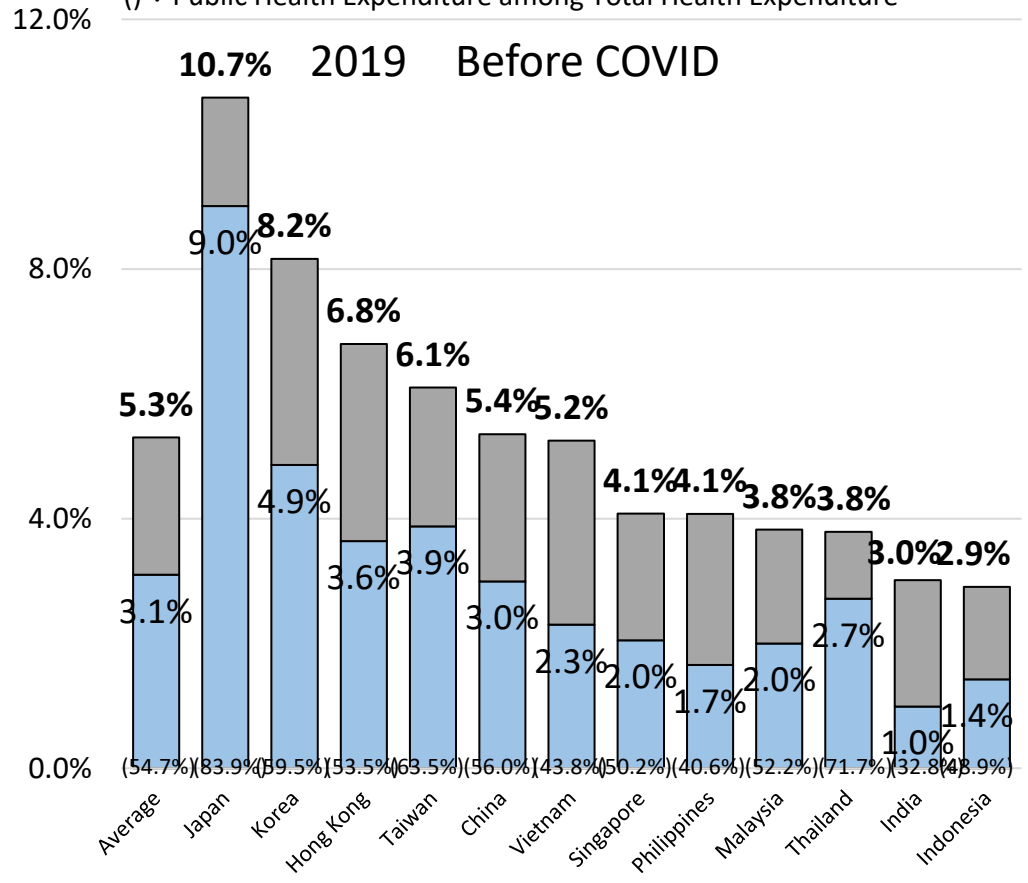
	1980	2000	2020	2025 (on fiscal basis)
National income (Trillion yen) A	248. 4	537. 6	538. 8	629. 3
Total benefit (Trillion yen) B	24. 9 (100. 0%)	78. 4 (100. 0%)	132. 2 (100. 0%)	140. 7 (100. 0%)
(Breakdown) Pension	10. 3 (41. 4%)	40. 5 (51. 7%)	55. 6 (42. 1%)	62. 5 (44. 4%)
Medical care	10. 8 (43. 2%)	26. 6 (33. 9%)	42. 7 (32. 3%)	43. 4 (30. 8%)
Welfare and others	3. 8 (15. 4%)	11. 3 (14. 4%)	33. 9 (25. 6%)	34. 9 (24. 8%)
B／A	10. 0%	14. 6%	24. 5%	22. 4%

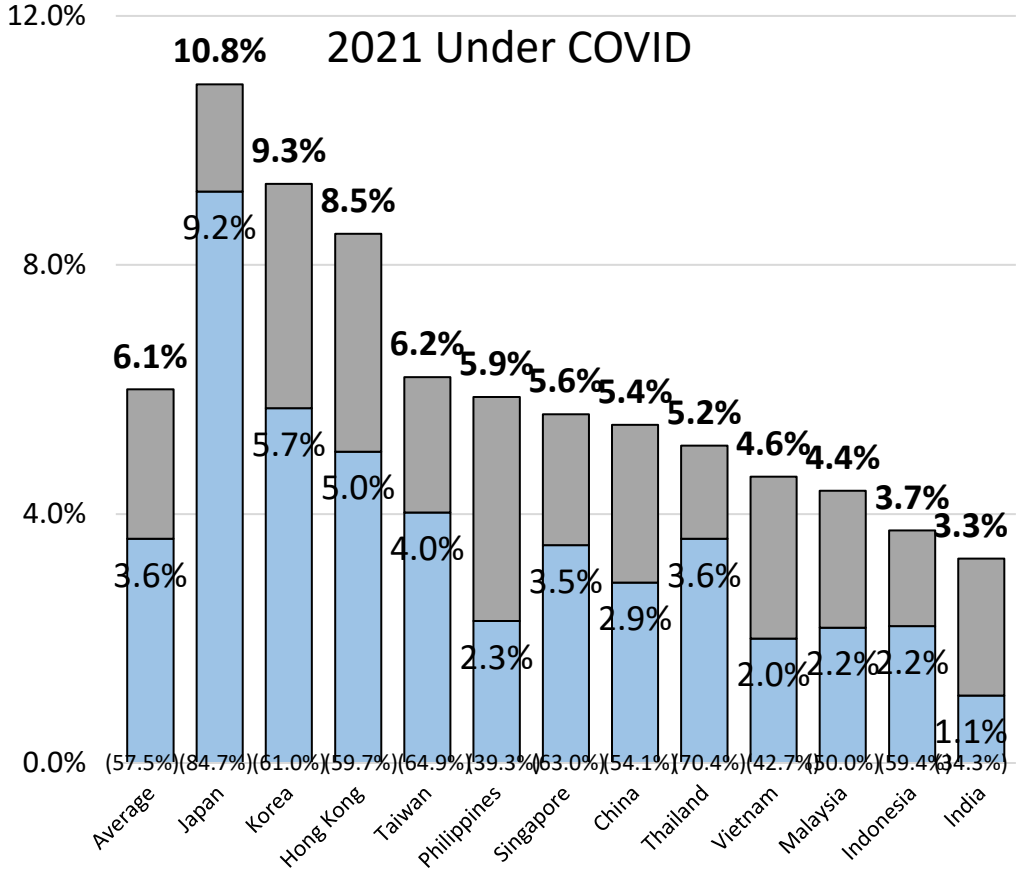
Source: Until fiscal 2023, data is from the National Institute of Population and Social Security Research's “Social Security Expenditure Statistics for Fiscal 2023”; for fiscal 2024–2025 (budget basis), data is from estimates by the Ministry of Health, Labour and Welfare.For fiscal 2025, gross domestic product is from “Economic Outlook and Basic Stance on Economic and Fiscal Management for Fiscal 2025 (Cabinet Decision on January 24, 2025).”(Note) The figures in the chart represent social security expenditure (trillion yen) for the fiscal years 1950, 1960, 1970, 1980, 1990, 2000, 2010, 2020, and 2025 (budget-based).

Health Expenditure(% of GDP), 2019, 2021

Bold：Total Health Expenditure (% of GDP)

()：Public Health Expenditure among Total Health Expenditure

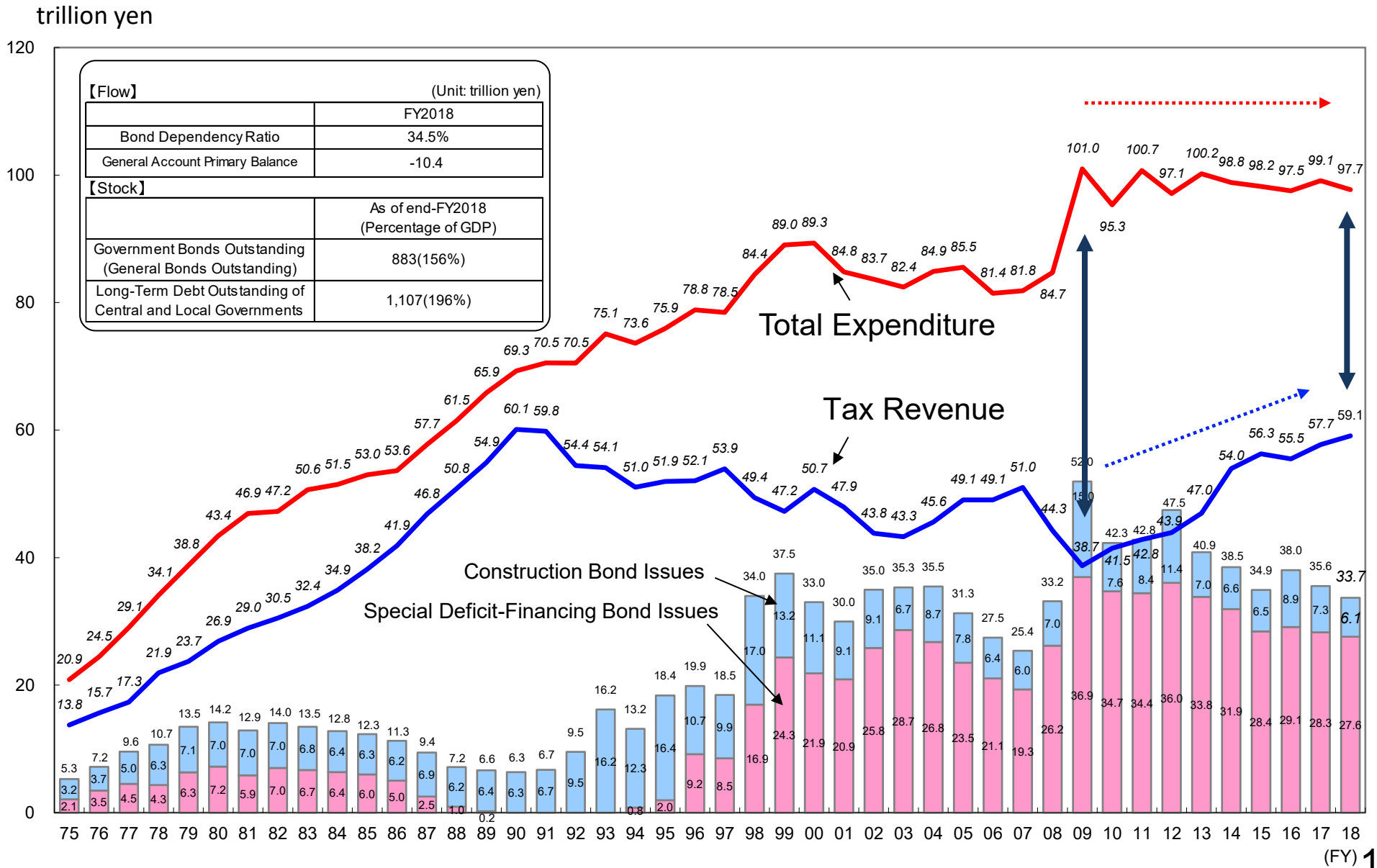




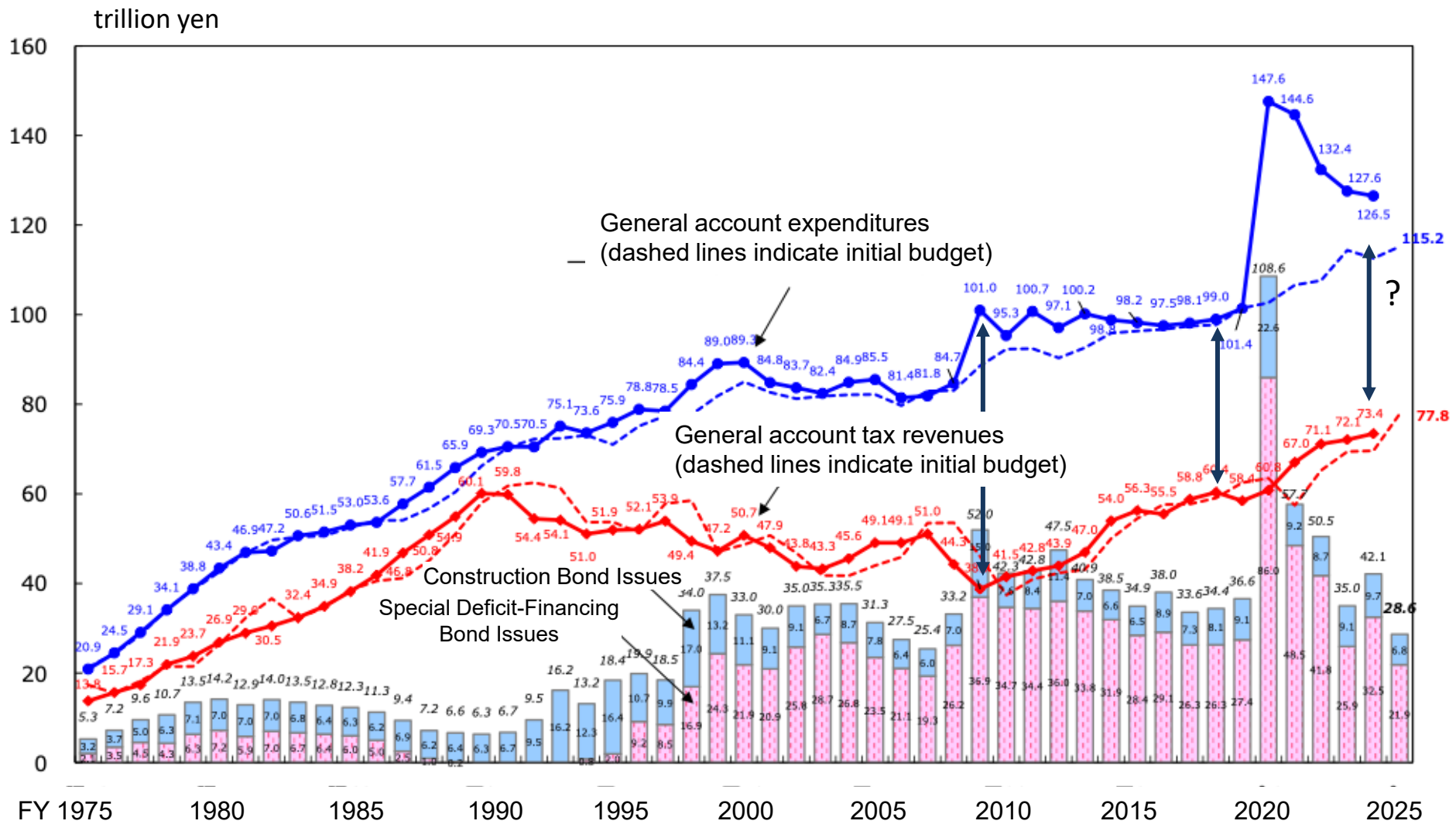
（public ratio vs total）

Source：WHO Global Health Expenditure Database、Health Facts of Hong Kong 2021,2022 Taiwan Ministry of Health and Welfare database
https://apps.who.int/nha/database/country_profile/Index/en https://www.dh.gov.hk/english/statistics/statistics_hs/files/2021.pdf
https://www.dh.gov.hk/english/statistics/statistics_hs/files/2022.pdf https://www.mohw.gov.tw/lp-130-2.html

[Reference] Trends in general account tax revenue, total expenditure, and bond issuance



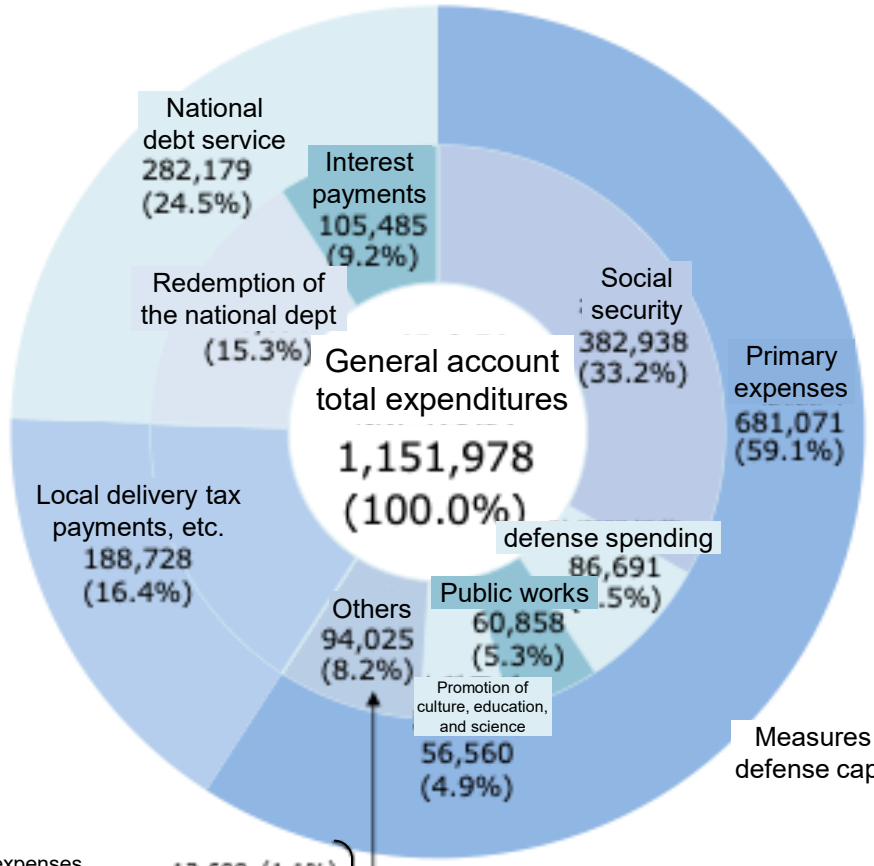
[Reference] Trends in general account tax revenue, total expenditure, and bond issuance



(Note 1) Until fiscal year 2023, figures are based on final accounts; for fiscal year 2024, figures are based on the revised budget; and for fiscal year 2025, figures are based on the budget revised by the House of Representatives and then the House of Councillors. The dotted line indicates the initial budget.(Note 2) The amount of public bonds issued includes temporary special public bonds issued in fiscal year 2000 to secure funds for activities to restore peace in the Gulf region, tax reduction special public bonds issued in fiscal years 2004 to 2006 to compensate for the decrease in tax revenue due to tax reductions implemented in advance of the increase in the consumption tax rate from 3% to 5%, fiscal year 2011: bonds issued to secure funds for measures to recover from the Great East Japan Earthquake; fiscal years 2012 and 2013: bonds issued to secure funds to achieve a 50% national government contribution to basic pensions.

[Reference] FY 2025 General Account Budget (after revisions by the House of Representatives and House of Councillors)
Composition of Expenditures and Revenues

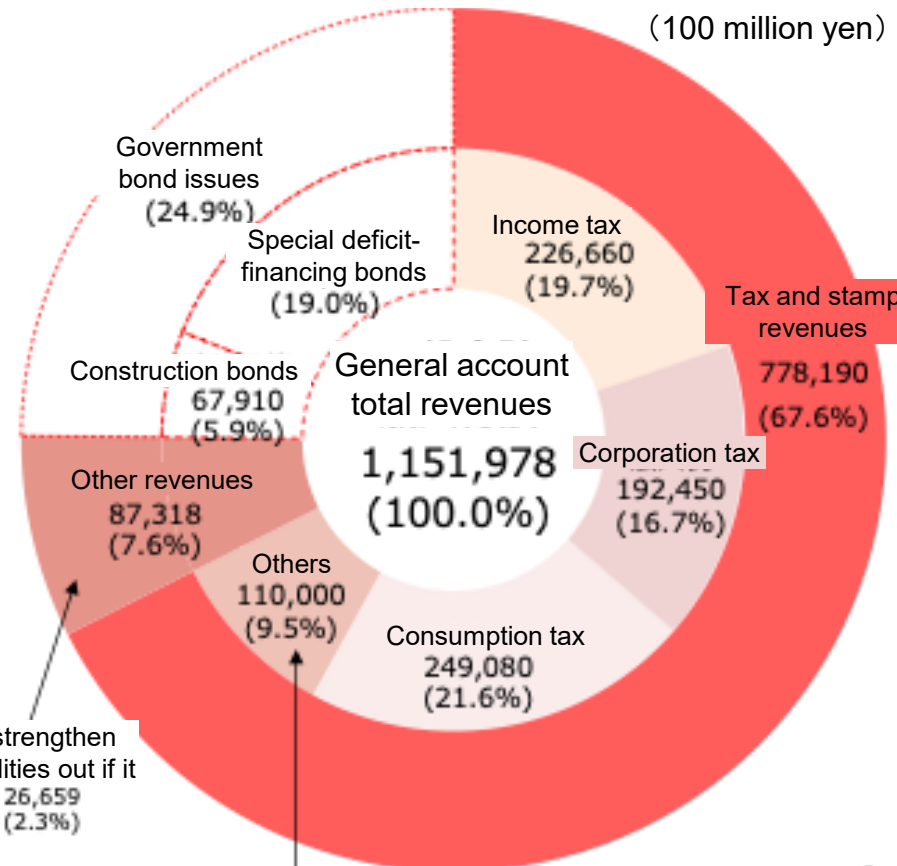
General account expenditures



Food security expenses	12,609	(1.1%)
Energy measures expenses	8,111	(0.7%)
Economic cooperation expenses	5,050	(0.4%)
Small and medium-sized enterprise measures expenses	1,695	(0.1%)
Pension expenses	623	(0.1%)
Other administrative expenses	58,543	(5.1%)
Contingency expenses	7,395	(0.6%)

General account revenue

（100 million yen）

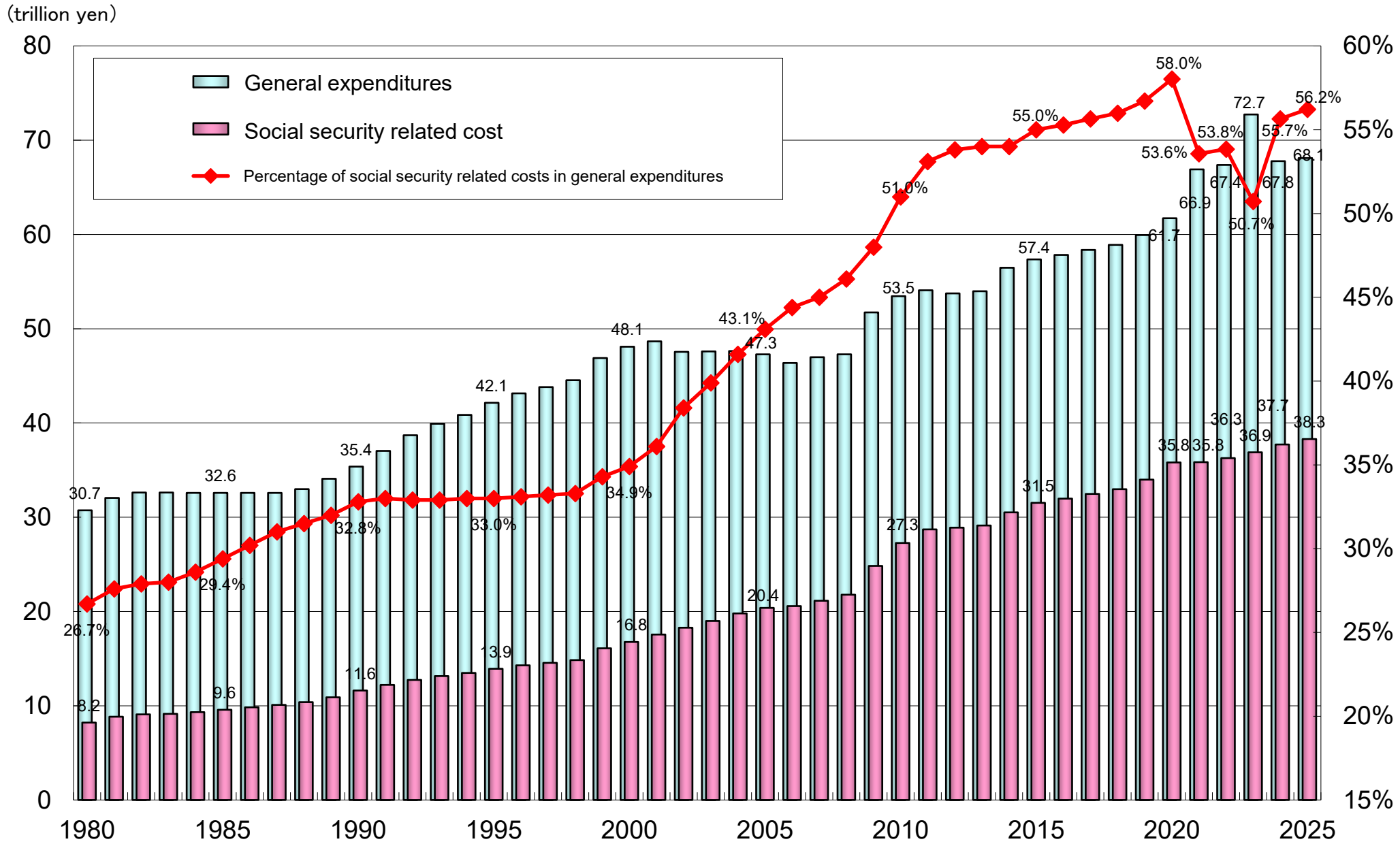


Inheritance tax	4,610	(3.0%)
Gasoline tax	9,760	(1.7%)
Alcohol tax	1,740	(1.0%)
Customs duties	9,890	(0.9%)
Tobacco tax	9,530	(0.8%)
Petroleum & coal tax	6,010	(0.5%)
Automobile weight tax	4,070	(0.4%)
Power development promotion tax	3,070	(0.3%)
Other tax revenues	1,020	(0.1%)
Stamp revenue	0,300	(0.9%)

"General expenditure" refers to expenses excluding national bond expenses and local allocation tax grants from total expenditure."Basic fiscal balance target expenses" (i.e., expenses excluding part of national bond expenses from total expenditure; an indicator representing policy expenses for the current fiscal year) amounted to 873,323 (75.8%).

(Note 1) The figures have been rounded off, so there may be discrepancies in the totals due to rounding.
(Note 2) Social security-related expenses account for 56.2% of general expenditures.

Trends in general expenditure and social security-related expenditure

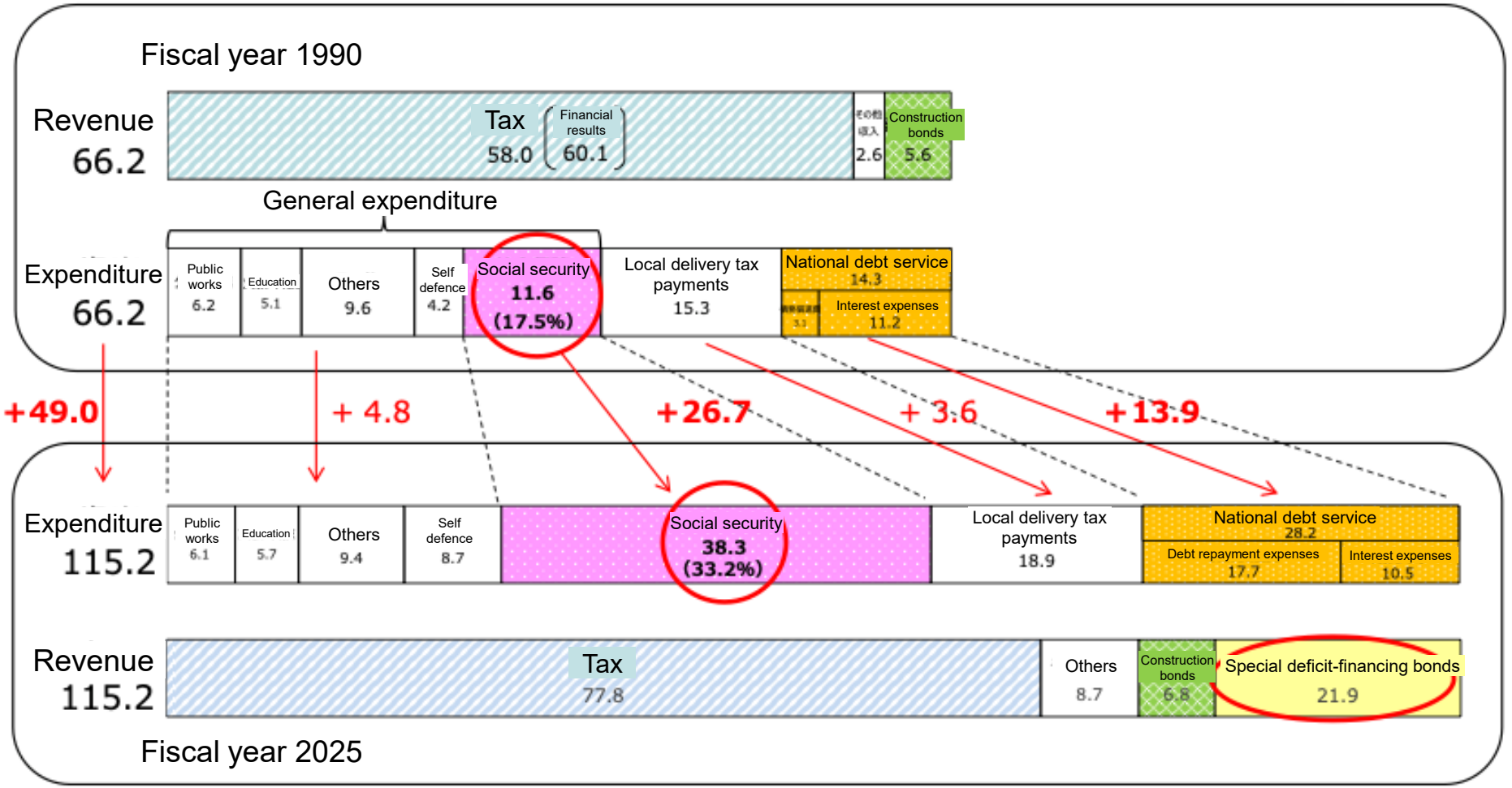


*Based on initial budget (revised budget for fiscal year 2025)

Comparison of national general account revenue and expenditure between fiscal year 1990 and fiscal year 2025

Compared to the initial budget for fiscal 1990, which was able to break away from issuing special bonds, the budget for fiscal 1995 shows a significant increase in social security-related expenses, which are being covered by special bonds.

Trillion yen



The figures in parentheses indicate the percentage of social security-related expenses in general account expenditures.

Consumer tax rate was raised to 8%, from 5%, and will be 10% next year, both to finance preparation for new demands until 2025, and to have sound budget.

- **Incrementally raise the consumption tax rate (national and local) to 8% in April 2014 and to 10% in October 2019**
- **Expand the allocation of consumption tax revenues to the four costs of social security (pensions, medical care, long-term care, and childcare) from the current three of elderly costs (basic pension, elderly medical care, and long-term care)**
- **Clarify the use of consumption tax revenues (use consumption tax revenues to finance social security)**
- **Pass on the entire consumption tax revenues to the people and do not use it to enlarge the government**

Approx. 1%

Enhanced social security

Approx. 2.7 trillion yen more

Approx. 4%

Stable social security: Protecting the current social security system

Approx. 10.8 trillion yen more

- **50% of pensions are funded by the national treasury (incl. costs for ensuring that 50% of the basic pension is funded by the national treasury in FY2012 and FY2013)** — **Approx. 2.9 trillion yen**
- **Reduce the burden passed on to future generations** — **Approx. 7.0 trillion yen**
  - **Current social security expenditures involving increases due to aging (natural increase) and failure to secure stable financial resources**
- **Increase in social security expenditures due to the consumption tax increase** — **Approx. 0.8 trillion yen**
  - **Increase in pensions and medical service fees along with price increases**

Approx. 0.7 trillion yen

○ Children and child-raising support

- Resolution of the problem of the children on waiting lists (quantitative expansion of childcare and after-school children's clubs), etc.

Up to little under 1.6 trillion yen

○ Enhancement of medical/long-term care

- Intensive input of medical care resources into the highly acute phase (expanded inpatient medical care), enhancement of home medical/long-term care (from hospitals/institutions to communities and homes), etc.

Up to approx. 0.6 trillion yen

○ Improvement of the pension system

- Provide additional benefits to elderly people with a low income and disabled people, shorten the period of eligibility to receive benefits, etc.
- Expansion of measures to deal with poverty and income inequality (measures for low-income earners, etc.)
  - Reduction of social insurance contributions for low-income earners, total accumulation system, etc.

Up to approx. 1.4 trillion yen of the above (redundant)

Actions taken for sustainable health care

"National Health Insurance"

- Abolish free care for the Aged in 1983
- 10% copayment in 1984
- 20% copayment in 1997
- Introducing new "Long-term care insurance" in 2000
- 30% copayment in 2003
- Introducing new "Medical Care System for the Elderly aged 75 and Over " in 2008

Health Care Delivery System

1990's

- Increase Long-term Care Services
  (New Insurance in 2000)

2000's

- Specialization of Hospital Functions to strengthen both acute care and rehabilitation

2010's

- Restructuring Health Care Delivery System, to "Integrated Community-based Care System"

Actions taken for sustainable health care

Cost Containment Actions

- Prevention
  - Oblige health Insurer to offer health checks to insured.
- Generic drug use
  - First target : 30% of all drugs
  - Current target : 80% of off-patent drug use
- Oblige Local Government to make a cost containment plan
  - target medical care cost
  - target health check rate

(Continued)

- Drug Price Revision and Reform of calculation method
- Appropriate use of super-expensive drugs
- Prevention of aggravation in patients, especially with diabetic patients
- Correction of Poly-pharmacy

Establishment of Integrated Community Care System

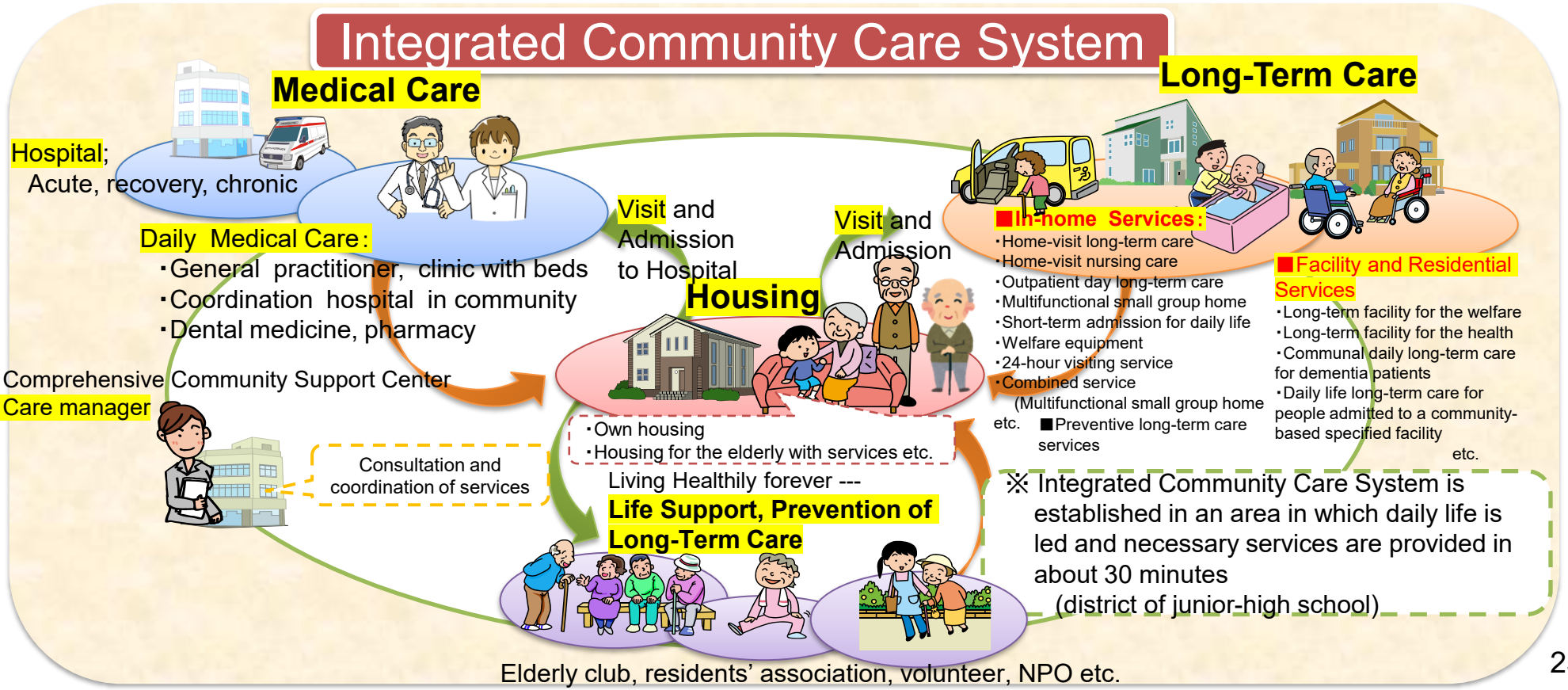
Establishment of the system in which **medical care, long-term care, prevention, housing and life support are comprehensively maintained** will be realized in order to lead lives in long-lived area until the end of lives even if in a condition to be taken care of intensively.

It is estimated that the number of the elderly with dementia will increase, therefore it is important to establish integrated community care system to support the lives of the elderly with dementia in communities.

There are large differences in the conditions of the advancement of population aging. In urban areas, population over 75 years old will rapidly increase while total population is stable. In rural areas, population over 75 years old will moderately increase while total population will decrease.

It is necessary that **insurers (municipalities) and prefectures should create integrated community care system in accordance with the characteristics of the communities** which is based on the autonomy and independence of the communities.

Integrated Community Care System



Hospitals to community-based care

The Director's Office at Yubari City Hospital

Small-scale Multi-functional Nursing facility

Yubari Municipal Hospital

- Once a prestigious general hospital
- Located in the city center (near Yubari Station)
- Became financially unsustainable due to Yubari's population decline(116,000 → under 10,000)
- Securing doctors also became difficult
- Converted into a bed-equipped clinic following the city's financial collapse

171 beds hospital → 19 beds clinic

Mimosa House

(Small-scale multifunctional nursing facility)

- Converted from a private residence in Yotsuya
- 1st and 2nd floors: Small-scale multifunctional facility; 3rd floor: Residence
- 1st floor: Multifunctional room; 2nd floor: Beds
- Located in the heart of a residential district

Registered capacity: 25 residents, 15 day-care users, 5 overnight stays

Longer healthy life

Health check and health promotion Among young generation

Prevention of "Frailty" And aggravation of disease

Collaboration with companies
Incentive to health care insurers

Prevention of Frailty
Collaboration with local community

Concept of Frailty

● Hypertension ● Heart disease
● Cerebrovascular disease ● Diabetes
● Respiratory disease ● Malignant tumor etc.

(Life Style Related Diseases)

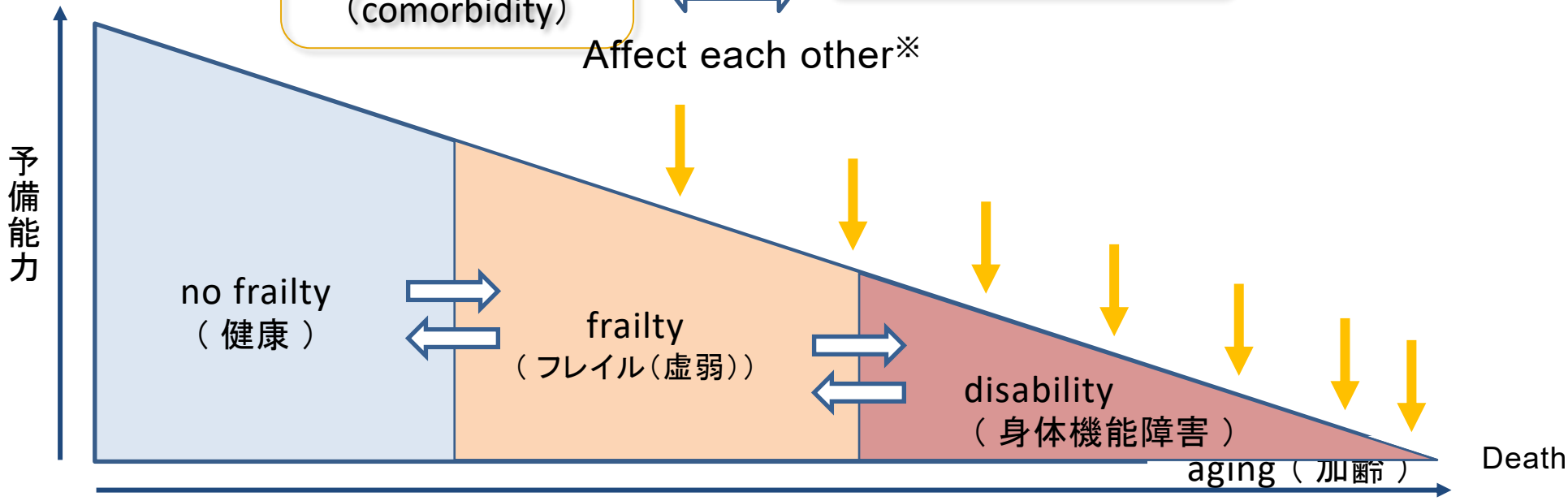
Combination of chronic diseases (comorbidity)

● Cognitive dysfunction ● Dizziness
● Eating / dysphagia disorder ● blurred vision
● depression ● Anemia ● Hearing impairment ● Delirium ● Compromised ● Weight loss
● Sarcopenia (lower muscle mass)

Senile syndrome

and/or

Affect each other※



As for "frailty", since the academic definition has not yet been confirmed, this report says, "With the age, mental and physical vitality (motor function, cognitive function, etc.) declines, and multiple chronic diseases such as coexistence It is defined as a state image in which lifestyle functions are impaired, emotional and mental impairment has emerged, but on the other hand, it is possible to maintain and improve living functions through appropriate intervention and support ".

The history and role of Japan's public health care system

: Looking ahead to addressing aging

CHARACTERISTICS OF JAPANESE MEDICAL INSURANCE

1: INSURERS, 2: MEDICAL FEES, 3: INSURANCE-COVERED MEDICAL INSTITUTIONS, 4: BENEFIT IN KIND

The history and role of Japan's public health care system
: Looking ahead to addressing aging

JAPANESE MEDICAL INSURANCE 1: INSURERS

THERE ARE MANY MEDICAL INSURANCE INSURERS IN JAPAN

About "insurers" (overview)

- A distinctive feature of Japan's medical insurance is the large number of insurers.
- Because they have completely different historical backgrounds, they are divided into several groups: the employee insurance group and the community health group.
- Employee insurance is further divided into insurers that belong to the public servant group, insurers that belong to the large company group, and insurers that mainly focus on small and medium-sized enterprises.
- In the health insurance reforms that have taken place since 2000, national insurers have been shifted to prefecture-level management, and municipal insurers have been reorganized to prefecture-level management.
- This is based on the idea that medical insurance insurers need to be of an appropriate size.

Comparison of Insurers

	NHI by municipalities	Japan Health Insurance Association	Health insurance societies	Mutual aid associations	Medical Care System for the Advanced Elderly
Number of insurers (As of the end of March 2023)	1,716	1	1,388	85	47
Number of subscribers (As of the end of March 2023)	24.13 million people (16.36 million households)	39.44 million people (Insured persons: 24.8 million, Dependents of insured persons: 14.64 million)	28.20 million people (Insured persons: 16.55 million, Dependents of insured persons: 11.65 million)	9.82 million people (Insured persons: 5.74 million, Dependents of insured persons: 4.09 million)	19.13 million people
Average age of subscribers (As the end of September 2022)	54.2 years old	38.9 years old	35.9 years old	33.1 years old	82.8 years old
Percentage of those aged between 65 and 74 (FY2022)	44.6%	8.2%	3.5%	2.4%	1.4%
Medical costs per subscriber (FY2022)	¥406,000	¥204,000	¥184,000	¥185,000	¥956,000
Average income per subscriber (*2) (FY2022)	¥960,000 (Per household ¥1.43 million)	¥1.75 million (Per household ¥2.79 million)	¥2.45 million (Per household ¥4.18 million)	¥2.46 million (Per household ¥4.30 million)	¥930,000
Average insurance premium per subscriber (FY2022) (*4) <Employer's contribution included>	¥91,000 (Per household ¥136,000)	¥125,000 <¥251,000> (Per insured person ¥200,000 <¥399,000>)	¥139,000 <¥304,000> (Per insured person ¥237,000 <¥519,000>)	¥144,000 <¥287,000> (Per insured person ¥253,000 <¥505,000>)	¥79,000
Insurance premium contribution rate	9.5%	7.2%	5.7%	5.8%	8.6%
Burden of public expenditure	50% of benefits + insurance premium reduction, etc.	16.4% of benefits, etc.	Subsidies for insurers with heavy burden of support payments, etc. for the advanced elderly		About 50% of benefits, etc. + insurance premium reduction, etc.
Amount of burden of public expenditure (*5) (Based on FY2024 budget)	¥4.1353 trillion (State: ¥2.9819 trillion)	¥1.1344 trillion (Full state funding)	¥125.3 billion (Full state funding)		¥9.3232 trillion (State: ¥5.9227 trillion)

The history and role of Japan's public health care system
: Looking ahead to addressing aging

JAPANESE MEDICAL INSURANCE 2 : “MEDICAL FEES”

THERE ARE MANY MEDICAL INSURANCE INSURERS IN JAPAN

About "Medical Fee Schedule" (Overview)

- A distinctive feature of Japan's medical insurance system is that the government determines the point system for “Medical Fees”.
- Hospitals and clinics use the same point system, which basically assigns points to the medical treatment provided by doctors.
- Primarily fee-for-service. Some hospitals are paid a lump-sum fee, but some aspects of fee-for-service remain.
- There is also the option of "cash payment," which is called “medical expenses payment”.
- It is revised every two years, but there is no mechanism for automatically adjusting it based on prices or wages.

Overview of “Medical Fee System”

(1) “Medical Fee System”

- ○ Compensation received by insurance medical institutions and insurance pharmacies as compensation for insured medical services
- ○ Applied uniformly to all insurance medical institutions and insurance pharmacies (uniform nationwide)
- ○ Determined by the Minister of Health, Labour and Welfare based on discussions at the Central Social Insurance Medical Council (*Chuikyo*) (Notification by the Minister of Health, Labour and Welfare)

(2) Functions of “medical fee system” (including score tables and related operating rules)

(1) Establish prices for individual medical services (characteristic as a price list)

* Technologies and services evaluated by quantifying them as points (¥10 per point).

(2) Establish the scope and content of insured medical services (characteristic as a list of items)

* Medical act not listed in the score table is not accepted as an insured medical treatment.

- ○ Evaluation of technologies and services (about 5,000 items)
- ○ Evaluation of prices of materials (about 17,000 items for pharmaceuticals, the prices of which are determined by the drug price standard)

(3) Main role and impact of “medical fee system”

(1) Regulates remuneration for each medical service → Affects the quality and quantity of medical services

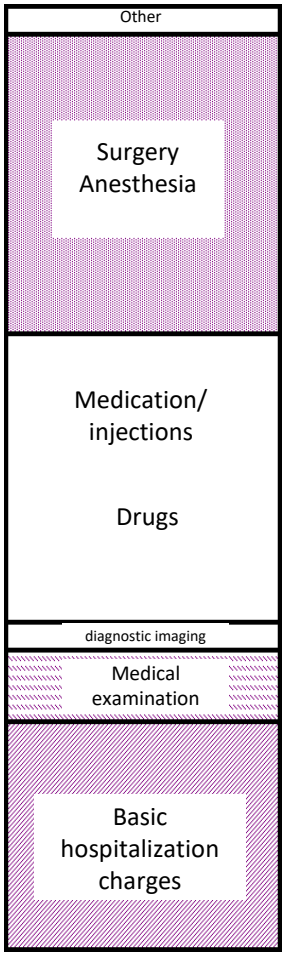
(2) Regulates medical business income of insurance medical institutions → Affects the management of insurance medical institutions

(3) Allocates medical expenses (medical resources) → Affects the establishment of the medical care delivery system

(4) Determines national medical care expenditure in conjunction with the amount of services provided → Affects the national budget (finances)

Example of “Medical Fee System”

(Example) ● A patient was hospitalized for acute appendicitis for four days.
● The patient had an appendix removal surgery on the day of admission and started eating a m
evening after the surgery.



○Basic Hospitalization Charges **7,416 points**

(Breakdown) Charges for Hospitalization in the Acute Stage(6) 1,404 points ×4
Additional charges within 14 days 450 points×4

○Additional Charges for Basic Hospitalization, etc.(for four days) **1,350 points**

(Breakdown) Additional charges 2 for comprehensive inpatient care(per day) 200 points ×4
Additional charges 2 for inpatient care at a clinical-training hospital (first day of hospital admission) 20 points
Additional charges 2 for medical record management(first day of hospital admission) 30 points
Additional charges for implementation of medical safety measures(first day of hospital admission) 85 points
Additional charges 2 for the arrangement of clerks who assist physicians with administrative work[clerk: physician=50:1](First day of hospital admission) 415 points

○ Surgery Surgery to Remove the Appendix **6,740 points**

○ Anesthesia **1,000 points**

(Breakdown) Spinal anesthesia 850 points
Anesthesia supervision fees(Ⅱ) 150 points

Total 16,506 points

(Hospital dietary expenses (I) 670 yen per meal×8 meals 5,360 yen)
(Standard co-payment for dietary treatment(Households paying residential tax)
490 yen per meal×8 meals 3,920 yen)

Total medical costs 170,420 yen

(Basic Hospitalization Charges)

The charges are calculated based on a serious of expenses including those for ensuring basic medical management exercised upon hospital admission, maintaining nurse staffing levels and providing an appropriate environment for medical treatment.
These charges include such costs as simple tests and treatment procedures and vary depending on types of hospital wards, nursing staffing and the average length of hospital stay, etc.
※In addition to the range of other basic hospitalization charges, the basic hospitalization charges for medical wards for the care of patients include costs for medical examinations, medication, injections and simple treatments.

(Additional Points to Basic Hospitalization Charges, etc.)

Additional points are calculated per day or per hospitalization according to the functions of a medical institution such as staffing, special medical treatments, etc.

＊As of June 1, 2024
Some hospitals have adopted a lump-sum payment system for inpatients in acute care hospitals, or the DPC per-diem payment system.

The history and role of Japan's public health care system
: Looking ahead to addressing aging

JAPANESE MEDICAL INSURANCE 3: “INSURANCE-COVERED MEDICAL INSTITUTIONS”

MUST BE HANDLED BY “INSURANCE-COVERED MEDICAL INSTITUTIONS”

About “Insurance-Covered Medical Institutions" (overview)

- In Japan, medical treatment covered by insurance is handled by “Insurance-Covered Medical Institutions." Medical institutions become “Insurance-Covered Medical Institutions” after receiving insurance designation.
- “Insurance-Covered Medical Institutions” must comply with the standards for handling medical insurance. These are called the “Regulations for the Provision of Madical Care” (Ministry of Health, Labour and Welfare Ordinance).
- If a medical institution commits fraud, such as filing fictitious claims in order to increase the number of insurance claims, its designation as an insurance medical institution may be revoked.
- Most medical institutions in Japan are designated as covered by insurance, but in recent years, the number of medical institutions (clinics) that only handle non-covered medical treatments (such as cosmetic medical treatments) has been increasing.

Overview of Medical Service Scheme in Japan

•75 years or older
10% copayment
Those with income equivalent to that of working people will bear 30% of the cost, and from October 1, 2022, those with income above a certain level other than working people will bear 20% of the cost.

•70 to 74 years old
20% copayment
Those with income equivalent to that of working people will bear 30% of the cost

・From compulsory education to age 69
30% copayment

•Yet to start compulsory education
20% copayment

Patient (insured)

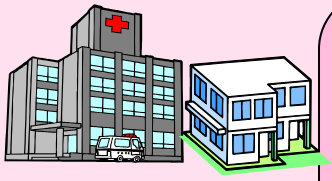
Patient burden: 5.4 trillion yen

(2) Receive service & pay copayment

(3) Provide Clinical service

Medical expenses 46.7 trillion yen

[Medical Service Providing Scheme]



Hospital 8,122 1,481,183 beds
Clinic 104,894 75,780 beds
Dental clinics: 66,818
Pharmacies: 62,828
*Figures are as of October 1, 2023 (Source: 2023 Medical Facility Static & Dynamic Survey)*Pharmacies are as of the end of March 2024 (Source: 2023 Health Administration Report)

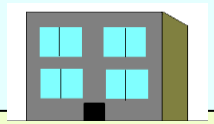
Insurance premiums 23.4 trillion yen

(1) Insurance contribution

(5) Reimburse-ment

(4) Claims

Insurer



Physician 343,275
Dentist 105,267
Pharmacist 323,690
Registered nurse 1.32 mil
Public health nurse 0.67 mil
Midwife 0.42 mil

* Doctors, dentists, and pharmacists are as of December 31, 2022 (2022 Statistics on Doctors, Dentists, and Pharmacists).* Nurses, public health nurses, and midwives are based on the number of employed persons, compiled by the Nursing Division of the Medical Affairs Bureau, Ministry of Health, Labour and Welfare, based on the "2020 Medical Facility Dynamics Survey" and the "2020 Health Administration Report (Biennial Report)" of the Ministry of Health, Labour and Welfare.

[Medical insurance system]

Administrative bodies

National
Prefectural
Municipal governments

Public funding

Public funding

Insurers

Supportive contribution

(Principle schemes)	(Number of insurers)	(Number of enrollment)
-"National Health Insurance"	1,716	Approx. 24 million
-Japan Health Insurance Association administered health insurance	1	Approx. 39 million
-Association/union administered health insurance	1,383	Approx. 28 million
-Mutual aid association	85	Approx. 10 million
-Advanced Elderly Medical Service System	47	Approx. 19 million

The history and role of Japan's public health care system
: Looking ahead to addressing aging

JAPANESE MEDICAL INSURANCE 4: BENEFITS IN KIND

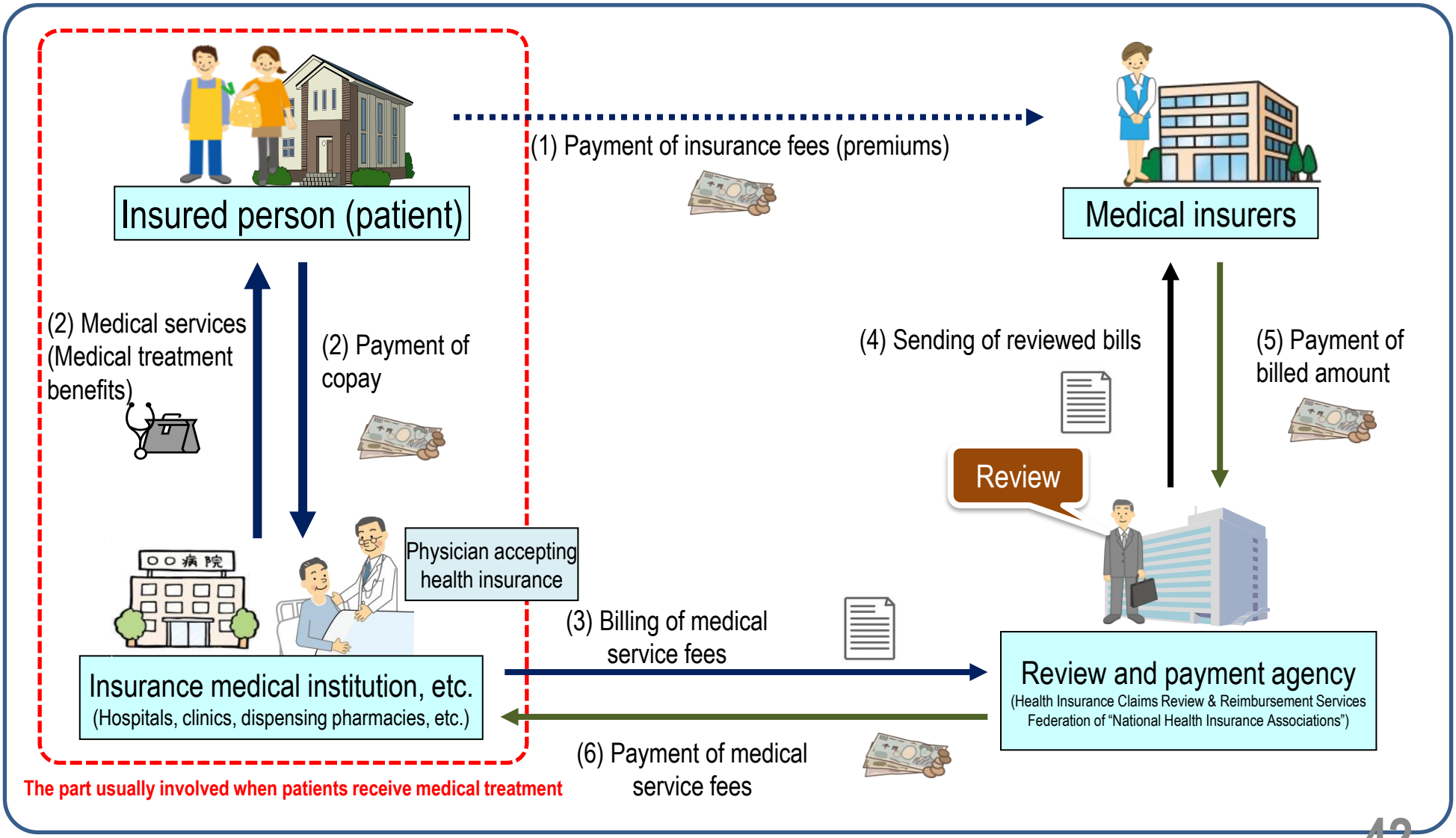
MOST MEDICAL CARE IS PROVIDED AS “BENEFITS IN KIND”.

Overview of "Benefits in Kind"

- Japan's medical insurance benefits include both cash and “benefits in kind”, but most are provided as “benefits in kind”.
- When a patient presents their “health insurance card” to a medical institution, the medical institution must provide medical care to the patient. The costs will be charged to the insurer, and a certain amount will be charged to the patient.
- If a patient does not have an “health insurance card”, they can pay the medical expenses first and then claim the costs to their insurer later.
- Medical care provided as “benefits in kind” must be provided in accordance with insurance standards. Medical treatments other than those approved by the insurance are prohibited. Combining insured and uninsured medical care is illegal. However, there are exceptions approved by the government (such as “Advanced Medical Treatments”).

Flow of healthcare services provided under health insurance

The overall flow of healthcare services provided under health insurance is shown in the flowchart below.



The history and role of Japan's public health care system
: Looking ahead to addressing aging

HISTORY AND HISTORICAL BACKGROUND OF MEDICAL INSURANCE IN JAPAN

1: INSURERS, 2: “MEDICAL FEES”, 3: “INSURANCE-COVERED MEDICAL INSTITUTIONS”, 4: BENEFIT IN KIND

The history and role of Japan's public health care system
: Looking ahead to addressing aging

HISTORICAL BACKGROUND 1: INSURERS

THERE ARE MANY MEDICAL INSURANCE INSURERS IN JAPAN

Historical background of insurers and revision process (overview)

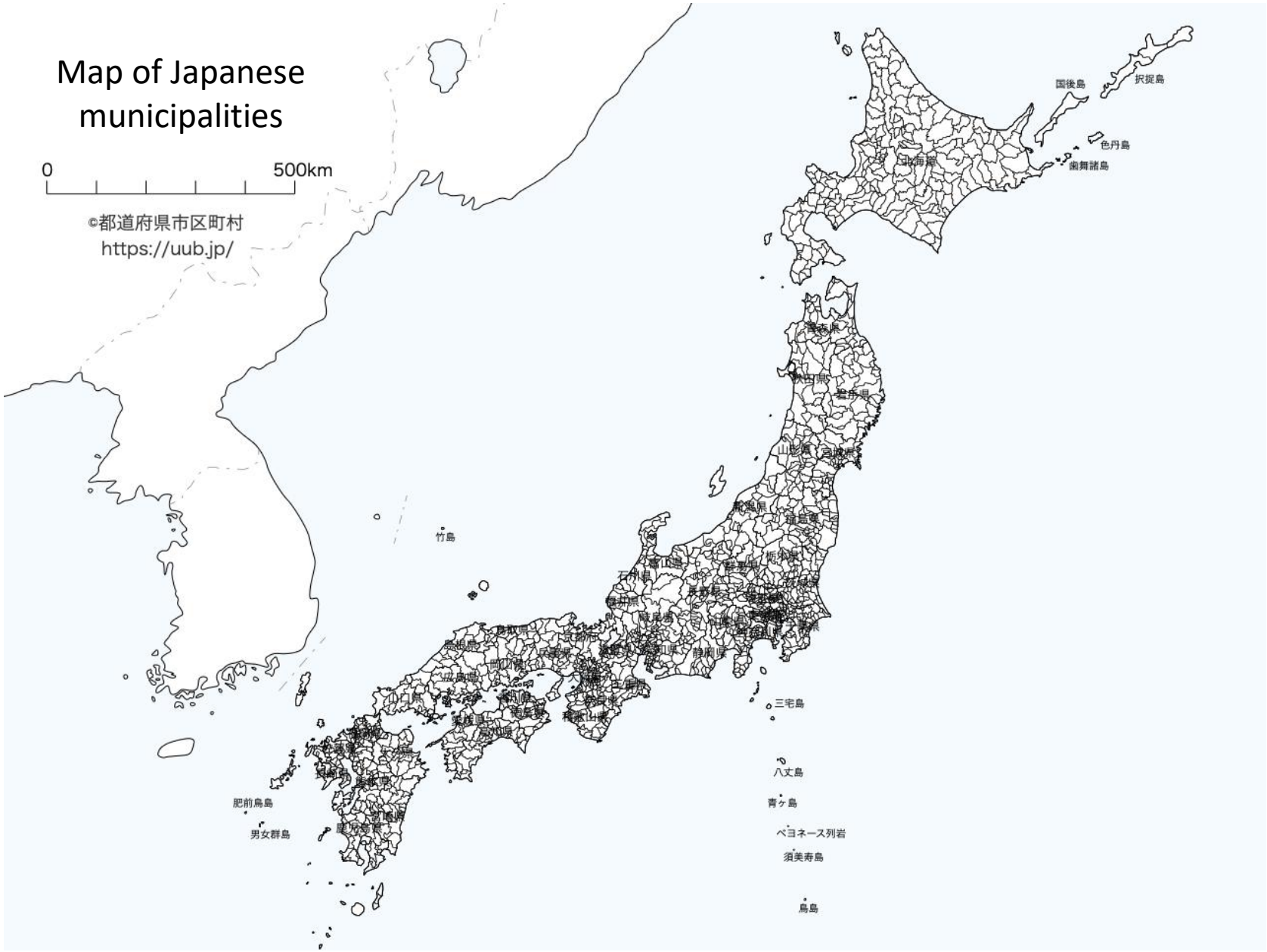
- Japan's health insurance system has developed gradually
- It started from the perspective of protecting workers.
- It expanded to civil servants.
- Meanwhile, self-employed people and agricultural workers were voluntarily introduced into insurance systems in rural areas.
- In 1961, all cities, all municipalities in Japan were required to implement medical insurance that covered all residents except employees.
- The process was implemented gradually law will be implemented over three years, and insurer-operated hospitals were established in various areas in response to complaints that people in rural areas have insurance but no medical care.
- It developed by recognizing existing insurance and filling in the gaps.

Historical background of insurers and the process of reform (reorganization of insurers)

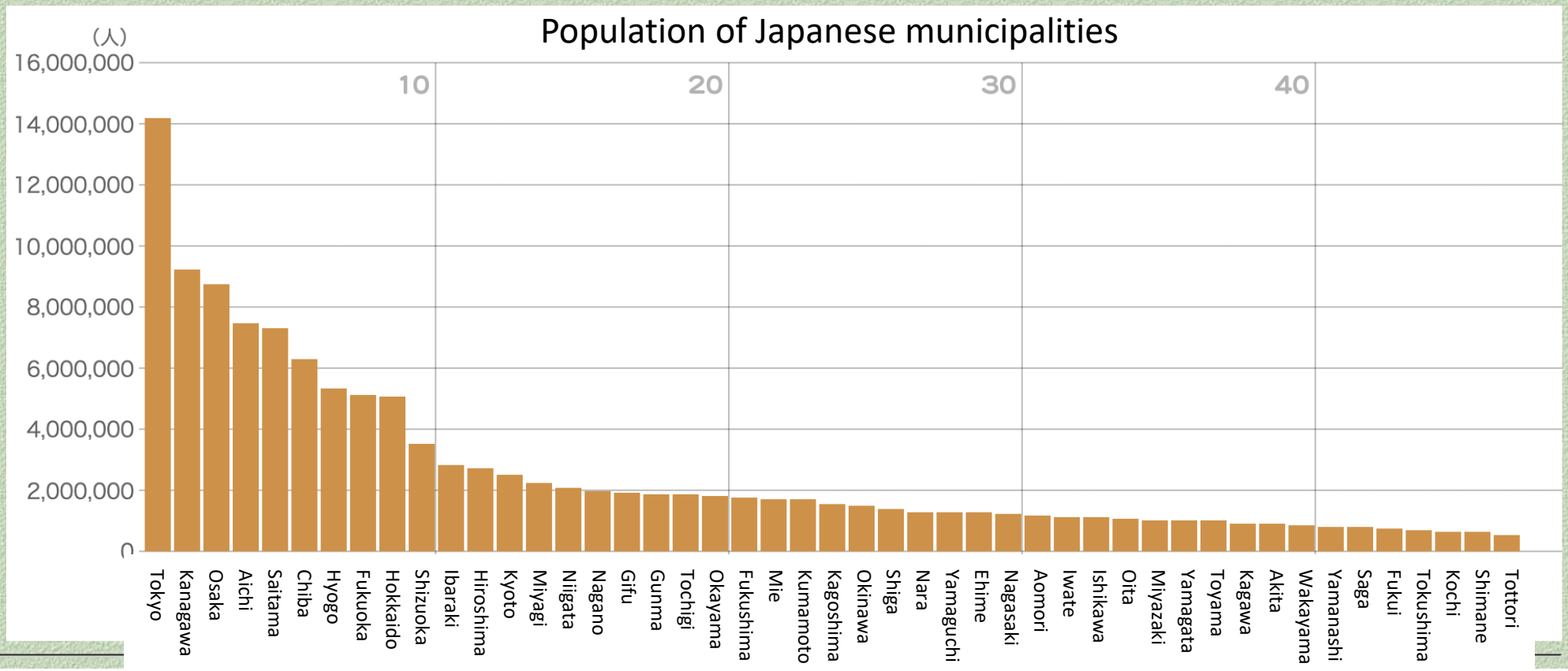
- Since the introduction of “Universal Health Insurance”, medical expenses have increased rapidly.
- A fiscal adjustment mechanism was introduced.
- Furthermore, the appropriate size of insurers was discussed from the perspective of strengthening insurer functions.
- As a result, the direction of insurer restructuring at the prefectural level was decided.
- The government-managed health insurance system, which was previously a single system nationwide, was shifted to fiscal management by 47 prefectures (legal amendment in 2006 , implemented in 2008).
- Municipality-based (approximately 1,700) “National Health Insurance” was shifted to a prefecture-based system (47) (legal amendment in 2015, implemented in 2018).

Japan's 47 Prefectures

Japan's 1,700 Cities, Towns, and Villages



Japan's 47 Prefectures' Population



Background to the privatization of government-managed health insurance and the establishment of prefecture-based systems

【Aims of privatizing government-managed health insurance and integrating it into prefectures】

- Strengthening the insurer function = Making it easier for public corporations independent from the national government to carry out health programs and respond to employers in accordance with local conditions, and strengthening disease prevention and health promotion programs
- Streamlining of administration: Abolishing health insurance directly managed by the government, allowing the government to focus on policy formulation and system supervision
- Financial transparency and clarification of responsibility: In the event of a deficit, the society which operates the system will bear the responsibility and will independently decide on insurance rates.
- The insurance premium rates were set by prefectures (starting in FY 2010). This will reflect the level of medical expenses in each region and encourage the insurer to exercise its functions.

The background to the prefectural-level allocation of “National Health Insurance” finances

【Aim of transferring the financial management of “National Health Insurance” to prefectures】

<Challenges>

- Many of the members are elderly or low-income earners, and medical costs are high, resulting in chronically unstable finances.
- Small municipalities have weak insurer functions (health services and financial management).

<Measures>

- Transferring responsibility for financial management to prefectures (medical benefit expenses for municipalities will be consolidated and managed by prefectures).
- Calculation of standard insurance premium rates for each municipality
- Wide-scale implementation of “medical cost optimization plans” and health programs

Item	Transition to the “Japan Health Insurance Association” (2008)	“National Health Insurance” financial management Shifted to Prefectures (2018)
Implementation date	October 1 , 2008	April 1 , 2018
Target system	Government-managed health insurance (employees of small and medium-sized enterprises)	“National Health Insurance” (municipal “National Health Insurance”)
Management body before reform	Ministry of Health, Labour and Welfare (the government was the direct insurer)	Municipality: city, town, village (insurer)
Management body after reform	“Japan Health Insurance Association” (public corporation, commonly known as "Kyosai Kenpo")	Prefectures (responsible for financial management) + municipalities (qualification management and premium collection)
Main reforms	- Abolish the system in which the national government directly acts as an insurer - Transition to independent management by public corporations - Strengthen insurer functions (health programs, insurance premium rate setting) - Introduction of prefecture-based insurance premium rates from FY 2010	- Centralizing financial management to prefectures - Prefectures setting standard insurance premium rates - Promoting wide-area optimization of medical expenses and health programs - Correcting disparities in insurance premiums between municipalities
Main background of the reform	- Government-run insurance provider lack strong insurer’s functions - Expanding fiscal deficit and increasing burden on the national treasury - Trend toward reduction in direct government operations due to progress in administrative reform	- Chronic financial difficulties due to aging and declining income levels - Weak insurer functions in small municipalities - Widening regional disparities in medical expenses and insurance premiums
the aim	- Strengthening the insurer's functions (emphasis on autonomy and strengthening of regional responsee) - Streamlining the administration - Clarifying financial responsibility	- Stabilizing the financial base (risk diversification) - Correcting disparities between municipalities - Wide-area rationalization of medical expenses
Post-implementation characteristics	- Japan's largest employee insurer with approximately 30 million subscribers - Premium rates vary by prefecture	-Prefectures manage the overall finances, while municipalities focus on collection and qualification work. -Standard insurance rates and actual insurance rates tend to be closer.

The history and role of Japan's public health care system
: Looking ahead to addressing aging

HISTORICAL BACKGROUND AND HISTORY 2: “MEDICAL FEES”

MEDICAL FEES ARE PAID BASED ON THE “MEDICAL FEE SCHEDULE”

Regarding "Medical Fees" (1)

- The first “Medical Fees” was the total contract system
- Prefectural Medical Associations were contracted to cover the total amount, and this was then distributed in each prefecture based on medical treatment performance (points were used at this time).
- The total volume of medical treatment varied from prefecture to prefecture, and the growth rate was also different, so this system showed a singns of stagnation.
- A system was introduced in which points will be determined by the government, Medical Associations, and insurers.

Regarding "Medical Fees" (2)

- The basis of payment was besed on a fee-for-service model, which combines products (medicines) and services (physicians' technical fees). Modernizing this system was a challenge.
- Transition to a new "Medical fee schedule" (1958)
- The goal was to separate products and services, to base "Medical Fees" on costs, and to move from fee-for-service to lump-sum payment. However, conflict intensified between hospital groups that welcomed the move and Medical Associations that opposed it.
- The system came to consist of two types of fee schedules: the new "Medical Fee Schedule", and the traditional "fee-for-service schedule" carried over from the past. These were referred to as Table A and Table B.

Regarding "Medical Fees" (3)

- In light of the abuse of the fee-for-service system during the era of free medical care for the elderly, a decision was made to establish a new compensation system, and a "Geriatric Medical Fee Schedule" for patients aged 70 and over was formulated (in 1983, the same year I joined the former Ministry of Health and Welfare, now the Ministry of Health, Labour and Welfare).
- Furthermore, without the co-payment, medical institutions could charge as much as they wanted and patients could visit as many times as they wanted, so free medical care was abolished at the same time.
- Ideally, patients should be required to pay a fixed rate, but at this point, they were only required to pay a low fixed amount.

Regarding "Medical Fees" (4)

- In 2003, a new comprehensive “Medical Fee schedule” for hospitalization was introduced to some medical institutions. This is a system called DPC, which is modeled after the US DRG-PPS. It is a groundbreaking system in which the total fee is determined by diagnosis group, and a fixed daily fee is paid, with a higher fee during the early stages of hospitalization.
- This allowed hospitals to increase their daily fees by shortening hospital stays, and the government was able to curb the growth of medical expenses.
- I was in the department in charge when this system was introduced.
- For outpatient care, various comprehensive points have been considered, but it is difficult to say that they have been successful at this point.

The history and role of Japan's public health care system
: Looking ahead to addressing aging

INTRODUCTION OF DPC

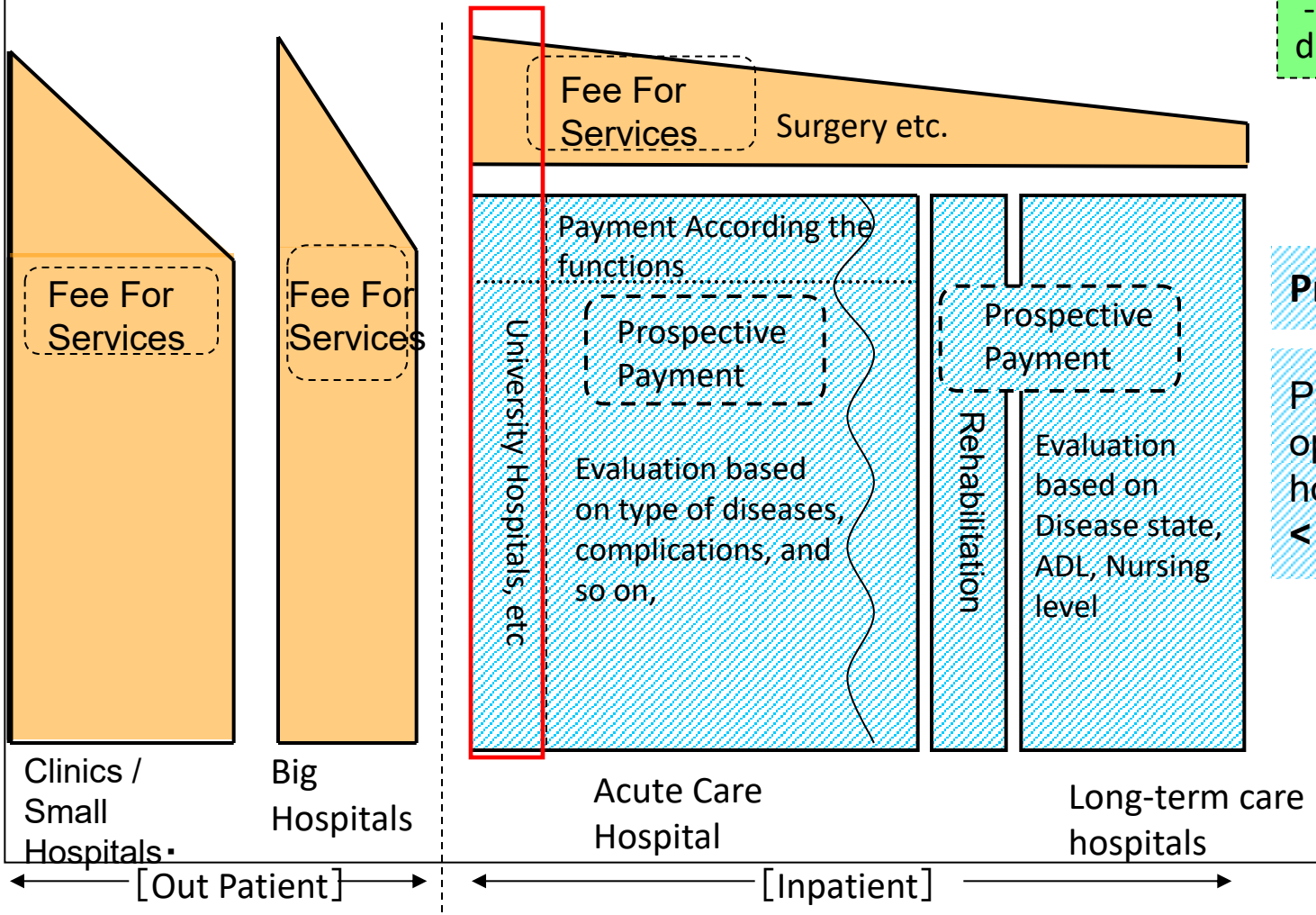
Reform of Physician & Hospital payment system in 2000's

Appropriate evaluation of each medical skills with emphasis on difficulty, time, and skill level

< Physicians fee factor >

Patients oriented reform

- Information disclosure
- Promote patients decision

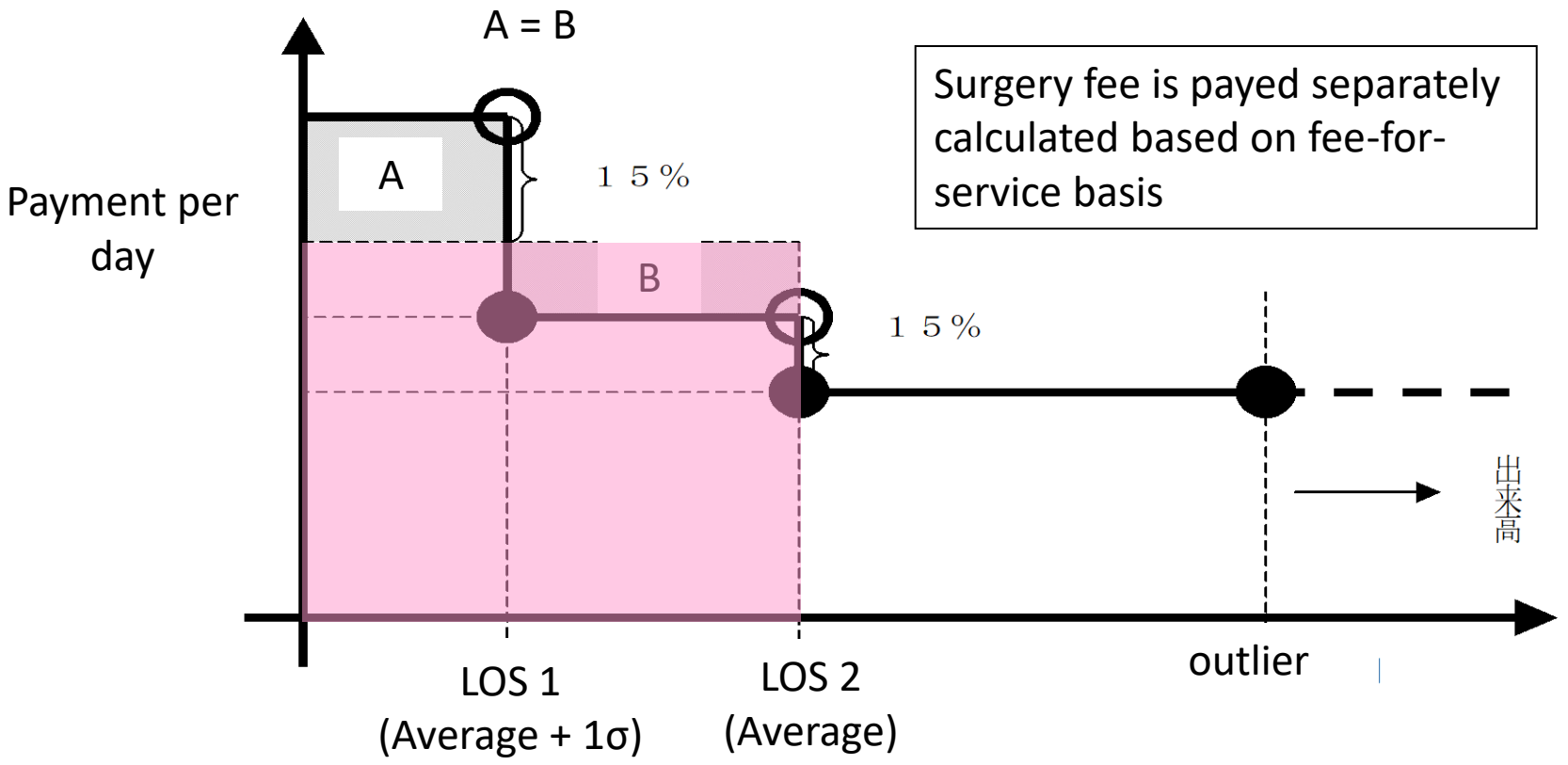


Prospective payments

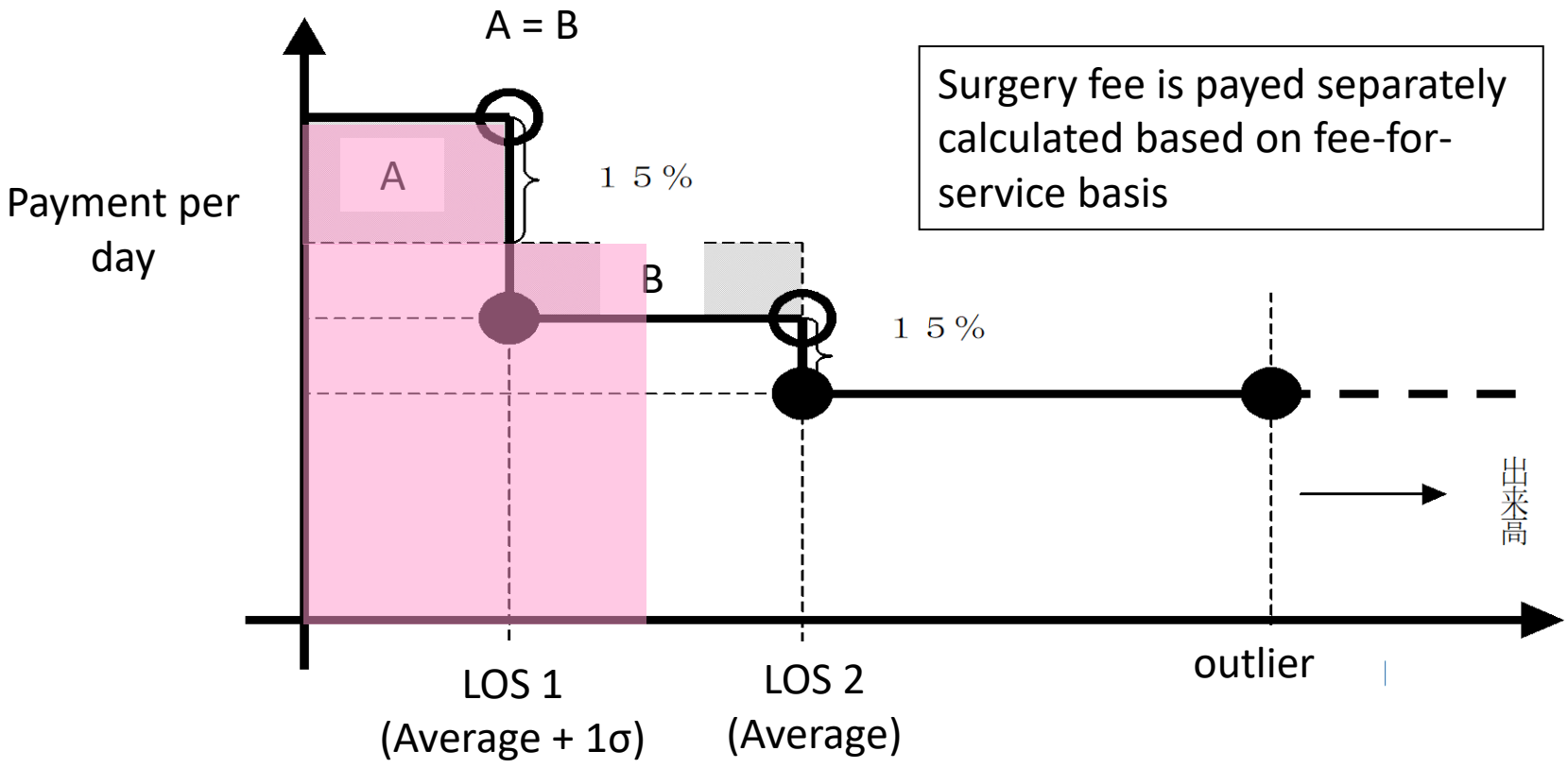
Payment based on operating cost and hospital's function

< Hospital Fee factor >

Introducing “DPC” Diagnosis Procedure Combination



Increased Hospital incomes per day and Reduced Medical Expenditures



Example:
Restructuring two hospitals

Yamagata Prefectural
Nihonkai Hospital

Sakata City Hospital

Status of Yamagata Prefectural Nihonkai Hospital and Sakata City Hospital befor reorganization

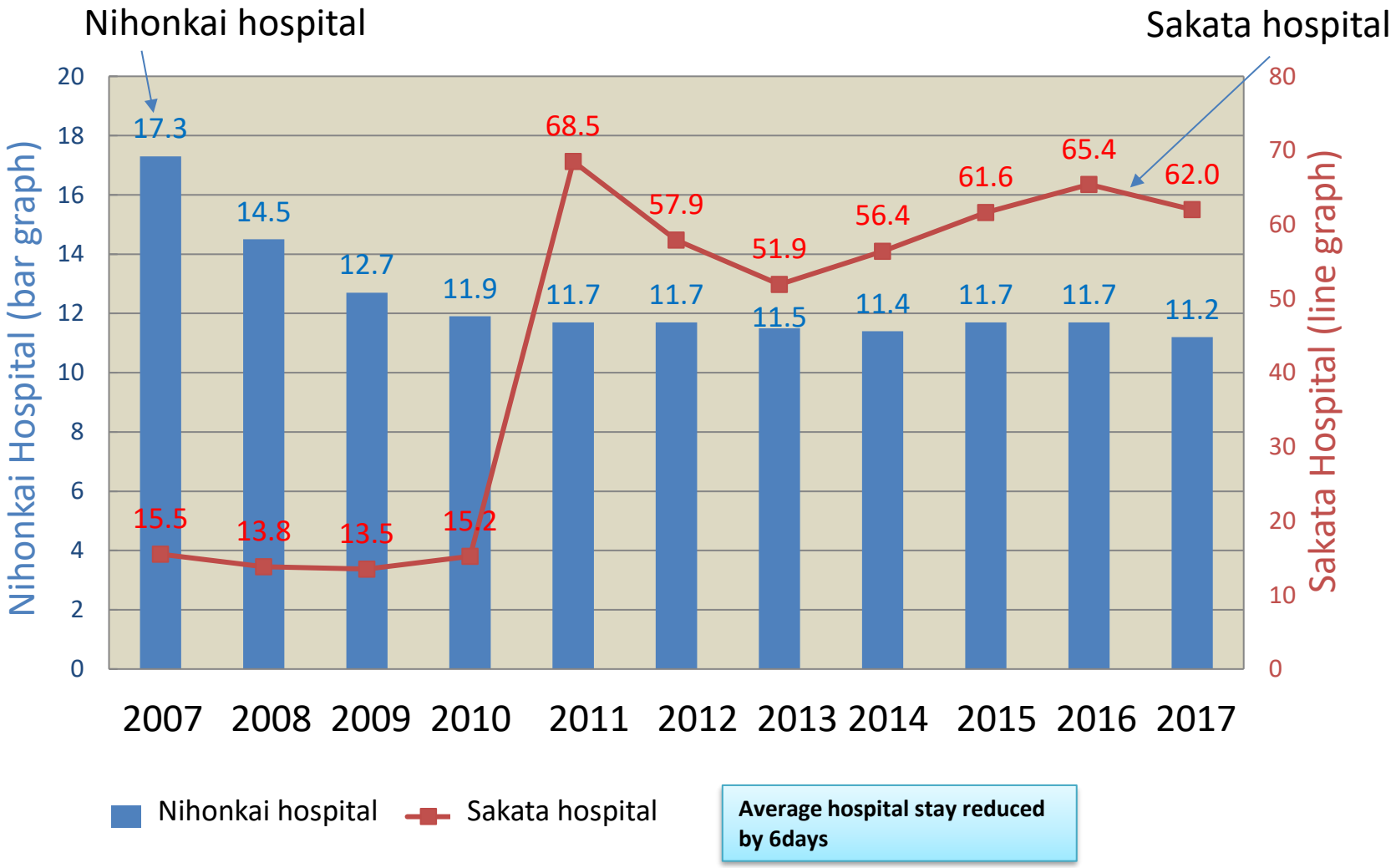
(As of 2005, at the Time of Reorganization Plan Formulation)

As of FY 2005

items	Nihonkai Hospital	Sakata Hospital
Opening Date of the Current Ward	June 1993	September 1969
Number of beds	528	400
Number of clinical departments	25	15
Daily Average Outpatients	954	868
Average Daily Inpatients	439	333
Bed Occupancy Rate	83.9	83.3
Medical Revenue per Patient (Outpatient)	JPY 8,328	JPY 7,393
Medical Revenue per Patient (Inpatient)	JPY 36,255	JPY 36,047
Net Profit or Loss	JPY('000) −170,306	JPY('000) 211,855
Deficit	JPY('000) −10,678,053	JPY('000) 0

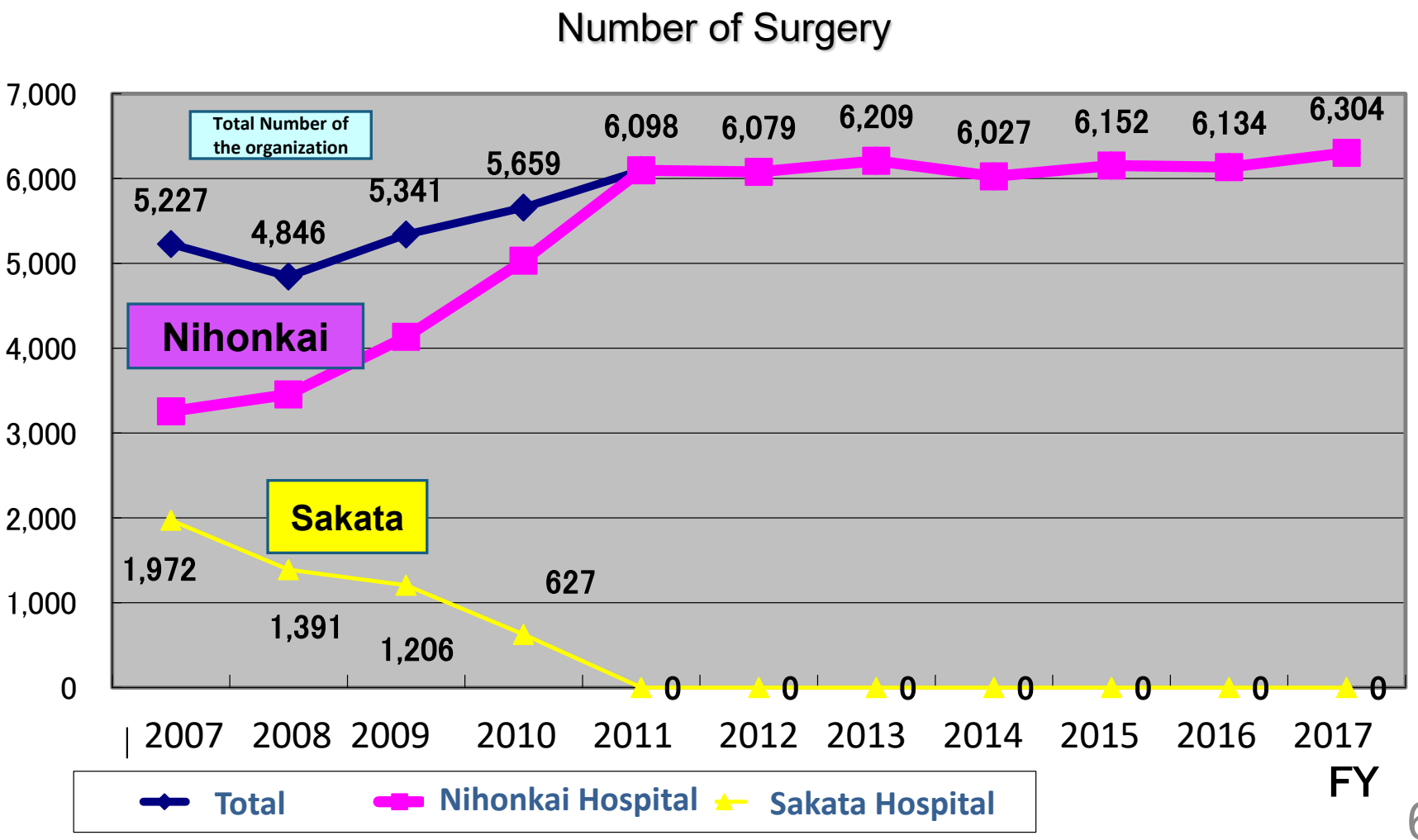
The accumulated deficit of Sakata Municipal Hospital (¥1,367,366 thousand) was addressed in accordance with Article 15 of the Enforcement Ordinance of the Local Public Enterprise Act.

Change of the Length of Stay

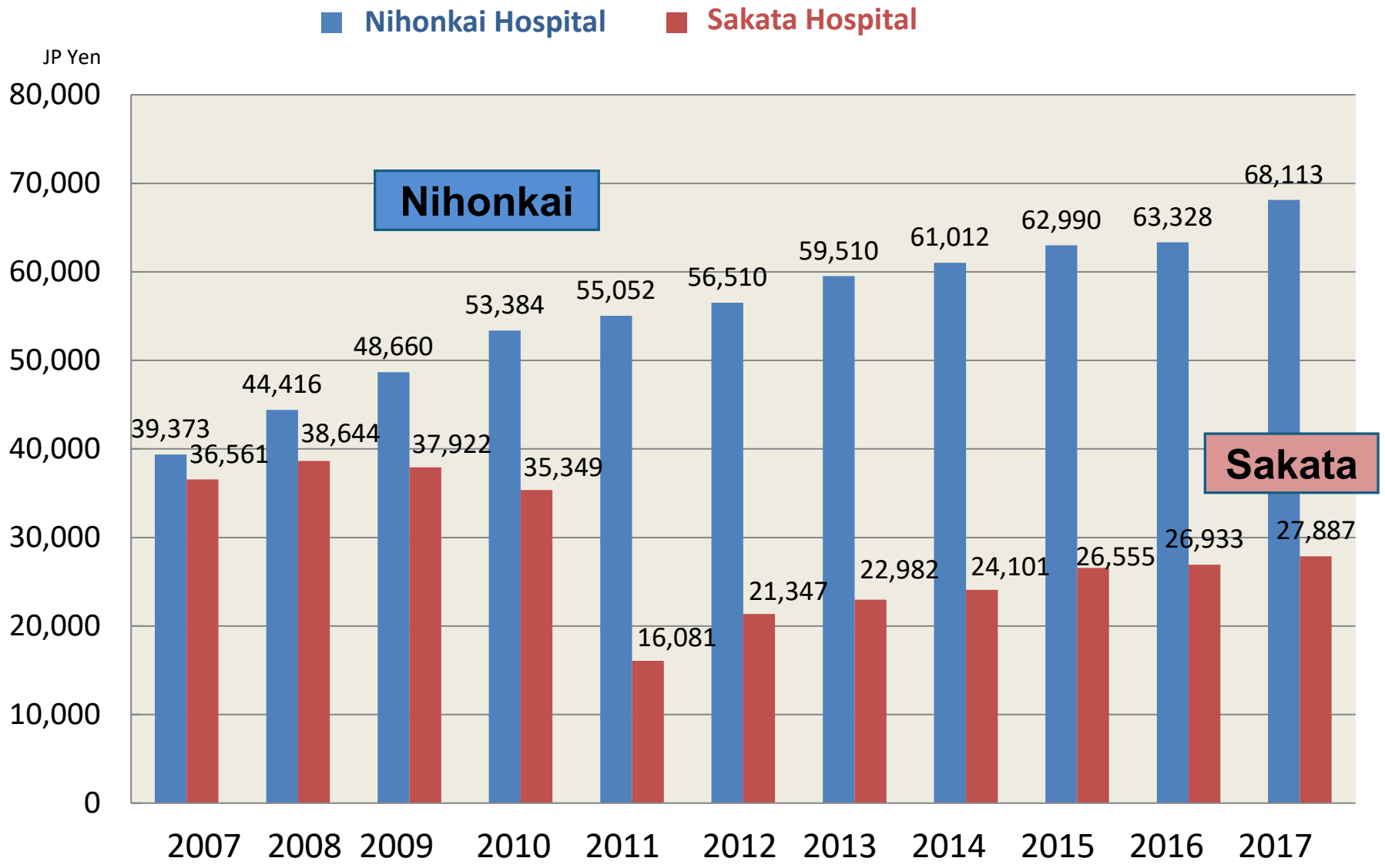


Number of Surgery

Up 1,077 / two hospital combined



Revenue / inpatient (per day)



What I thought about when introducing DPC

- Regardless of the diagnostic group, remuneration should be based on costs
(more detailed classification than US DRGs was necessary = elimination of unintended incentives)
- It was necessary to realize an electronic score table. →(a table format was needed without changing the calculation logic)
- Coefficients should be used instead of scores. → (The weighting of the score setting should be clarified)
- The perspective of income security for the previous year should be taken into account. However, weighting should be possible based on severity assessment. → (Adjustment coefficients + DPC weighting)
- It was necessary to promote standardization of diagnostic names (It was essential for medical information technology)
- It was necessary to create a summary for each hospitalization. → (It was essential as medical data)
- Having the function of disclosing information was necessary. → (because this makes predictability of medical expenses, comparison with averages possible)
- It is necessray to double hospital unit prices and make true hospital management possible.

The history and role of Japan's public health care system
: Looking ahead to addressing aging

DRUG COST (SEPARATION OF MEDICAL AND PHARMACEUTICAL FUNCTIONS)

Criticism of drug price difference raised

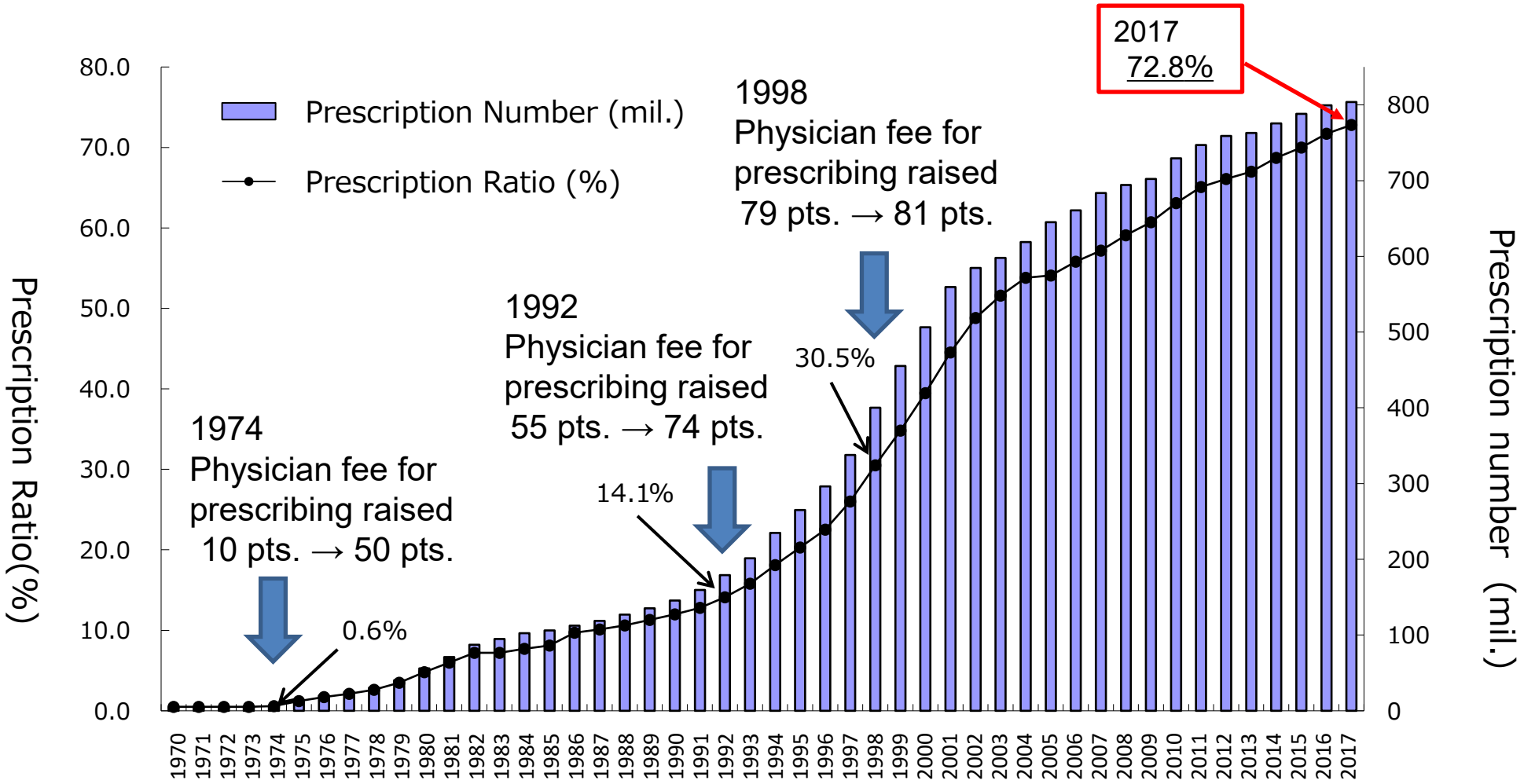
On Nov. 9, 1989, total amount estimate of medical institutions' drug price difference was reported on the front page of Japanese leading news paper.

It said, "Yakka-Sa", difference of actual purchasing price at medical institutions and their reimbursement price, which is officially determined as a Drug Tariff by the MHLW, totals 1 trillion and 300 billion yen.

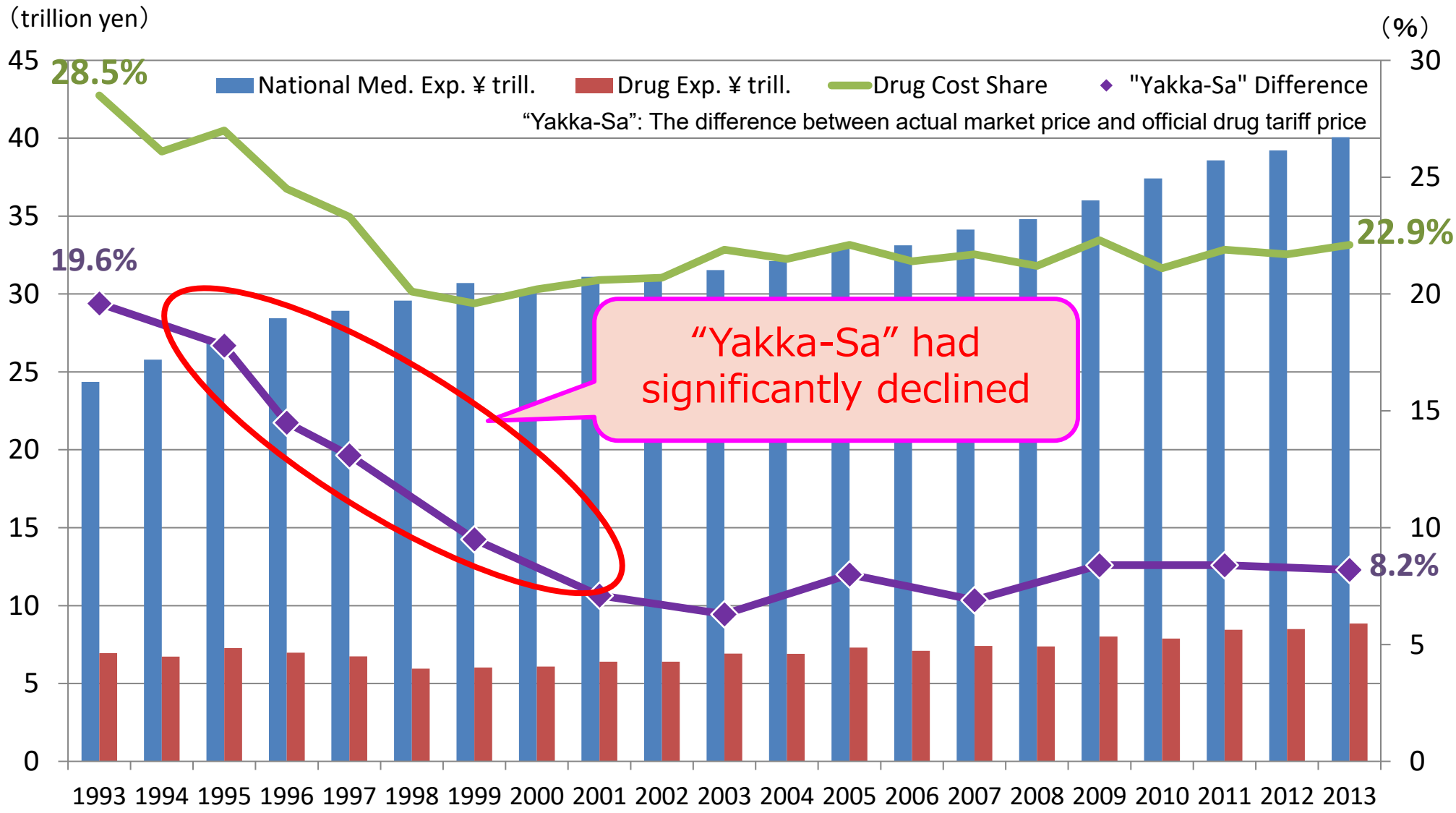
One of the reason that the difference existed and the difference goes to medical institutions' budget is Japanese historical structure of not separating dispensing from prescribing.

* Separating dispensing from prescribing is called "IYAKU BUNGYO" in Japan

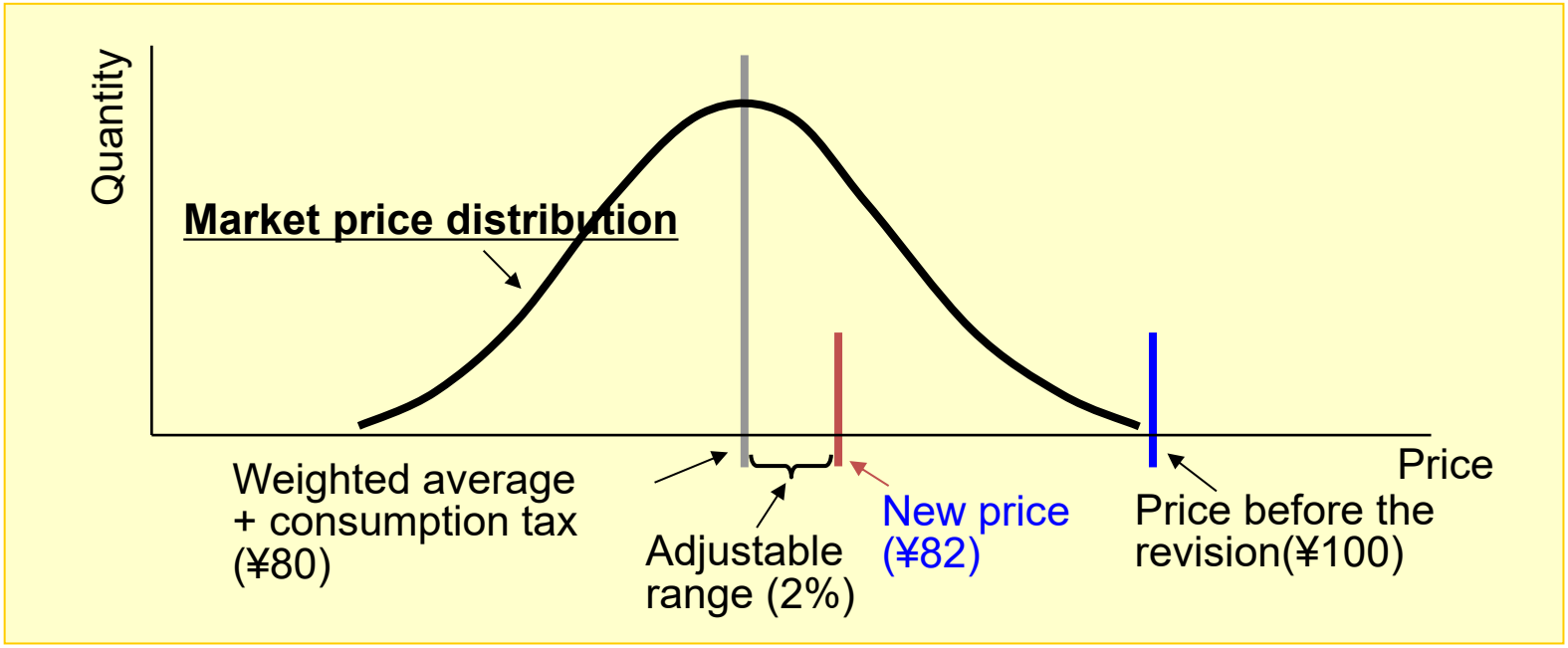
Historical trend in prescription rate compared with dispensing in DR's Office



Historical Trend of “Yakka-Sa” and Drug Cost in “National Health Insurance”



Current pricing method for listed drugs



The new drug price is the weighted average of the wholesaler's selling price to medical institutions and pharmacies (market price excluding tax), with consumption tax added as well as the span of the adjustable range (2% of drug price before the revision) for stabilizing drug distribution.

$$\text{New drug price} = \left[\text{Weighted average of selling price to medical institutions and pharmacies (market price excluding tax)}\right] \times \text{1 + consumption tax rate (incl. local consumption tax)} + \text{Span of adjustable range}$$

Change the course - - Why?

- Japan Medical Association (JMA)
  Chairman Dr. Takemi kept saying;

  "Physician's mission is not selling drugs."

- JMA has changed policy to new physician fee scheme that put emphasis on technical fee in 1973.

- Prescribing fee had been raised significantly in 1974.
  (Giving incentives not dispensing drugs but writing prescriptions for patients)

Criticism of drug price difference : Media

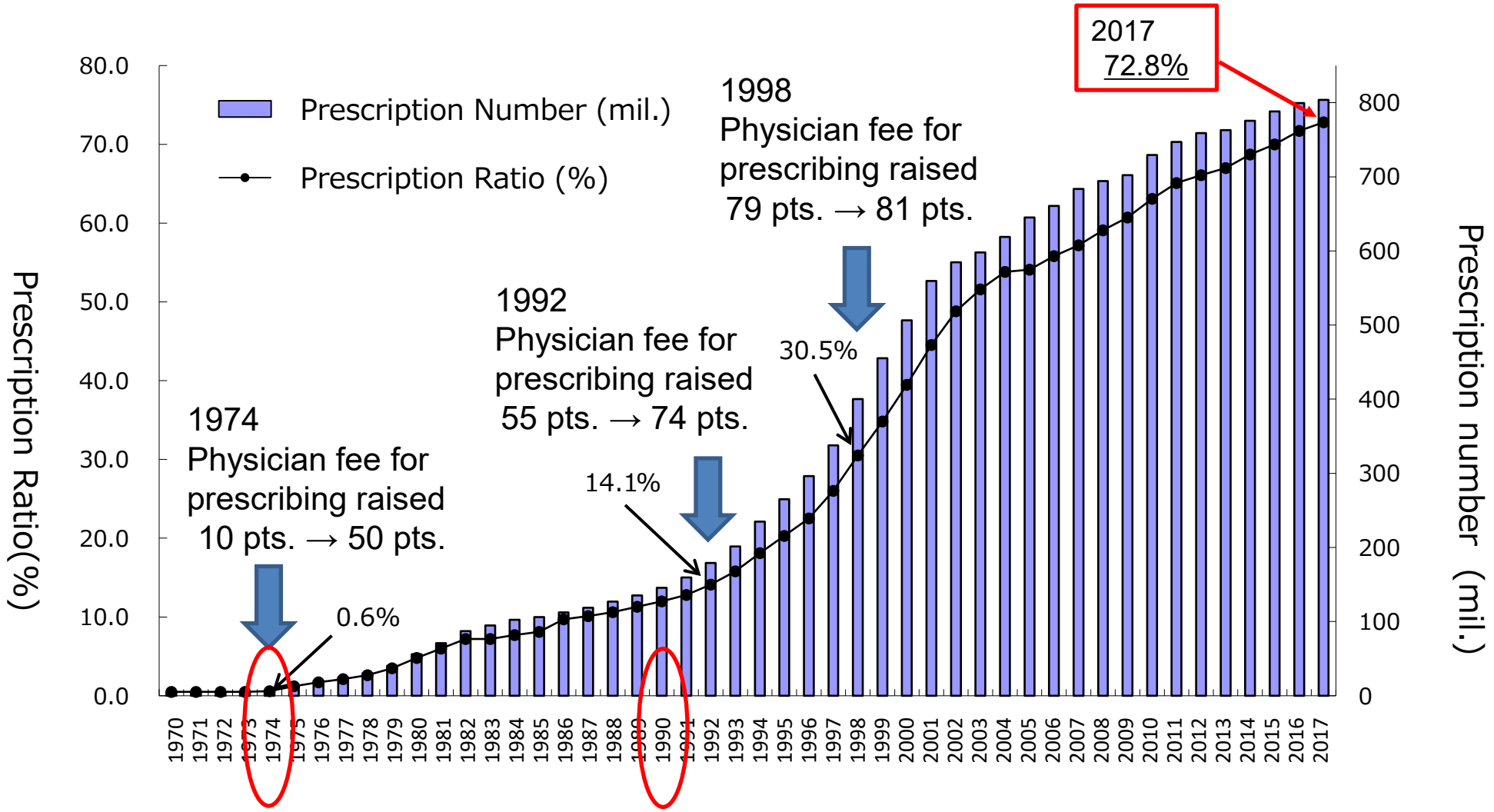
On Nov. 9, 1989, total amount estimate of medical institutions' drug price difference ("Yakka-sa") was reported on the front page of Japanese leading newspaper.

It said, "Yakka-Sa", difference between actual purchasing prices at medical institutions and their reimbursement prices, which is officially determined as a Drug Tariff by the MHLW, totals 1.3 trillion yen.

One of the reason that the difference exists and the difference goes to medical institutions' budget is the Japanese historical structure of not separating dispensing from prescribing.

* Separating dispensing from prescribing is called "IYAKU BUNGYO" (医薬分業) in Japan

Historical trend in prescription rate
Compared with dispensing in Dr's Office



Change the drug pricing scheme
- Reducing yakka-sa and paying for the innovation -

- Former rule : One price for all the same ingredients, with specific drug names.（統一限定収載方式）

  Different companies and drugs are sold with different prices = large disparities

- From 1978, each drug was listed with its brand name and its own price
  （銘柄別収載方式）

  The price of each drug has become more reflective of the value of that drug. = more value-based rule

Criticism of drug price difference : Media (1)

"the Ministry has officially provided a specific figure for the total amount of the drug price difference. During the same year, the medical expenses paid to medical institutions by each health insurance and patients were about 5,160 billion yen, of which one-quarter of this was profit margins for medical institutions. The medical institution makes an insurance claim for the drug cost used by the patient at the standard price. In reality, however, **most drugs are purchased at a discounted price, and the difference is exactly the same as making money for medical institutions.**"

Criticism of drug price difference : Media (2)

"**the total gross profit for one year is calculated as 1,324.8 billion yen, and the average profit margin reaches 25.7%.** According to the ministry's Health Insurance Bureau, if this is per capita, it is about 10,000 yen per year, and **about 40,000 yen for a standard four-person household, which is the profit margin for medical institutions**. If the entire profit is returned to the insured, the **standard premium per household can be reduced by 3000 yen per month**. The Ministry of Health and Welfare has reviewed the actual drug purchase price of medical institutions and revised the drug price standard once every two years in order to reduce the margin of drug price gains. The next revision is scheduled for next spring. "

Criticism of drug price difference : Media (3)

"The story of Toshiro Murase, **Vice President of the Japan Medical Association:** Social insurance is all controlled. On the other hand, pharmaceuticals brought into the market are subject to the competition principle as a trade in a free economic society. The Ministry of Health and Welfare approves the drug price after acknowledging that, and even if a margin arises, it is not bad. The **Ministry of Health and Welfare itself has used drug price margins as a lever for low-cost policies**, and **the margins are actually used as a source of hospital management, such as salaries for medical institutions**."

Background

Drug price revision were deep and frequent.

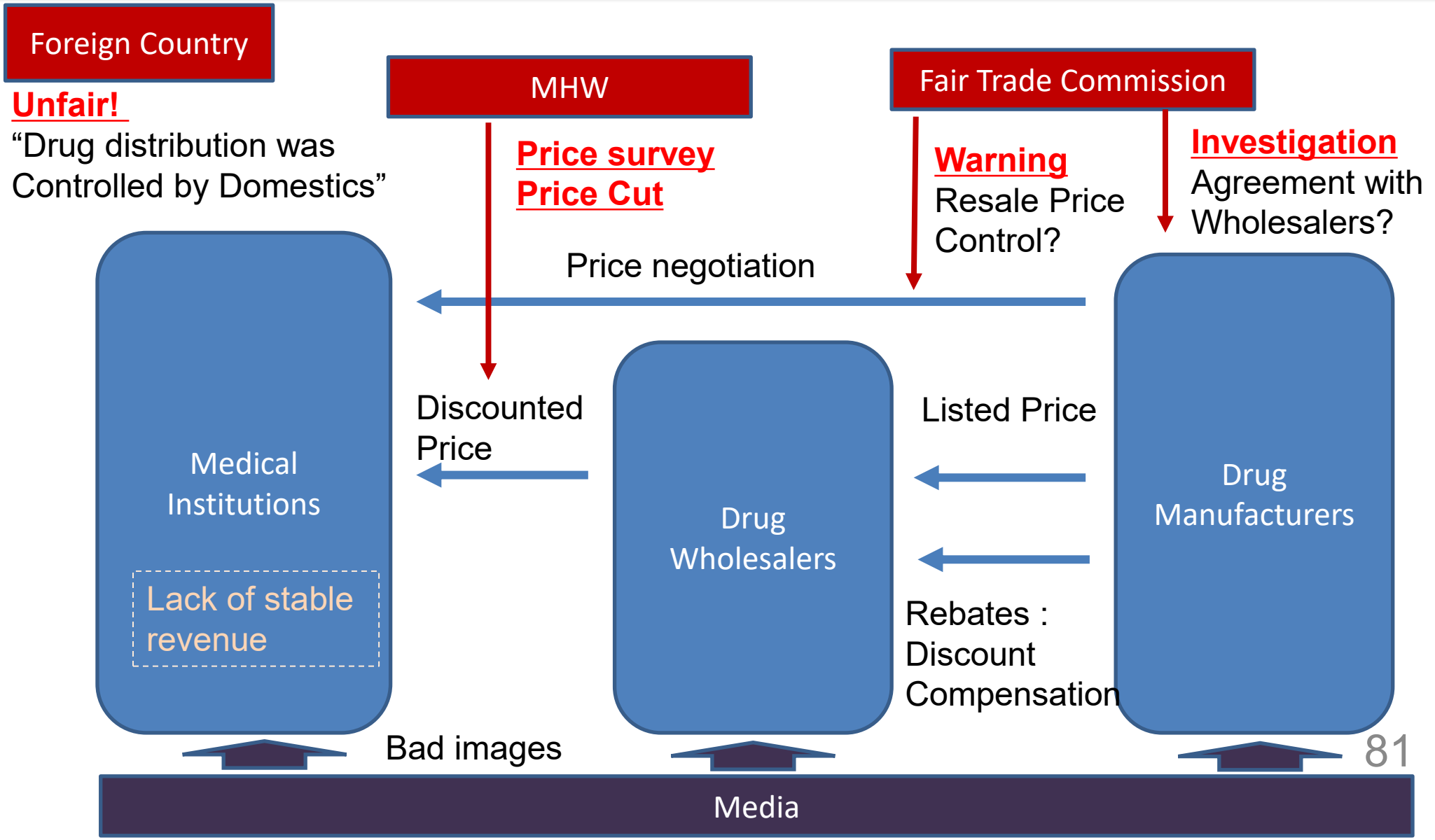
1981/6/1	- 18.6 % (biggest)
1983/1/1	- 4.9 %
1984/3/1	- 16.6 %
1985/3/1	- 6.0 %
1986/4/1	- 5.1 %
1988/4/1	- 10.2 %

(If added, 61.4% as a total)

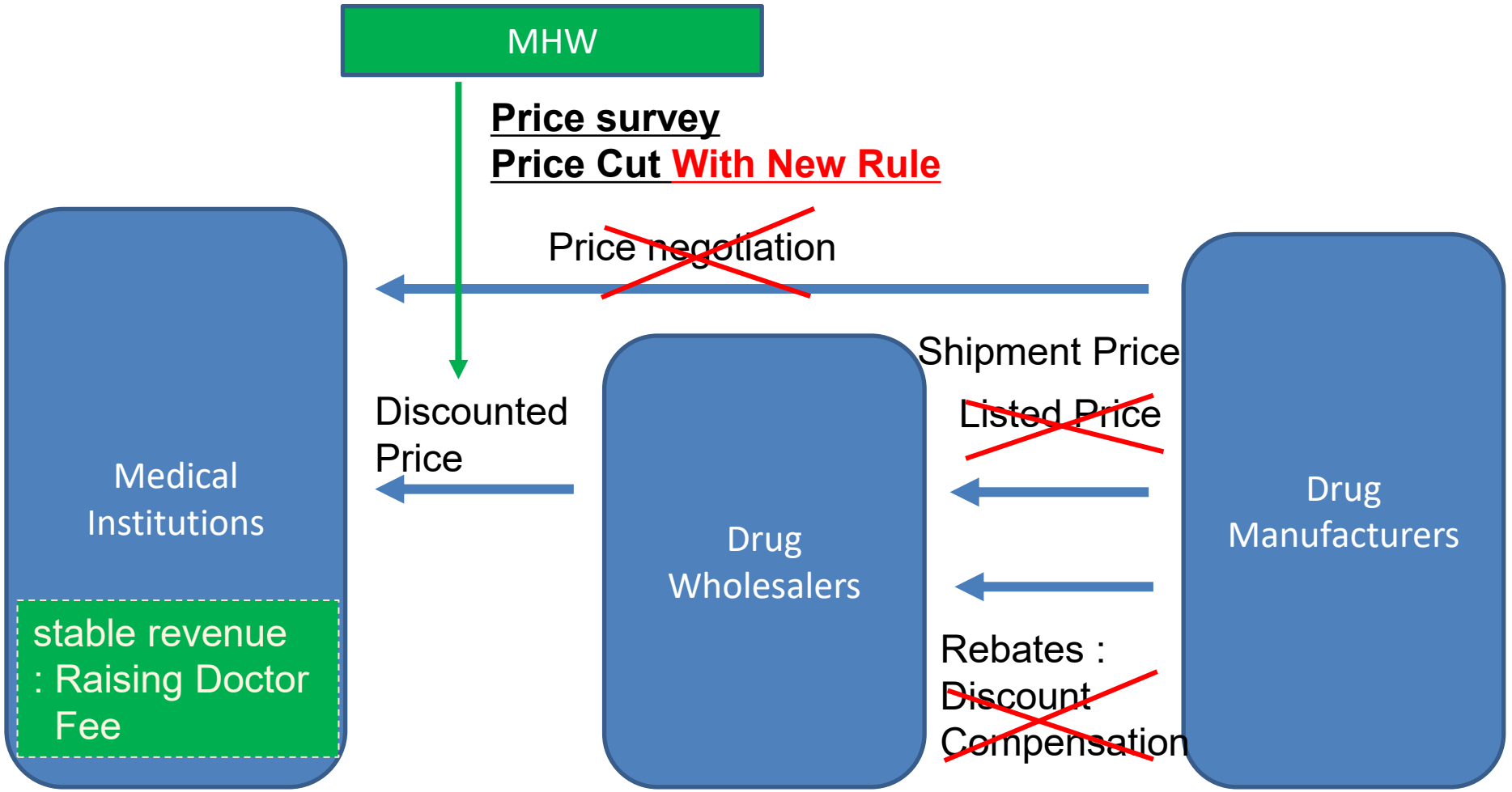
Drug industry worried the continuous price reduction very much.

Medical institutions' operation became unstable.

Situation : unsustainable



Change into Sustainable system?



R-Zone and its reduction

Year	R-Zone	Yakka-sa	Drug ratio	Drug price revisopn
1992	R=15			
1994	R=13	19.6%(1993)	26.1%	-6.6%
1996	R=11	17.8%(1995)	24.5%	-6.8%
1997	R=10、LLP8	14.5%(1996)	23.3%	-4.4%
1998	R=5、LLP2	13.1%(1997)	20.1%	-9.7%
2000	R=2	9.5%(1999)	20.2%	-7.0%

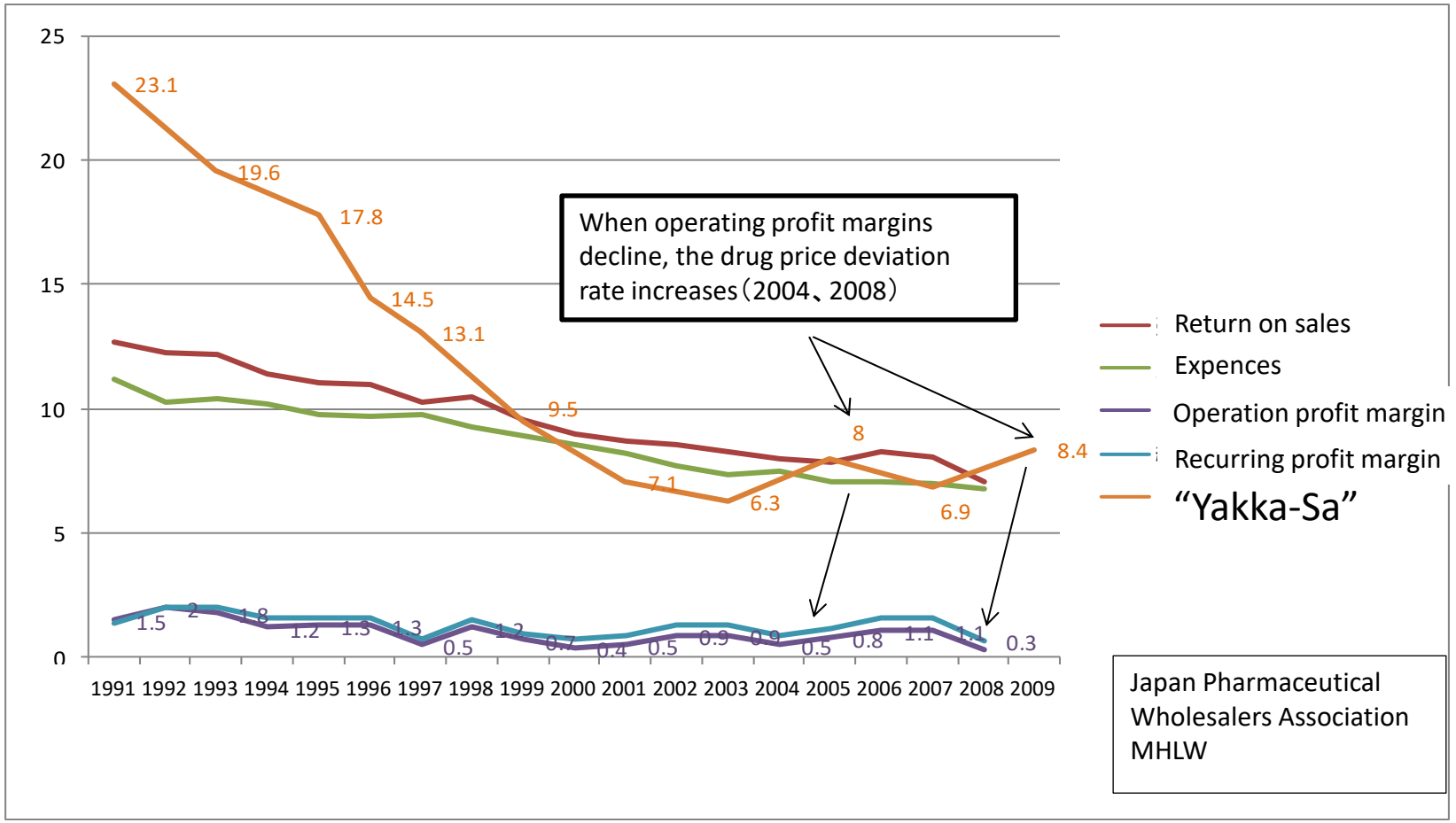
Note: LLP = Long-term Listed Products、R = Reasonable Zone

R-Zone (Reasonable zone)

- Ryukinkyo (Drug distribution system modernization committee) had put together a report on drug price reform in 1990.
- “Japan-U.S. Structural Impediments Initiative” was being discussed. Improvement in terms of transparency of transaction and fair trade was demanded from the U.S.
- Chuikyo (Central Social Insurance Medical Council) had put together a proposal to the Minister of MHLW on drug price reform in 1991.
- New rule for price revision was introduced, and new price should be based on average market price + R-zone.
- Reasonable zone had reduced step by step to the level that the industry didn’t expected (Political Decision)

“Yakka-Sa” and Drug distributors profit change

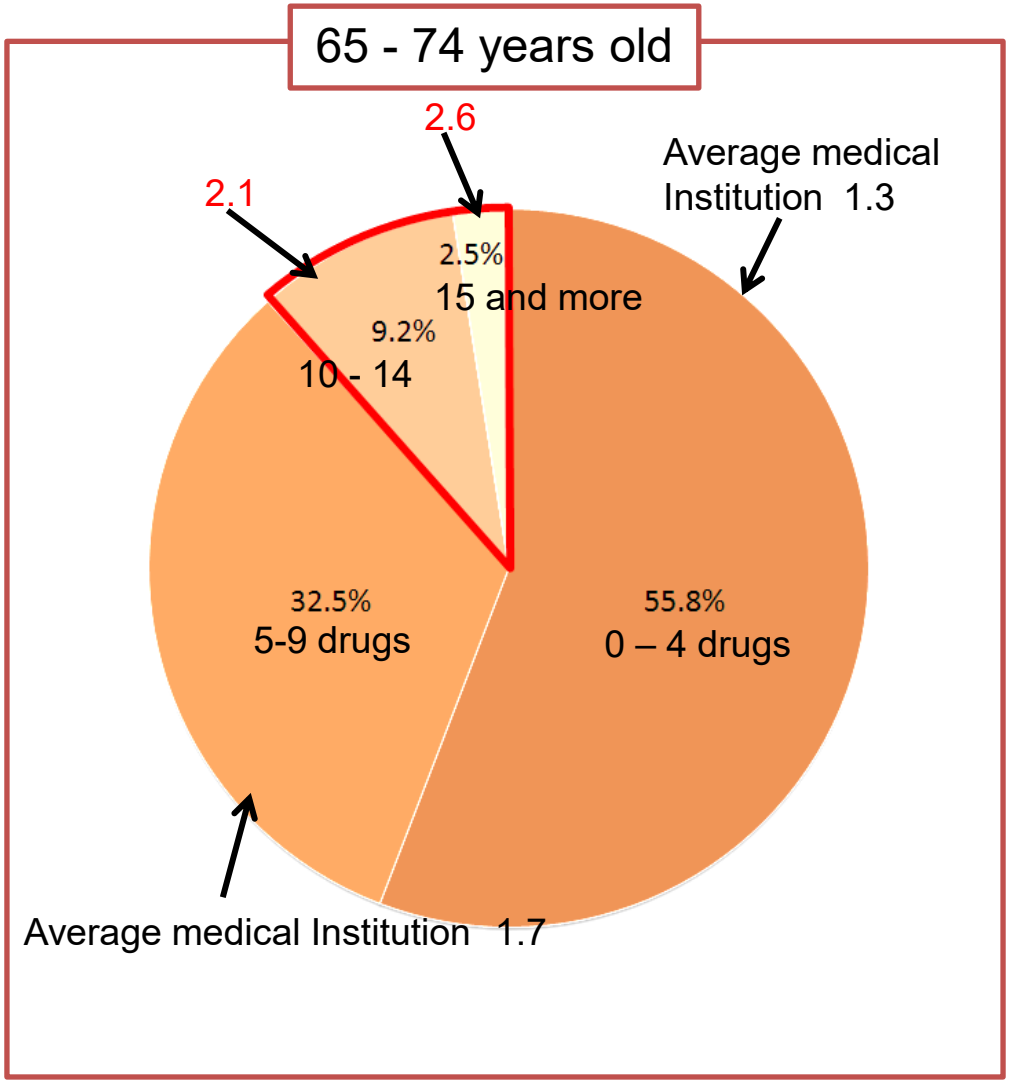
■ Profit rate of distributors had declined to 0.3%

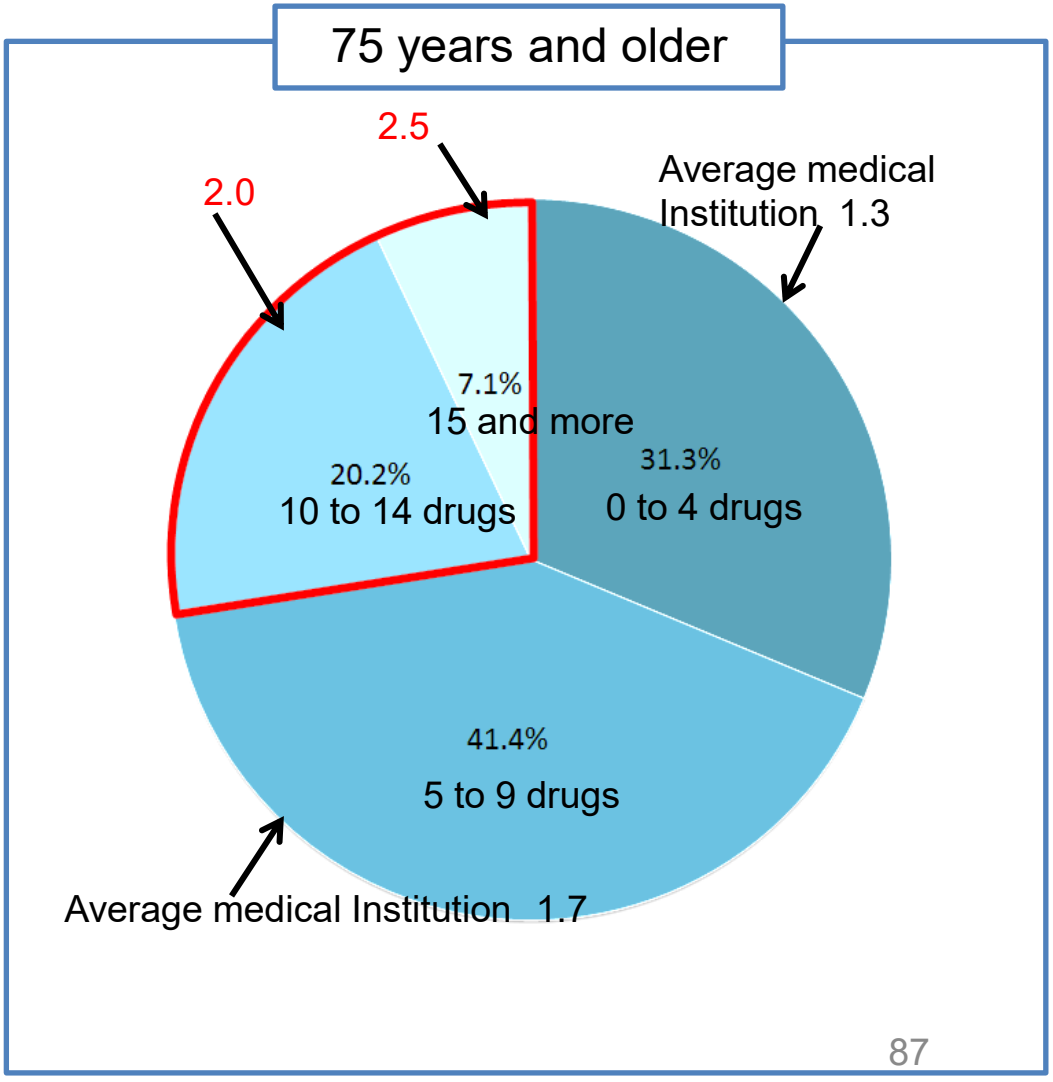


Drug Distribution Reform

- With new reform, drug wholesalers' profits getting low, having little or minus margin to offer big discounts to medical institutions.
- New drugs comes in, many of them sold with higher price, and innovative drugs had limited needs for discounts to appeal to physicians.

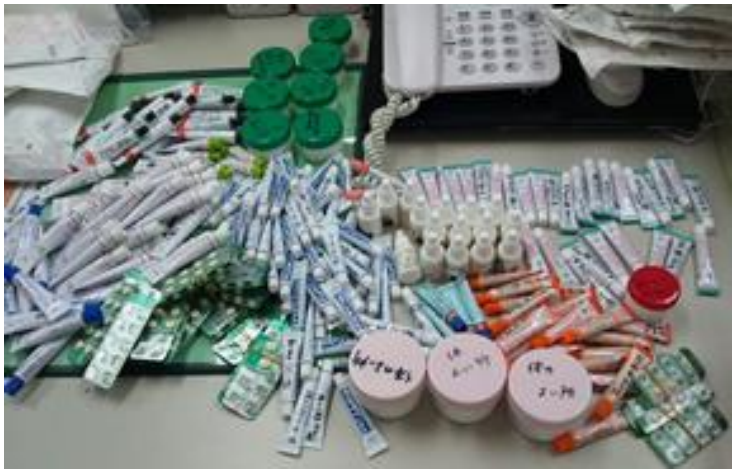
Multi-Medication situation of aged patients in Japan





Left-over drug at home

With prescription days get longer, more left-over drugs are frequently found at home by forgetting, reducing by own, and disappear of needs.



Provided by the Japan Pharmaceutical Association

The history and role of Japan's public health care system
: Looking ahead to addressing aging

HISTORICAL BACKGROUND AND HISTORY 3: “INSURANCE-COVERED MEDICAL INSTITUTIONS”

Regarding “Insurance-Covered Medical Institutions" (no major changes to the system)

- In Japan, medical treatment covered by insurance is handled by "Insurance-Covered Medical Institutions." Medical institutions become “Insurance-Covered Medical Institutions” after receiving designation by government.
- “Insurance-Covered Medical Institutions” must comply with the standards for handling medical insurance. These are called the “Regulations for the Provision of Madical Care” (Ministry of Health, Labour and Welfare Ordinance).
- If a medical institution commits fraud, such as filing fictitious claims in order to increase the number of insurance claims, its designation as an insurance medical institution may be revoked.
- (reposted the previous slides) There have been no major changes to this system .

The history and role of Japan's public health care system
: Looking ahead to addressing aging

HISTORICAL BACKGROUND AND HISTORY
4: BENEFITS IN KIND

INCREASINGLY PATIENTS CAN CHOOSE AND PAY

Regarding “in-kind benefits” (system transition 1)

- Medical care provided as “benefits in kind” must be provided in accordance with insurance standards. Medical treatments other than those approved by the insurance are prohibited. Combining insured and uninsured medical care is illegal.
- (partially reposted the previous slide)
- Traditionally, the provision of special rooms has been permitted to be charged extra for the room diference (patient choice in the area of amenities), but the expansion of this practice was discussed.
- In 1984, a legal amendment was made allowing the combination of insured and uninsured medical treatment.
- The above measures were gradually expanded.

Regarding "in-kind benefits" (System transition 2)

- In 1984, a legal amendment was made allowing the combination of insured and uninsured medical treatment.
- The above measures were gradually expanded.
- The most important mechanism today is the handling of “Advanced Medical Treatments”.
- According to documents from the Ministry of Health, Labor and Welfare, the current situation is as follows:

Overview of the system

“Mixed Medical Treatment Fee System”

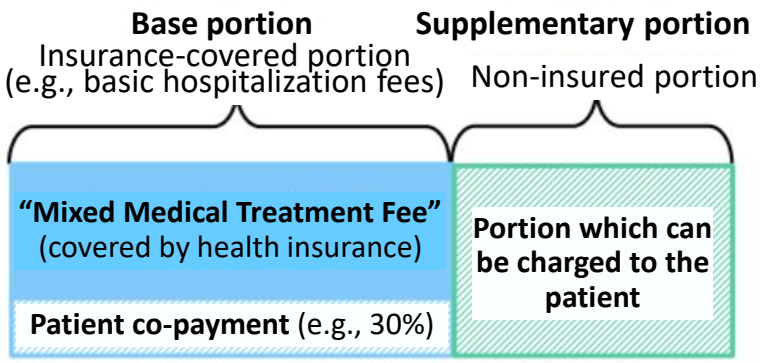
Introduced under the 2006 legal reform

Medical treatment allowed to be combined with insured care

① Evaluative treatment
② Patient-requested treatment
→ **Treatment evaluated for potential insurance coverage**

③ Designated treatment → **Treatment not intended for insurance coverage**

Mechanism of “Mixed Medical Treatment Fee System”



※ “Mixed Medical Treatment Fee System” clearly stipulates requirements when collecting fees from patients, including the obligation to display the charges.

○Evaluative Treatments

・”Advanced medical treatments”
・Medical services related to clinical trials of pharmaceuticals, medical devices, and regenerative medicine products
・Use of pharmaceuticals, medical devices, or regenerative medicine products after regulatory approval but before insurance coverage
・Off-label use of drugs listed in the drug price standards
(where partial modifications of dosage, method, or indications have been approved for application)
・Use of program-based medical devices
(after first-stage regulatory approval, aiming for re-evaluation through a challenge application)

○Patient-requested treatments

○Designated Treatments

・Special care environment (private rooms with additional charges)
・Use of gold alloys in dental treatment
・Complete dentures with metal base
・Scheduled/appointment-based consultations
・Out-of-hours consultations
・Initial consultations at large hospitals
・Follow-up consultations at large hospitals
・Guidance and management for pediatric dental caries
・Hospitalization exceeding 180 days
・Medical procedures exceeding the permitted number of times
・Multifocal intraocular lenses used for lens reconstruction
・Program-controlled medical devices after the end of insurance coverage period
・Intermittently scanned continuous glucose monitoring devices
・Sperm freezing and thawing
・Long-term inpatient medical supplies

Overview of the system (“Advanced Medical Treatments”)

What is “Advanced Medical Treatments”

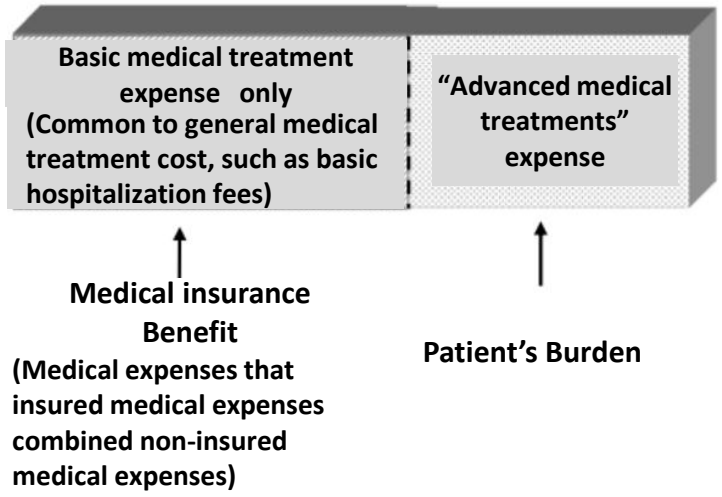
“Advanced Medical Treatments”

○A System **that sets facility standards** to ensure the safety and effectiveness of advanced medical technologies that are not yet covered by insurance. It allows for the **combined use on insured and uninsured medical treatment**, and **evaluate them with a view to future introduction of insurance**.

○Insurance applies to basic medical expenses, such as basic hospitalization fees, which are common to general medical treatment, but “advanced medical treatments” expenses are borne by the patient.

○For each medical technology to be recognized as “advanced medical treatments”, it must undergo an examination for safety, effectiveness, etc.by the Council for “advanced medical treatments”, and medical institutions that implement the “advanced medical treatments” must notify or obtain approval from the Minister of Health, Labor and Welfare.

Overview



Classification of target medical technology

○**”Advanced Medical Treatments” A**

1. Medical technology that doesn’t involve the use of unapproved drugs, medical devices, regenerative medicine products, or off-label use of unapproved drugs, medical devices, regenerative medicine products. (excluding item4)

2. The following medical technologies with minimal impact on the human body when implemented. (excluding item4)
(1)Medical technology involving the use of unapproved in vitro diagnostics or off-label use of in vitro diagnostics.
(2)Medical technology involving the use of unapproved diagnostic reagents or off-label use of diagnostic reagents.

(3) Medical technology involving the use of unapproved medical devices or off-label use of medical devices for the purpose of testing.

○**”Advanced Medical Treatments” B**

3.Medical technology involving the use of unapproved drugs ,medical devices, or regenerative medicine products, or off-label use of drugs, medical devices, or regenerative medical products. (excluding item2)
4.In the light of its safety, effectiveness of the medical technology, it is deemed to require particularly intensive observation and evaluation its implementation environment, effectiveness, etc.

Overview of the system (“Selected Medical Services”)

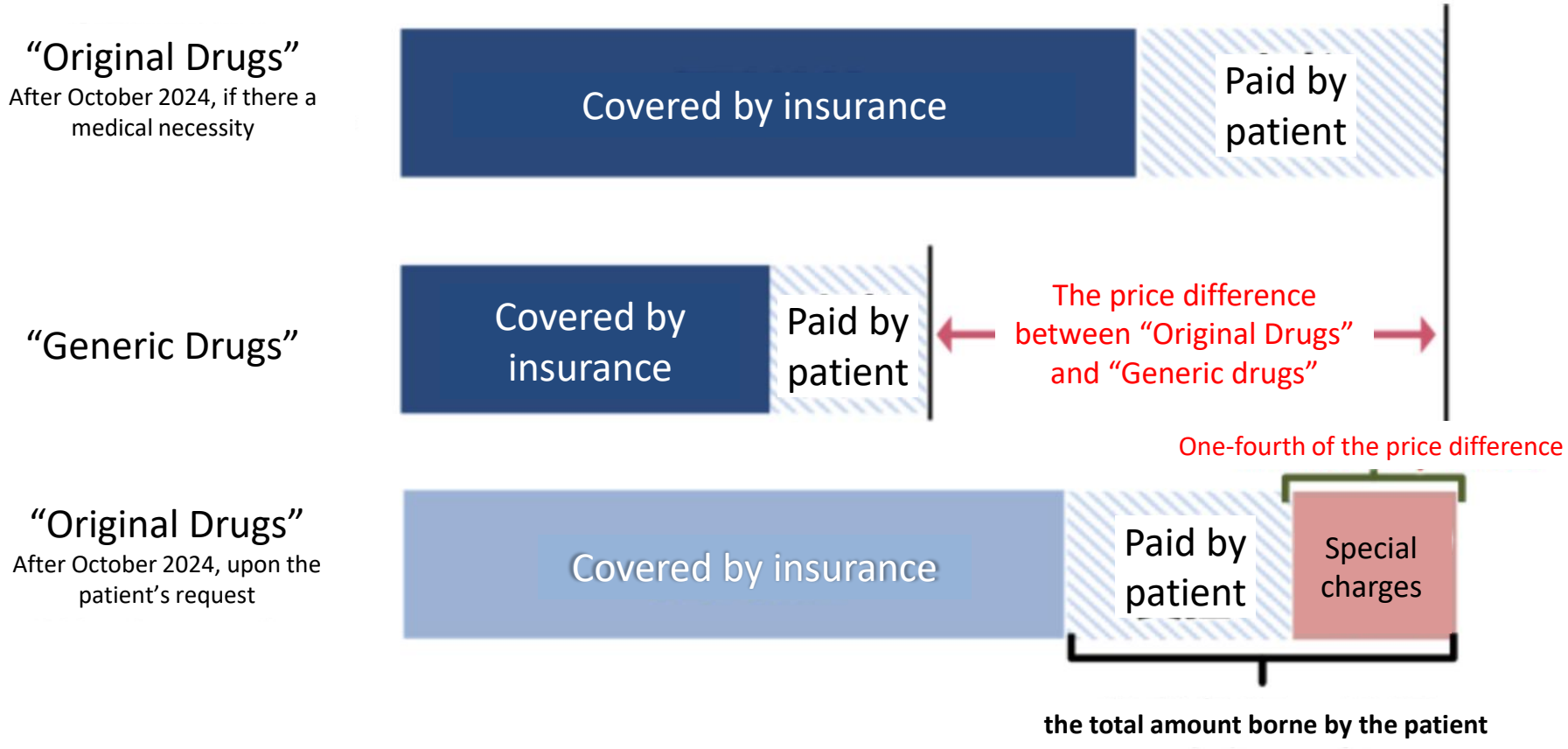
“Selected Medical Services”

“Selected Medical Services” refer to services under combined insured and non-insured medical treatment that are not intended for future inclusion in public health insurance. Patients may receive these services by paying special additional charges to combine non-insured treatment with insured treatment. There are the following types of “Selected Medical Services”:

- Special care environment (private rooms with additional charges)
- Use of gold alloys in dental treatment
- Complete dentures with metal base
- Scheduled/appointment-based consultations
- Out-of-hours consultations
- Initial consultations at large hospitals
- Follow-up consultations at large hospitals
- Guidance and management for pediatric dental caries
- Hospitalization exceeding 180 days
- Medical procedures exceeding the permitted number of times
- Multifocal intraocular lenses used for lens reconstruction
- Program-controlled medical devices after the end of insurance coverage period
- Intermittently scanned continuous glucose monitoring devices
- Sperm freezing and thawing
- Long-term inpatient medical supplies

Overview of the system
(newly introduced measures of patient costs related to drug selection)

Exceptional billing calculation



The history and role of Japan's public health care system
: Looking ahead to addressing aging

JAPAN'S MEDICAL INSURANCE SYSTEM: HOW TO DEAL WITH THE AGING POPULATION AND HOW TO UTILIZE PRIVATE INSURANCE

Use of private insurance (transition 1)

- Initially, the government and Medical Association were opposed to the use of private insurance, as it would allow for mixed (insured and uninsured) medical treatment.
- In private insurance, products that add fixed hospitalization benefits as riders became popular, but these have no relationship to insured medical treatment related to hospitalization.
- The Ministry of Health, Labour and Welfare was opposed to systems and insurance that weakened the effectiveness of co-payments, as the abolition of co-payments had led to abuse of the system.
- Subsequently, resistance to the use of private insurance gradually weakened, with the combination of insured and uninsured medical treatment becoming permitted.
- In Japan, almost all medical care is covered by medical insurance, and no alternative products are sold.

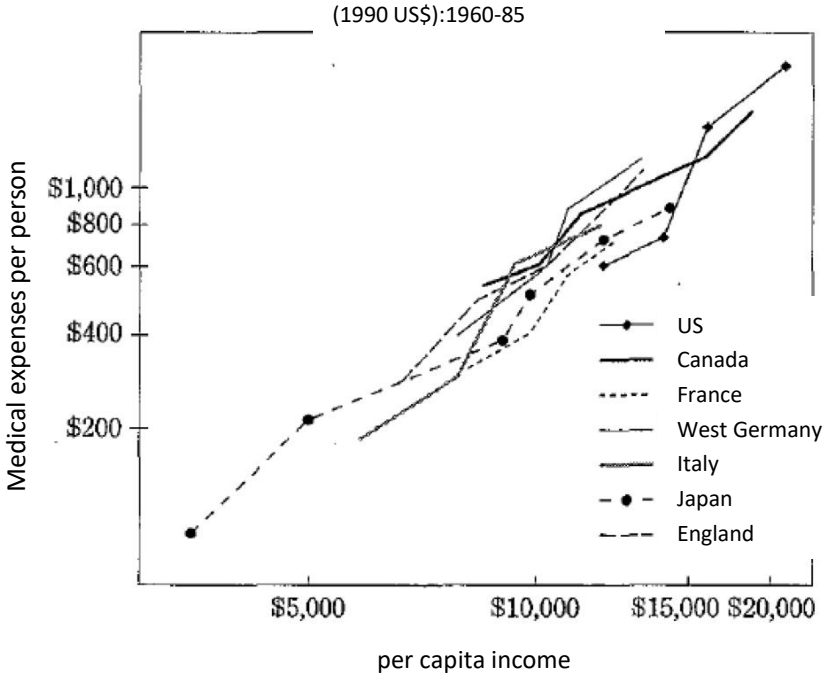
Use of private insurance (transition 2)

- Subsequently, it became possible to pay copayments by credit card and receive benefit equivalent to the copayments through private insurance.
- Meanwhile, cancer insurance has become widespread, and as a result, riders to cancer insurance that cover the costs of “Advanced Medical Treatments” designated by the government have become widespread.
- Discussions regarding the use of private insurance are still ongoing in various areas.
- However, it is limited to the costs associated with nationally insured medical treatment or the costs of non-insured medical treatment approved by the government, and is of a complementary nature.
- This is because Japan's public health care system has a “Universal Health Insurance” system that basically covers all necessary medical care.

Factors behind the overall increase in medical expenses: Relationship with income

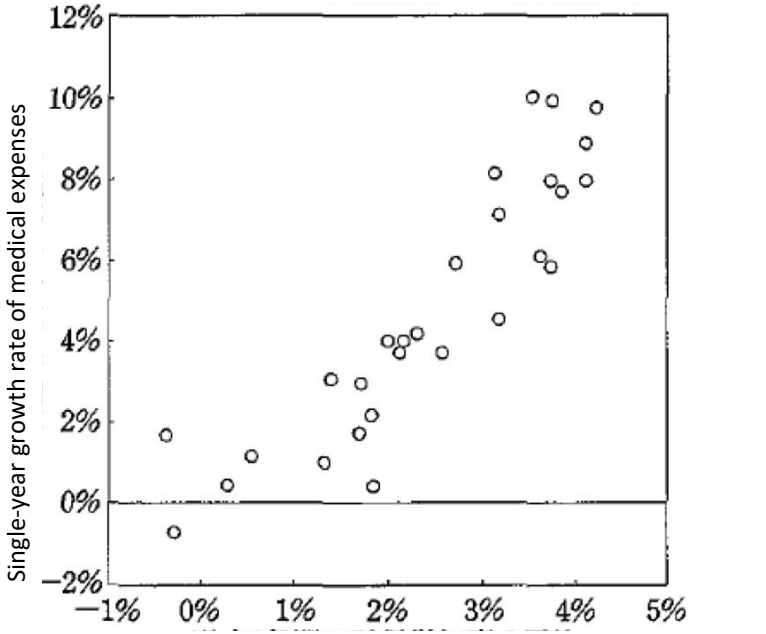
According to international comparative research,
-There is a positive correlation between per capita medical expenses and per capita income,
-There is a positive correlation between the annual growth rate of medical expenses and the income growth rate over the past six years (not just for a single year).
has been pointed out.

(Per capita income and medical expenses)



Source: Getzen (1995) 36.

Average annual income growth rate over the past six years and single-year growth rate of medical expenses



Source: Getzen (1995) 37.

Source: "Basio Theories and Issues in Health Economics" (edited by Nishimura Shuzo, Tanaka Shigeru, and Endo Hisao, Keiso Shobo, 2006) Chapter7 "International Comparison of Total Medical Expense Levels and Issues and Empirical Research on Determinants" (by Gonjo Zenichi)

23. Oct. 2008
National Social Security Conference Materials

As income increases, medical expenses also increase.

- As income increases, the need for medical care expands.

  ※ Another example: Generally, as income rises, the proportion of food expenses in household expenses tends to decrease. (This is called the “Engel Coefficient”.)

- As people become wealthier, their medical needs become more diverse.

- As income increases, people tend to invest more in their own health.

It could also be considered as above.

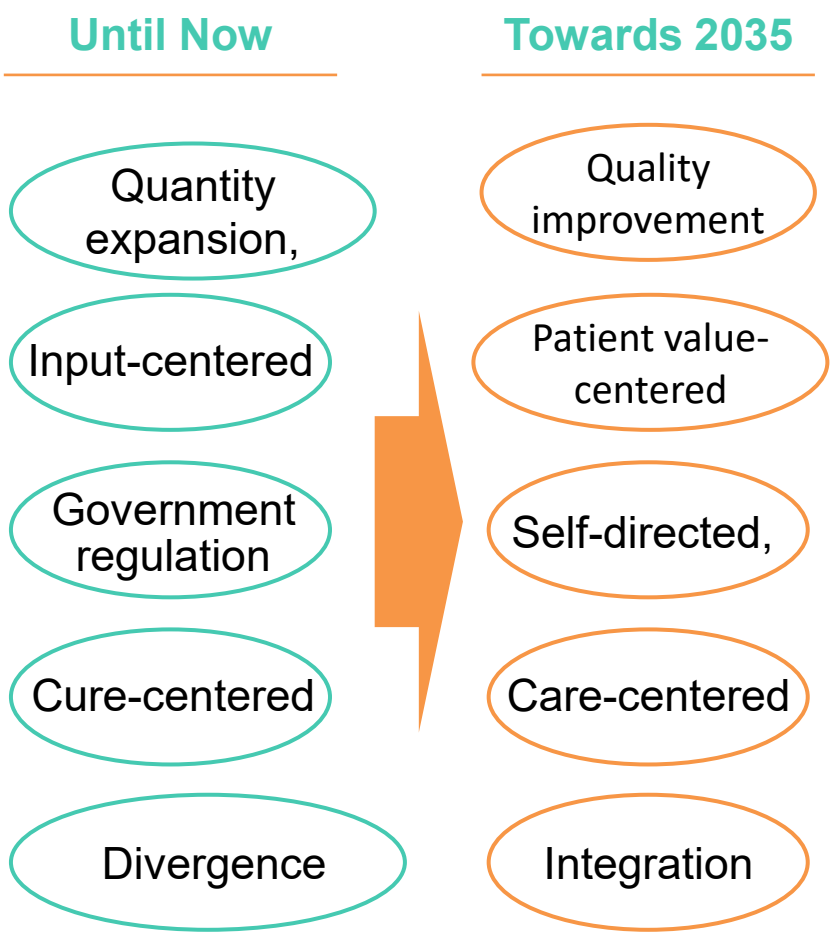
From the Ministry of Health, Labour and Welfare website

A paradigm shift is necessary to respond to the changes in society and the economy 20 years from now

Challenges and prospects for 2035

- Increasing healthcare needs, diversifying social environments and values, growing disparities, and advancing globalization.
- Rather than simply maintaining the current system by increasing burdens and reducing benefits, we need to share values and visions and restructure healthcare as a new "social system.
- "While maintaining the world's highest level of health, we must also contribute to Japan's economic growth and development through innovation in healthcare technologies and systems.
- We must also seriously address fiscal reconstruction and actively contribute to Japan's economy and finances.
- By overcoming the declining birthrate and aging society, Japan will further develop and lead the international community in the face of the aging population, thereby establishing itself as a nation with a long and healthy life expectancy.

A paradigm shift in healthcare



The New York Times

2018 Nobel Prize in Medicine Awarded to 2 Cancer Immunotherapy Researchers

The Nobel Prize for Physiology and Medicine was awarded to James P. Allison, left, and Tasuku Honjo on Monday for their work on cancer research.

Jonathan Nackstrand/Agence France-Presse — Getty Images

OPDIVO® オプジーボ®

Opdivo®ナル抗体

For drip only anti-tunor analgedlc

In accordance with the approval conditions for this drug, we will conduct a usage results survey (investigating all cases) after manufacturing and marketing approval. and will take the necessary messures to ensure the appropriate treatment of thin drug.

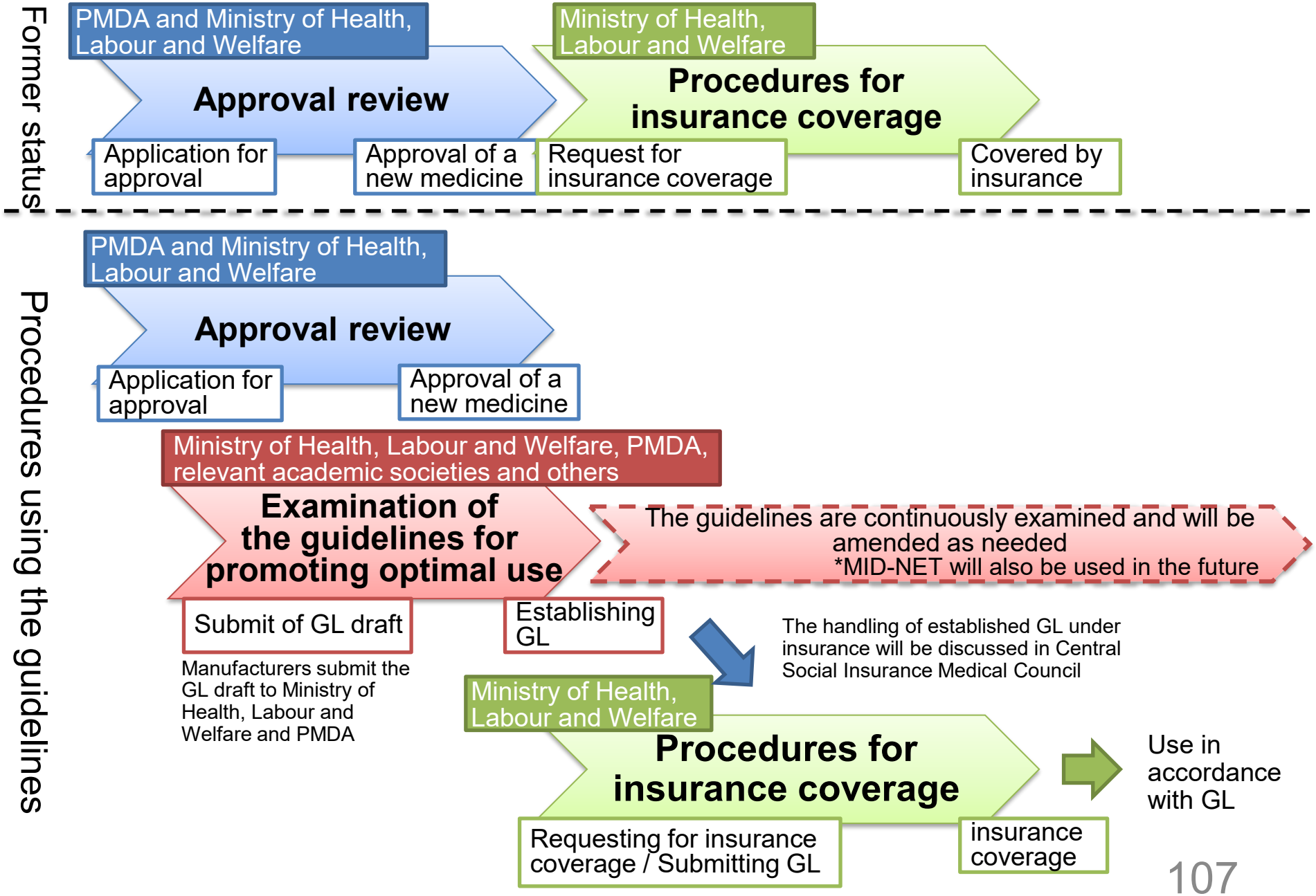
Product name

Generic name of the drug

Effects and Efficacy

Dr. Tasuku Honjo,
Novel Prize Winner

Procedures from approval to insurance coverage



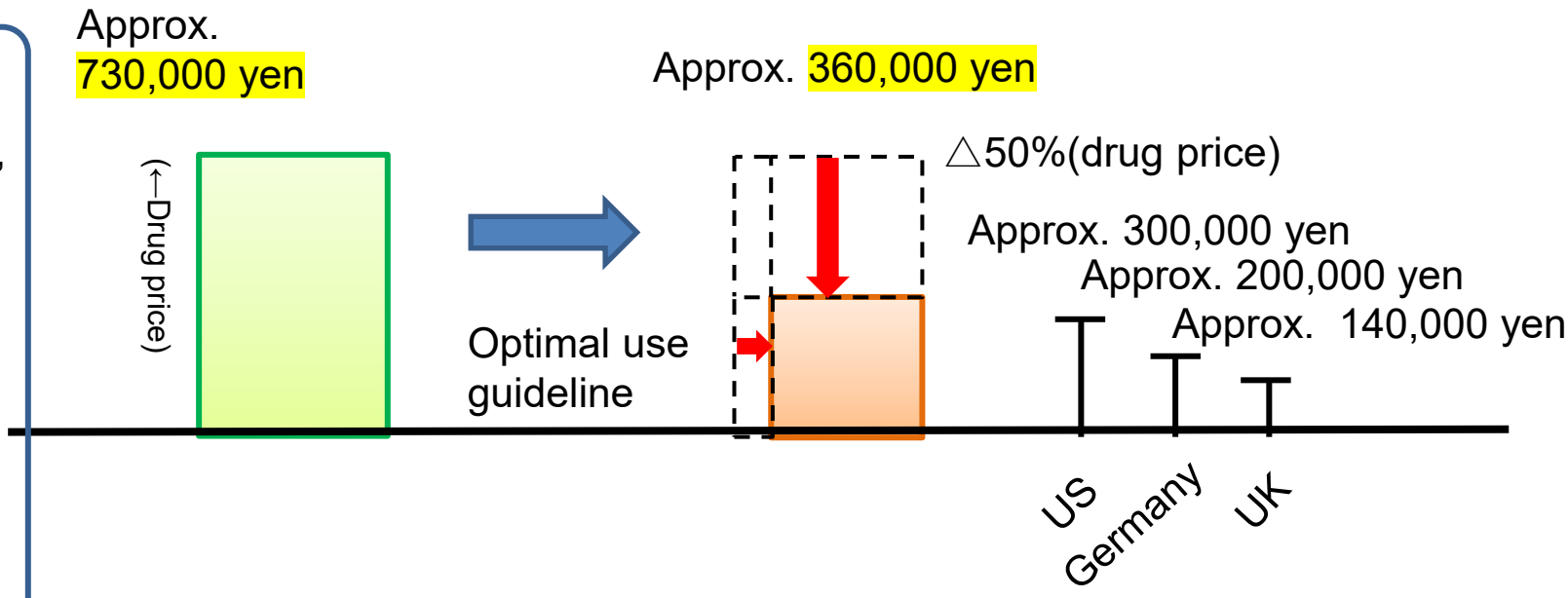
Special drug price revision for high-price drug

- The drug price for Opdivo was reduced by 50% as an emergency measure.
- It was ensured that the product is restricted to effective use in accordance with the **guideline**.

Opdivo

At the time of approval in Jul. 2014, the indication was only rare disease of malignant melanoma

Additional indications such as lung cancer were added and the market was drastically expanded,



Study Group on Revision of the Scope of Public Health Insurance Benefits
Report
[Report summary]

The public health insurance system faces a tough environment, with a declining population, a declining birthrate and aging population, an increasing burden on the working generation, and steady growth in medical expenses, making ensuring its sustainability a policy issue. Based on the philosophy of "necessary and appropriate medical care should be provided in kind," this study group aims to: 1) evaluate medically and scientifically evidenced and essential for the treatment of illness; 2) ensure the appropriateness of the system (correction of irrationalities) and consistency between systems from the perspective of patients and other stakeholders ; and 3) evaluate the proactive efforts of citizens, insurers, and family doctors that contribute to extending healthy life expectancy . We examined the appropriateness and validity of the scope of benefits provided by the current public health insurance system from the following three perspectives . Furthermore, since removing certain medical technologies from the current scope of benefits would mean that even basic costs would have to be borne by the patient, we also reorganized and examined the system for combined uninsured medical care expenses, and proposed the creation of a new category called "New Selected Medical Care (tentative name)" that would allow for the payment of combined uninsured medical care expenses, in addition to the current “selected medical services” that is not intended to be covered by insurance, even for medical technologies that have been recognized as effective and safe. Furthermore, from the perspective of ensuring access to medical care for the public and patients , we also considered the use of private insurance and consideration for low-income earners. The overall picture of the research results is as follows.

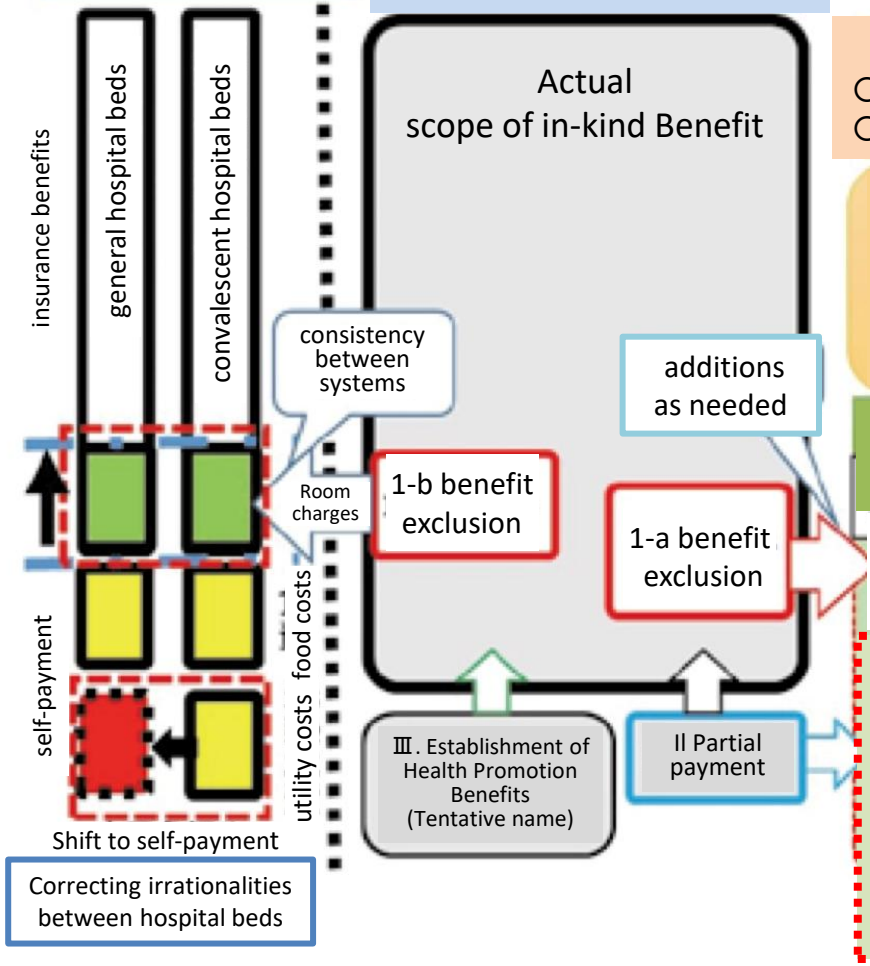
Health Economics Research Institute, FY2018 Independent Research Project
Report of the Study Group on the Revision of the Benefit Scope of Public Health Insurance, March 2019, Research Director: Ichiro Innami

Overall overview of the study group's recommendations

Dietary treatment costs、living costs during hospitalization

Benefits in kind (medical treatment benefits)

“Mixed Medical Treatment Fee System” (those requiring self-payment)



Current “Mixed Medical Treatment Fee System”

- ○Evaluted medical treatment (“advanced medical Treatments”)
- ○Patient-requested treatment

○”Selected Medical Service”

- ・Amenity-related items (extra bed charge)
- ・Fees related to medical visits (such as initial and follow-up consultation fees at large hospitals)
- ・Special dental materials, etc.

Introduction of “New Selected Medical Treatment (tentative name)”

New categories of medical treatments recognized as effective and safe that are subject to non-insurance combined treatment fees

- ○Those with low medical need.
- ○Those for which there is insufficient evidence.

(absorb some of the current selected Self-pay medical treatments)

- ○Cost-effectiveness evaluation
- ○ Those for which medical insurance-coverage is narrower than the scope approved by the Pharmaceuticals and Medical Devices Act

Utilizing private insurance and consideration for low-income earners

Source: Study Group

From the summary of the report of the study group on the review of the scope of benefits, etc. of public health insurance

An example of private insurance for cancer treatment that complements National Medical Insurance

Tokio Marine & Nichido Life Insurance

FAQ "Insurance Glossary"

Customers considering insurance | Product list | Contractor | Corporate customers | About Anshin Life

Anshin Life Insurance Home > Customers considering insurance > Cancer insurance > Anshin Cancer Treatment Insurance

Anshinki Premium

Anshin Cancer Treatment Insurance

Cancer Treatment Insurance (No Surrender Value) [Non-Dividend]

Cancer insurance that pays benefits for each month of treatment and covers the latest treatments

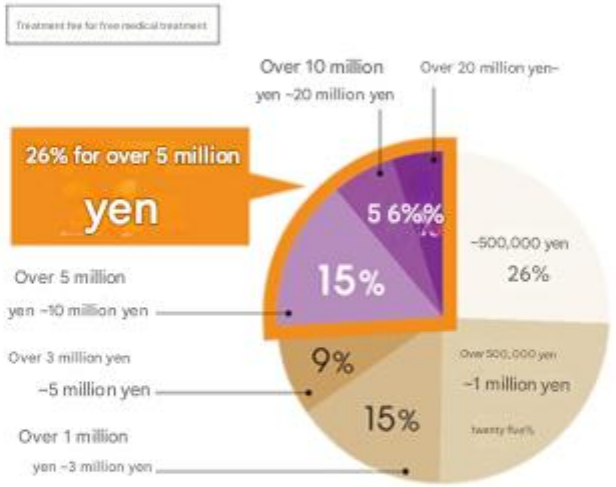
An example of private insurance for cancer treatment that complements National Medical Insurance

Feature 2

[option]

We guarantee free medical treatment for cancer treatment!

| If you receive free medical treatment that is not covered by the public medical insurance system, the cost may be high.



[Note] Numbers do not total 100% due to rounding. Source: "Survey on Cancer Treatment" research by our company (January 2021)

When adding the "Specific Cancer Treatment Coverage" as an option

● By adding this rider, when you are hospitalized or visited a hospital for any of the following medical treatments (*2) for cancer treatment, you can receive a total of up to 100 million yen in benefits equal to the cost of the medical treatment. ① Medical treatment based on patient-requested treatment (*3) or evaluated treatment (excluding advanced medical care) under the public medical insurance system

②Specified free medical treatment conducted at target hospitals

*2 Medical treatment refers to medical activities that include examinations and tests by doctors, provision of drugs or treatment materials, treatments, surgeries, and other treatments.

High-cost pharmaceuticals tend to be limited to specific patient groups.

Summary of the results of the drug pricing organization

Calculation method	Similar efficacy comparison method (I)	First calculation organization	August 1, 2014

Appropriateness of Adopting Cost Accounting Methods		New drug	Reason for the absence of similar drugs
	Ingredient Name	Nivolumab (genetical recombination)	There are no other products already listed with the same efficacy and effects as this drug, and since the pharmacological effects, composition, and chemical structure are different, it has been determined that, overall, there is no drug that is most similar to this drug and is eligible for new drug pricing.
	Efficacy/effect	Unresectable malignant melanoma	
	Pharmacological action	PD-1/PD-1 ligand binding inhibition	
	Composition and Chemical Structure	Consists of 440 amino acid residues Two H chains (y4 chains) and 214 L chain (K chain) consisting of amino acid residues. It is a glycoprotein (molecular weight: approximately 145,000) consisting of two chains. The 221st amino acid residue of human PD-1 is replaced by Pro. Recombinant human IgG4 monoclonal antibody. It is a clonal antibody.	
	Administration route, dosage form, and usage	Injection, injectable medication, once every three weeks	

From the Central Social Insurance Medical Council materials

High-cost pharmaceuticals tend to be limited to specific patient groups.

Summary of the results of the drug pricing organization

Calculation method	Similar efficacy comparison method (I)	First calculation organization	January 12, 2017

Validity of Most Similar Drug Selection		New drug	Most Similar Medication
	Ingredient Name	Pumprolizumab (genetical recombination)	Nivolumab (genetical recombination)
	Efficacy/effect	Unresectable malignant melanoma PD-L1-positive unresectable, advanced or recurrent non-small cell lung cancer	Unresectable malignant melanoma Unresectable, advanced or recurrent non-small cell lung cancer Unresectable or metastatic renal cell carcinoma Relapsed or refractory classical Hodgkin lymphoma
	Pharmacological action	PD-1/PD-1 ligand binding inhibition	Same as left
	Composition and Chemical Structure	A recombinant human monoclonal antibody against human PD-1 (a glycoprotein consisting of two H chains (γ1 chains) each consisting of 447 amino acid residues and two L chains (chains) each consisting of 218 amino acid residues (molecular weight: approximately 149,000)	Recombinant human IgG4 monoclonal antibody against human PD-1 (a glycoprotein produced in Chinese hamster ovary cells, consisting of two heavy chains of 440 amino acid residues and two light chains of 214 amino acid residues)
	Administration route, dosage form, and usage	Injection, injectable medication, once every three weeks	Injection, injectable medication, twice every three weeks
	[illegible]		

From the Central Social Insurance Medical Council materials

High-cost pharmaceuticals tend to be limited to specific patient groups.

(Continued from the previous page)

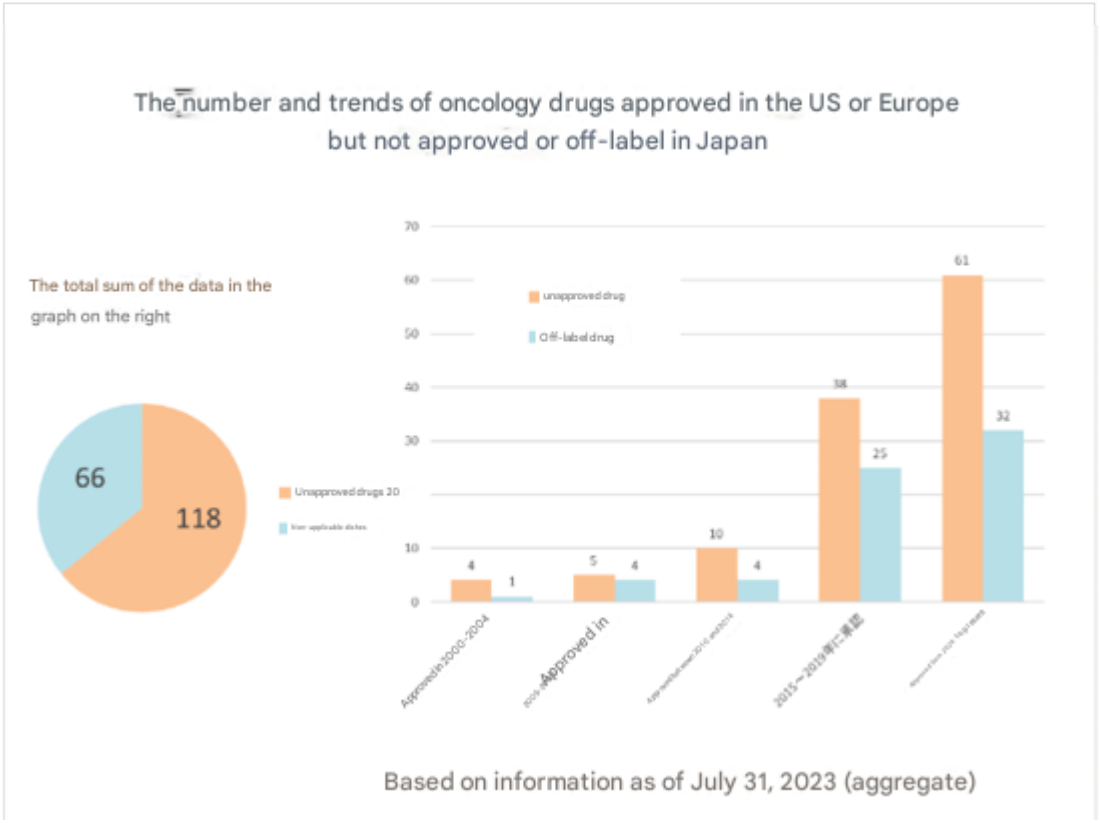
Key Points of Objections to the Initial Proposal by New Drug Listing Applicants	In the first-line treatment of non-small cell lung cancer, this drug has shown a significant extension of overall survival compared to standard chemotherapy. In addition, its use is recommended as the first choice in domestic and international clinical guidelines, and it is positioned as a standard treatment for the target disease, so it is eligible for a utility premium (II).	
Views on the Above Objections	Second accounting organization	January 30, 2017
	Taking into consideration that the comparative drug has been shown to be effective against renal cell carcinoma and other conditions and is considered more useful than this drug, and that there have been no clinical trials directly comparing this drug with the comparative drug, it has been determined that it is difficult to determine which is better, and therefore it is not eligible for a surcharge. ⇒The initial calculation will be used.	

From the Central Social Insurance Medical Council materials

Many high-priced drugs are not approved or covered in Japan -- From the National Cancer Center website

Drugs that are not approved or are off-label use in Japan under the Pharmaceutical and Medical Device Act

This list was created by the National Cancer Center's Office of “Advanced medical treatments” and Cost-Effectiveness Evaluation based on the "Unapproved Drug Database (links to external site)" published by the Pharmaceuticals and Medical Devices Agency (PMDA), with the addition of approval information from the United States and Europe.



“Advanced medical treatments” and Cost-Effectiveness Evaluation Office

- Medical expenses paid by patients themselves when using unapproved drugs (model case)
- About the “Advanced medical treatments” Evaluation Committee
- Regarding medicines that are not approved or are off-label for use in Japan under the Pharmaceutical and Medical Device Act

List of Pharmaceuticals and Indications Not Approved or Off-Label Under the Pharmaceutical Affairs Law in Japan

No.	General name in Japanese	General name in English	Product name in Japan	Product name in U.S.	Company name	Development situation	Similar medicine in Japan	Type of cancers	Efficiency
1	ドスタルリマブ	Dostarlimab-gxly	-	JEMPERLI	Glaxo	Not started yet		Uterus	Recurrent or progressive endometrial cancer (in combination with chemotherapy)
2	タラゾパリブ	Talazoparib	-	TALZENNA	Pfizer	Under development		Urology	HRR-mutated castration-resistant prostate cancer (in combination with enzalutamide)
3	グロフィタマブ	Glofitamab-gxbm	-	COLUMVI	CHUGAI	Under development		Blood	Relapsed or refractory diffuse large B-cell lymphoma
4	ニボルマブ	Nivolumab	OPDIVO	OPDIVO	ONO YAKUHIN	Not started yet		Child	Unresectable or metastatic malignant melanoma<Expanded indication for pediatric patients aged 12 years and older>

Approved by the Government of Japan	Approved by the Government of U.S.	Date of approval by the U.S. FDA	Approval by the Europe FMA	Date of approval by the Europe FMA	Other information	2 grade or more in NCCN guidelines	Drug cost per month (1 cycle/28 days) yen	Remarks on drug cost calculation
Not approved yet	Approved	July 2023	Not approved yet			○	¥1,778,257	
Not approved yet	Approved	June 2023	Not approved yet			○	¥2,101,688	
Not approved yet	Approved	June 2023	Approved	July 2023		○	¥3,270,075	
Out of cathegory	Approved	July 2017	Approved	May 2023		○	¥732,810	Calculated based on an average weight of 46 kg for a 13-year-old childCalculated using the dosage when combined with ipilimumab