

Toward the 2023 G7 Hiroshima Summit (GCPPD2023)

Pharmaceutical Industry Initiatives and Recommendations for Health Challenges in an Aging Society



April 25, 2023

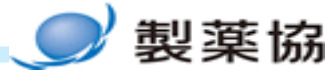
Yasuko Minamida, Group leader

International Affairs Committee, Global Health Department, Aging Group
Japan Pharmaceutical Manufacturers Association

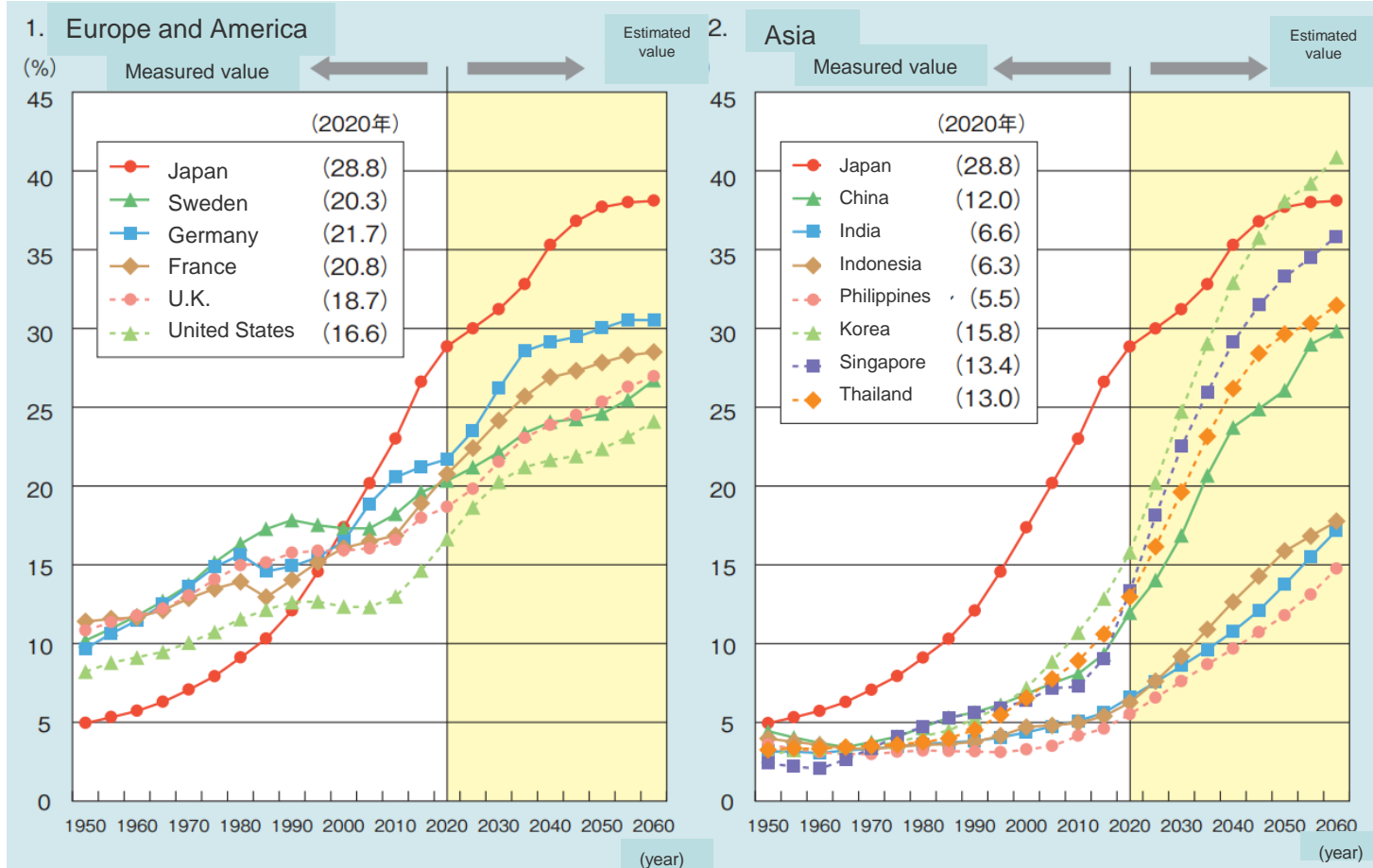
Please note that this is a presentation of research conducted by the Aging Group of the Global Health Department, International Affairs Committee of the Japan Pharmaceutical Manufacturers Association (JPMA) and is not an official presentation by JPMA or the speaker's organization.

Aging in the World

Comparison of Aging Trends in Japan, Western and Asian Countries



Aging rates in each country¹⁾



- By 2030, 1 in 6 people in the world will be aged 60 years or over. At this time the share of the population aged 60 years and over will increase from 1 billion in 2020 to 1.4 billion²⁾.
- By 2050, the world's population of people aged 60 years and older will double (2.1 billion) and the two-thirds of the world's population over 60 years will live in low- and middle-income countries²⁾.
- The increase in non-communicable diseases associated with an aging population is recognized as a global challenge.

Rapid aging of the world's population; Japan has the highest ageing rate in the world
Some Asian countries are ageing faster than Japan

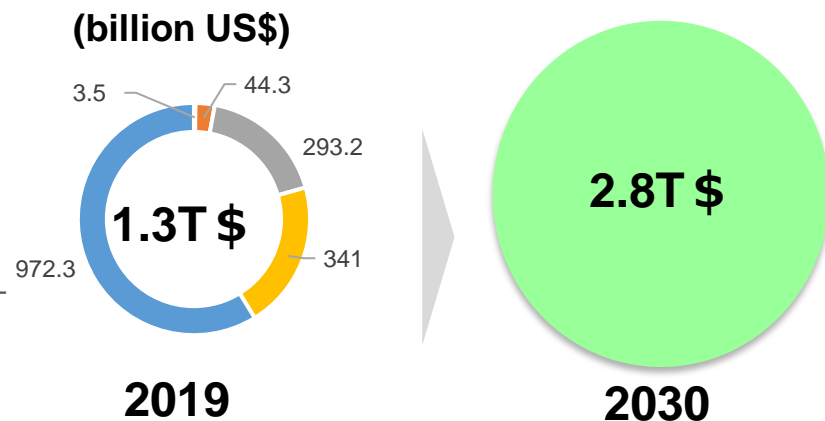
Cost Impact of Health Issues associated with Aging



Dementia-related costs estimated to be \$2.8 trillion in 2030¹⁾ Dementia informal care costs account for about 40% or more³⁾

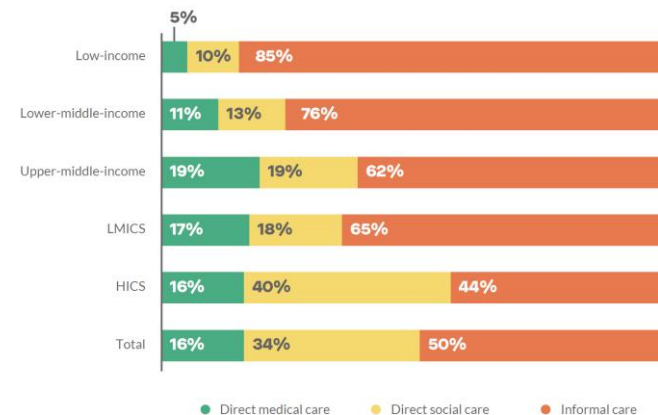
Global

- Low-income
- Lower-middle-income
- Upper-middle-income
- Low-and middle-income
- High-income



Global

FIGURE 7
Percentage of costs associated with different types of dementia care, by World Bank income level

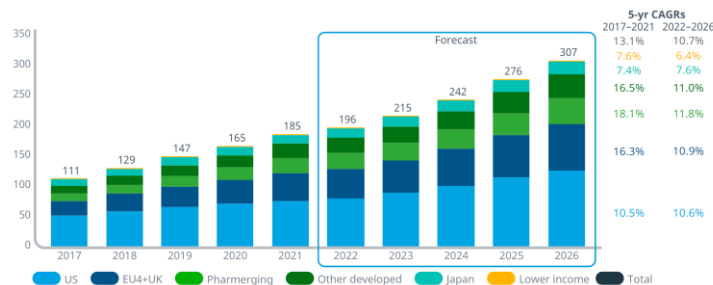


Anticancer drug treatment costs will increase²⁾

Global

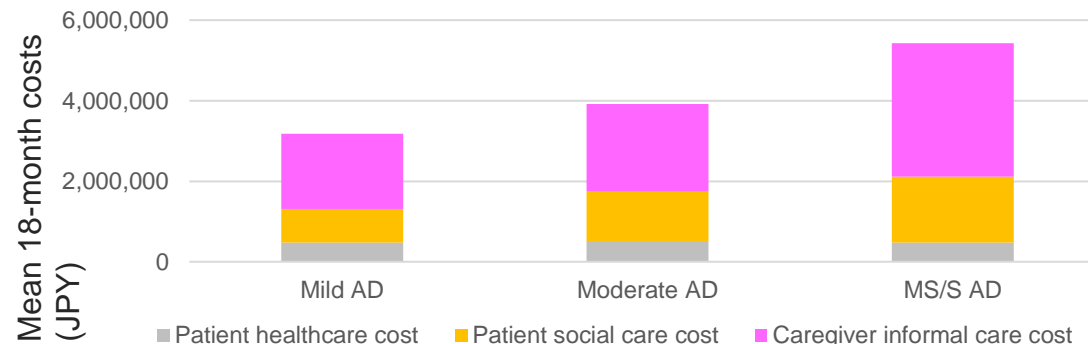
Cancer medicine spending rose to \$185Bn globally in 2021 and is expected to reach more than \$300Bn by 2026

Exhibit 42: Oncology spending by region, US\$Bn



Japan

Informal care costs increase with severity of dementia⁴⁾

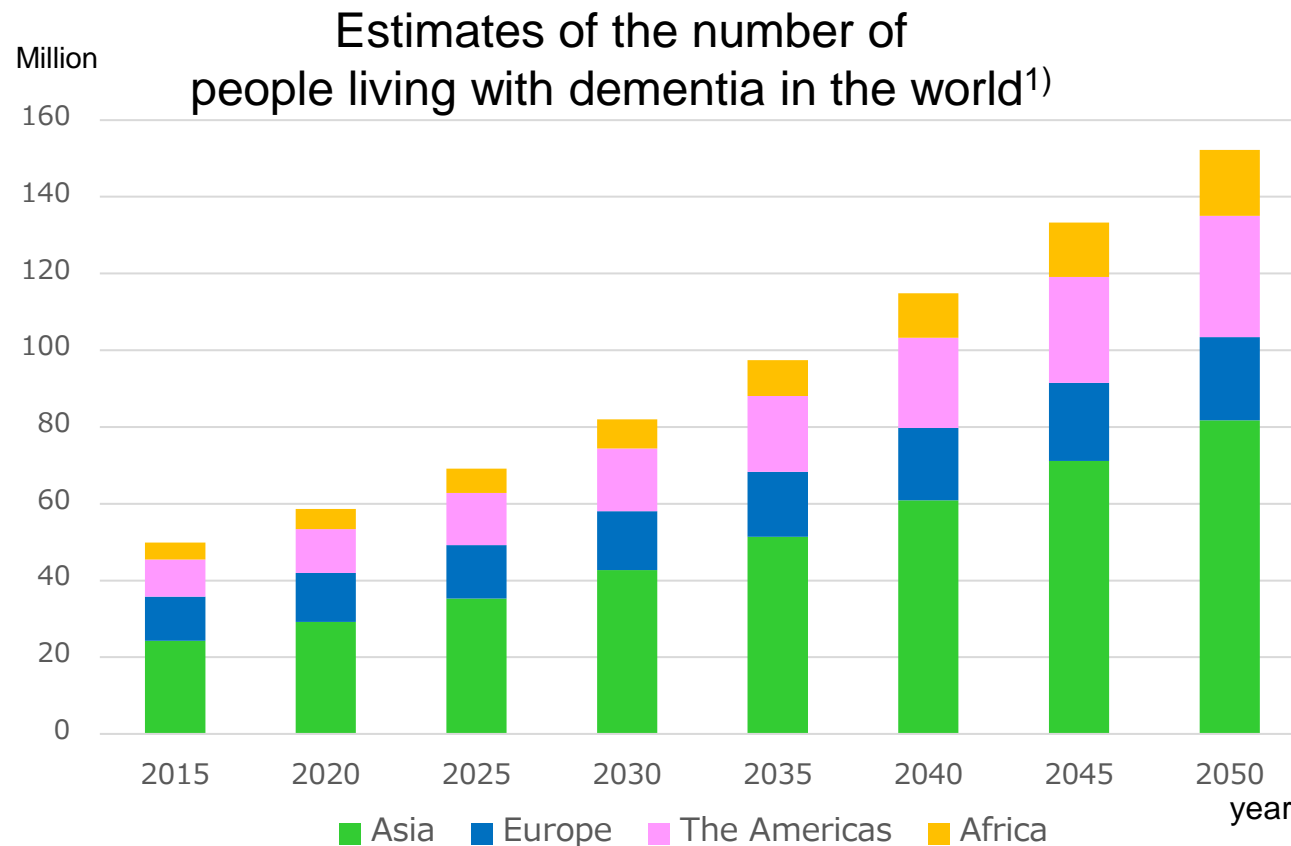


Costs related to treatment and care for dementia and cancer will be increasing year by year

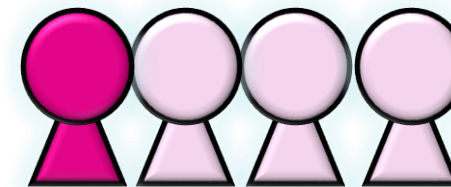
1) <https://www.who.int/news/item/02-09-2021-world-failing-to-address-dementia-challenge>, accessed April 2023, 2) IQVIA Institute, Global Oncology Trends 2022, p51

3) Global status report on the public health response to dementia (2021), 4) Cost and resource use of community-dwelling patients with Alzheimer's disease in Japan: 18-month results from the GERAS-J study, Current Medical Research and Opinion (2021)

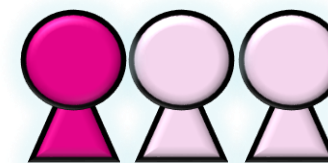
The Number of People living with Dementia is Increasing with the Aging of the Population



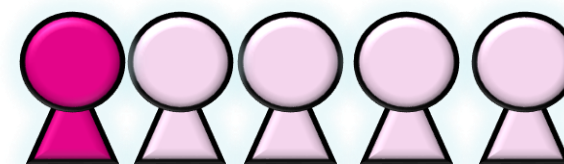
Future estimates of the number of people living with dementia in Japan²⁾



1 in 4 people will be over 75 years old



1 in 3 people will be 65 years old or older



1 in 5 elderly people will live with dementia
(approximately 7 million people)

The number of people with dementia is estimated to reach 69 million in 2025 and 152 million in 2050

By 2025, 1 in 3 Japanese will be 65 or older and 1 in 5 will live with dementia (approximately 7 million people)

1) World Alzheimer Report 2018, 2) Takashi Asada et al. Prevalence of Dementia in Urban Areas and Response to Impairment of Life Functioning of Dementia. Grant-in-Aid for Health and Labour Science Research in 2012 (Comprehensive Research Project for Dementia Control).

Progress of the World Health Organization (WHO) Global Action Plan for Dementia

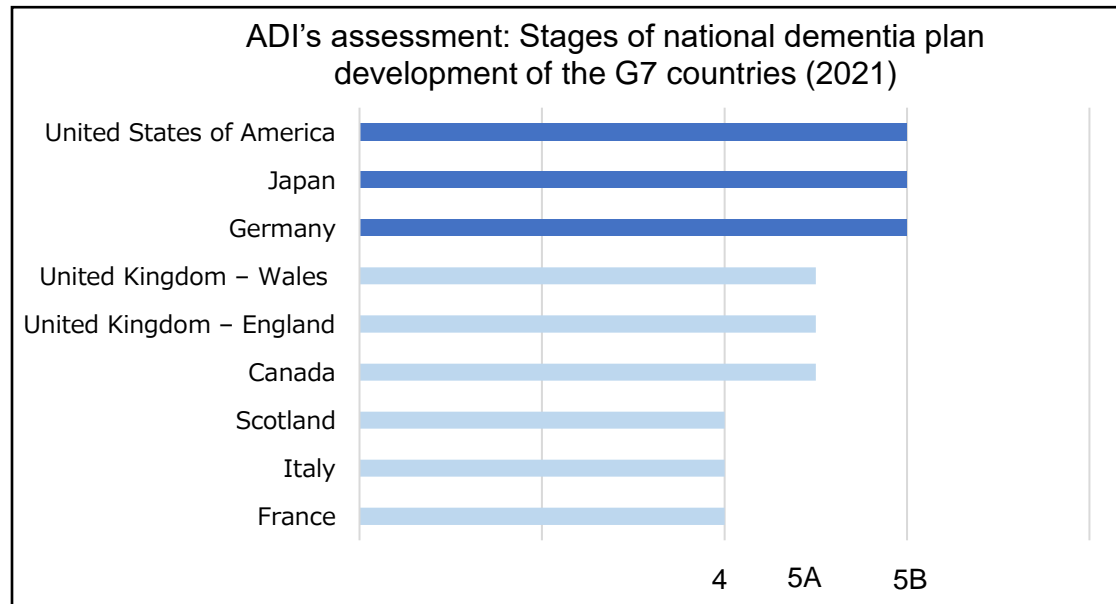
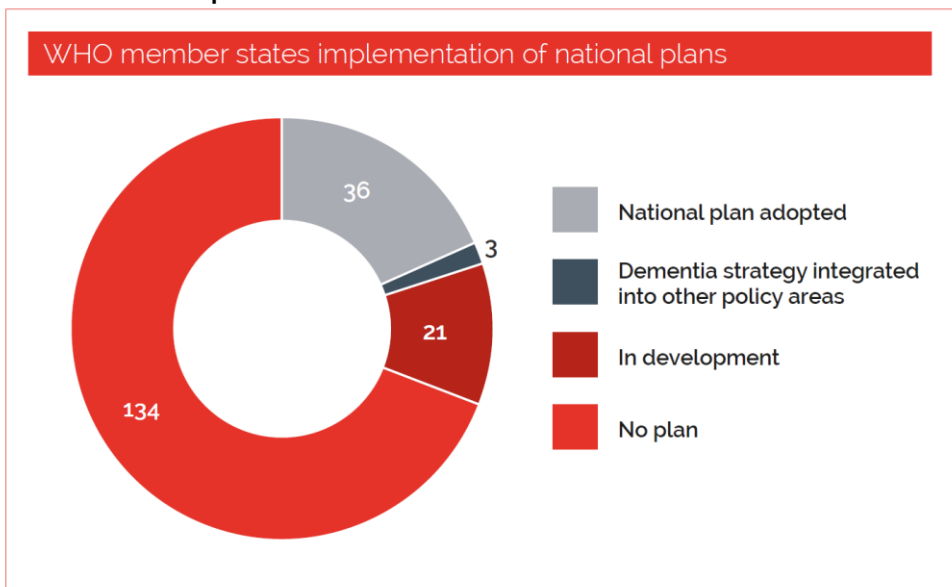


WHO Global action plan on the public health response to dementia 2017-2025

Key Goal: 75% (146/194) of the member countries will have developed or updated national plans for dementia, by 2025.

Progress: As of May 2022, progress is slow with 27% (39 countries) of the member countries having national plans.

ADI Report¹⁾ Survey of the formulation and progress of dementia plan in WHO member



Stage 4: Plan/Strategy adopted but with inadequate or no funding.
Stage 5A: Plan/Strategy adopted, but not fully communicated.
Stage 5B: Plan/Strategy adopted, funded and monitored.

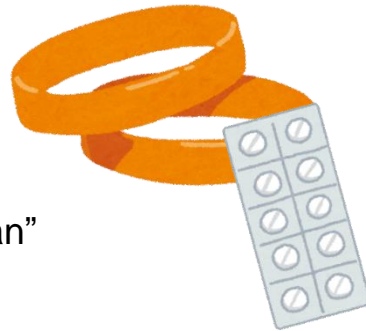
**Progress in developing a plan across the member countries has been slow.
Japan, Germany, and the U.S. are the highest stage 5B**

1) From Plan to Impact V: WHO Global action plan: the time to act is now, Published by Alzheimer's Disease International (ADI)

The Framework for Promoting Dementia Care in Japan's Aging Society



1999	Drug for alzheimer's disease approved
2000	Care insurance system is introduced
2001	
...	
2004	Change of terminology for "dementia"
2005	Training for Dementia Support Doctors begins.
2006	
2007	Training to improve dementia response skills begins.
2008	
...	
2012	Start of the "Orange Plan"
2013	
2014	Start of the "New Orange Plan"
2015	
2016	
...	
2019	
2020	
2021	
2022	



The Framework for Promoting Dementia Care

Aiming to delay the onset of dementia and to create a society in which people with dementia can live their daily lives with hope even after the onset of dementia, and promote initiatives that will advance inclusion and risk reduction as two wheels of the cart, while focusing on the viewpoints of people with dementia and their families.

Inclusion : People with dementia live with dignity and hope, and also live together in the society whether they have dementia or not.

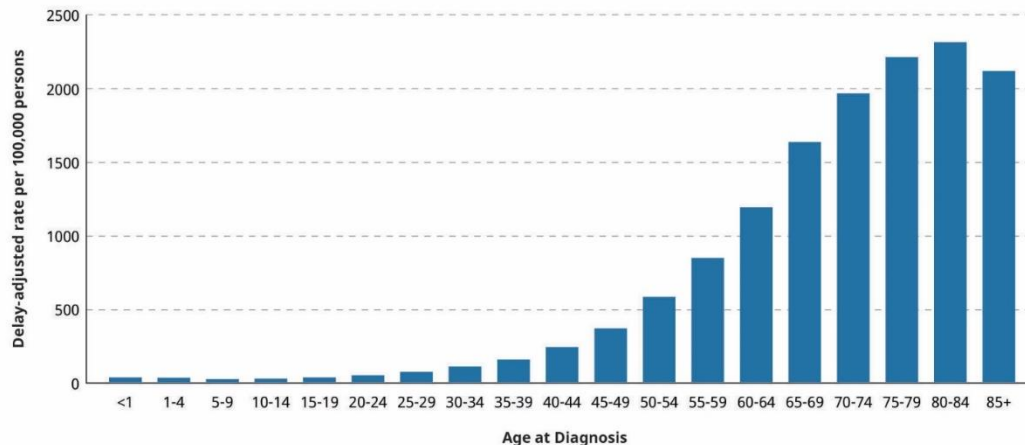
Risk reduction: For "delaying the onset of dementia" and "slowing the progression of dementia even if it does occur."

- Promoting public awareness and supporting efforts made by people with dementia to disseminate their stories and opinions among the public
- Risk reduction
- Providing support for healthcare, caretaking, and nursing services and caretakers
- Promoting the creation of barrier-free spaces and services for people with dementia and providing support to people with early-onset dementia
- Promoting research and development conducted by industry and disseminating their results internationally

Various measures are being promoted under the Framework for Promoting Dementia Care. On the other hand, deepening efforts to realize a symbiotic society, as well as specific goals and measures of intervention for risk reduction and early detection are needed.

Cancer Risk and Age

The incidence age for overall cancer globally¹⁾



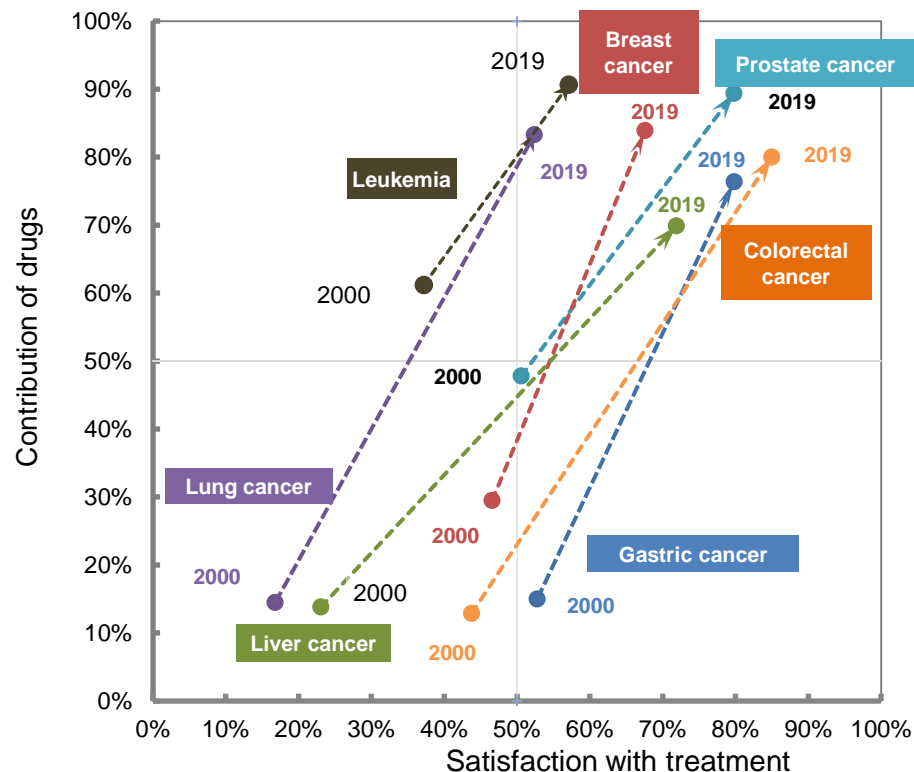
- Although the most common age group varies by cancer, **the incidence rates for cancer overall climb steadily as age increases**, from fewer than 25 cases per 100,000 people in age groups under age 20, to about 350 per 100,000 people among those aged 45–49, to more than 1,000 per 100,000 people in age groups 60 years and older¹⁾ .
- More than half of all new cancer cases occur in those aged 65 and older, and this age group accounts for 70% of cancer deaths. Yet, even in advanced states such as the US, Japan and countries within the EU, health systems are not always identifying the specific needs of older people living with cancer or defining individualized care pathways for them ²⁾ .
- **The risk of certain cancers accumulating with age** is should be the most important reason cancer rates increase with age. In addition to the overall accumulation of the risk, the cell repair system tends to become less effective with age ³⁾ .

**Advancing age is the most important risk factor for cancer overall and for many individual cancer types, although the most common age group is different.
Evidence is needed on the best ways of managing and treating older people living with cancer**

1) The National Cancer Institute (<https://www.cancer.gov/about-cancer/causes-prevention/risk/age>, accessed April 2023) 、 2) Cancer and Ageing: Policy responses to meeting the needs of older people (<https://cancerandageing.eiu.com/>, accessed April 2023)、 3) WHO Fact Sheets Cancer (<https://www.who.int/news-room/fact-sheets/detail/cancer>, accessed April 2023)

New Drugs Contributing to Increased Satisfaction in Unmet Medical Needs

Changes in satisfaction with medical treatments and level of drug contribution¹⁾
(7 cancers: 2000→2019)



Providing cancer-related information²⁾

	disease and treatment info by cancer type	Info of supportive care	Info of Economic support	Info of job assistance	info from cancer survivors
A 社	○	○	○	○	○
B 社	○	○	○	○	○
C 社	○	○	○	○	○
D 社	○	○	○	○	○
E 社	○	○	○	○	×
F 社	○	○	○	○	×
G 社	○	○	○	○	×
H 社	○	○	×	×	○
I 社	○	○	×	×	×
J 社	○	×	×	×	×
K 社	×	×	×	×	×
Publication rate	90.9%	81.8%	63.6%	63.6%	45.5%

Created by Office of Pharmaceutical Industry Research based on HP, a pharmaceutical company that sells anticancer drugs
Included in 100 domestic sales of prescription drugs in FY2018

Cancer-related apps²⁾

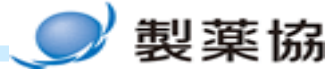
	cost	content
App1	Free	Providing cancer-related information
App2	Free	Treatment information + symptom records (to help communicate with doctors)
App3	Free	Symptom record (to help you communicate with your doctor)
App4	Free	Management of medication and symptom, and info of proper use of drug
App5	Free	Monitoring of side effects
App6	Free	Information of Side Effect and Recipe (meal)
App7	Free	Recipe (meal) information
App8	Free	information exchange between cancer survivors

Created by Office of Pharmaceutical Industry Research based on public information in Jan 2021

**Areas where treatment satisfaction is improving but where unmet medical needs still exist.
Information and apps from pharmaceutical companies are also available.**

1) Created by Office of Pharmaceutical Industry Research based on Japan Human Science Foundation's Domestic Basic Technology Survey Report of 2000, 2005, 2010, 2014 and 2019, 2) Office of Pharmaceutical Industry Research, OPIR Views and Actions No.62 (Mar. 2021).

Progress in Addressing Cancer in Japan



1980

1963 Subsidy for cancer research by Ministry of Health and Welfare started

1981 Cancer became the leading cause of death

1984 Comprehensive 10-year Strategy for Cancer Control

1990

1994 New 10-year Strategy to Overcome Cancer

2000

2004 The 3rd-term Comprehensive 10-year Strategy for Cancer Control

2005 Action Plan 2005 for Promotion of Cancer Control

2006 Cancer Control Act enacted

2007 Basic Plan to Promote Cancer Control Programs

2009 Headquarters of 50% Cancer Screening Rate

2010

2012 Second Basic Plan to Promote Cancer Control Programs

2013 Cancer Registry Promotion Act

2014 Comprehensive 10-year Strategy for Cancer Control

2018 Third Basic Plan to Promote Cancer Control Programs

2020

◆ **Comprehensive 10-Year Strategy for Cancer Control: "Elucidating the Nature of Cancer"**

◆ **New 10-Year Strategy to Overcome Cancer: From Elucidating the Nature of the Disease to Conquering It**

◆ **The 3rd-term Comprehensive 10-year Strategy for Cancer Control: "Dramatic Reduction in Morbidity and Mortality"**

- Specific numerical targets introduced for mortality reduction, etc.
- Based on the interim evaluation, the "Law for the Promotion of Cancer Registry" was promulgated in 2013, and the "National Cancer Registry" was institutionalized.

◆ **10-Year Cancer Research Strategy: "Cure, Prevention, Symbiosis" - Cancer research in collaboration with patients and society**

- Promotes clinical research aimed at elucidating the true nature of cancer and the practical application of **innovative prevention, early detection, diagnosis, and treatment technologies** based on this research.
- Research on childhood cancer, **cancer in the elderly**, intractable cancer, and rare cancers is newly positioned in the strategy and promoted. In addition, research aimed at **building a society that realizes enhanced survivorship** and research on the effective promotion and evaluation of cancer control measures are also promoted.
- June 2019 Interim Evaluation of Cancer Research as a whole, confirming that the study is generally progressing well.

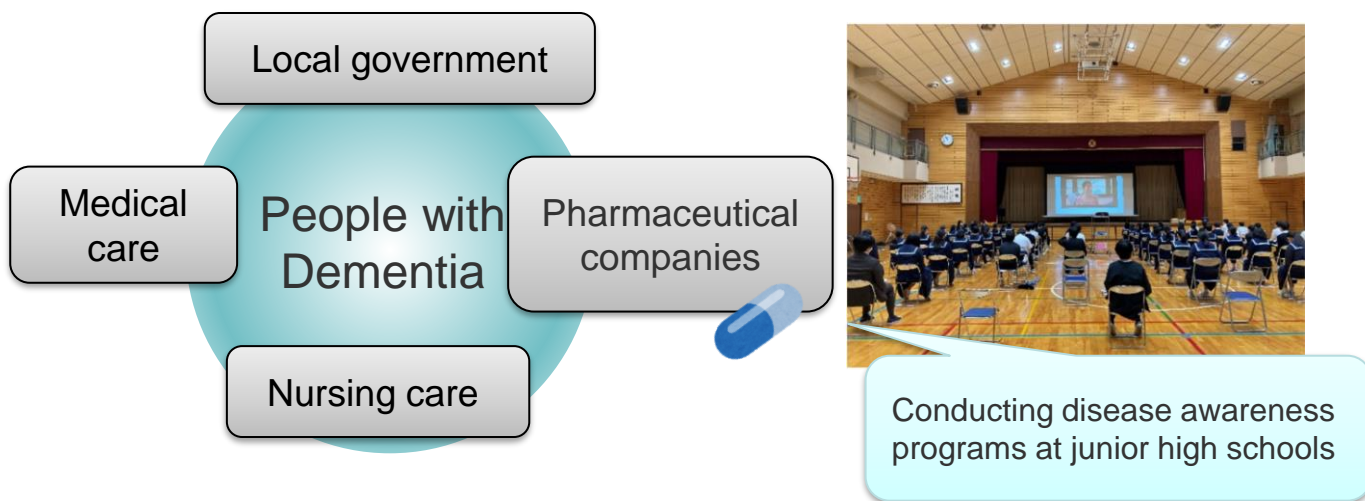
“The 10-Year Cancer Research Strategy,” which aims to cure, prevent, and coexist with cancer, is underway as a 10-year plan.
“The Third Basic Plan to Promote Cancer Control programs,” which aims to prevent cancer, improve cancer treatment, and live in harmony with cancer, is underway.

Advances in Pharmaceutical Company Initiatives Beyond Drug Development & Supply



Creating a community where people can feel safe even if they suffer from dementia ^{1) 2)}

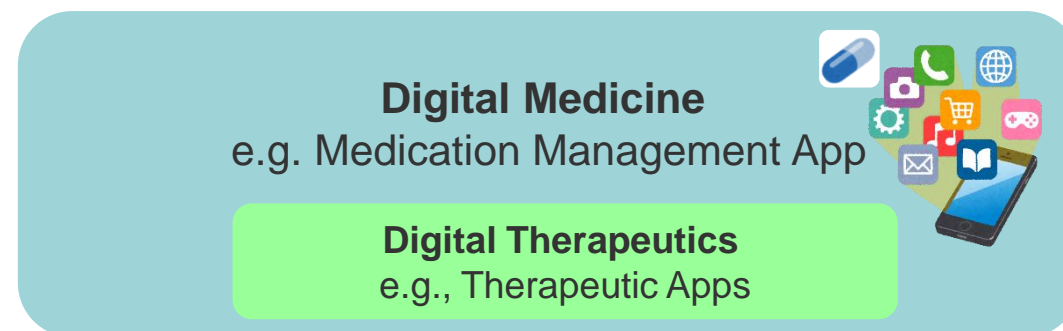
We have worked to realize a dementia friendly community in cooperation with medical and nursing care professionals, government and local authorities and community residents.



- ✓ Promote awareness and understanding of dementia
- ✓ Early detection of dementia
- ✓ Reinforcement of medical and nursing care systems



Initiatives using digital technology ^{3) 4)}



Company Name	Initiatives
Daiichi Sankyo	<ul style="list-style-type: none">• Development of an application to support cancer treatment• Recipes and ingredient information developed by registered dietitians
Eisai	<ul style="list-style-type: none">• Self-check tool for cognitive function
Chugai	<ul style="list-style-type: none">• PHR* services to promote appropriate use of anticancer drugs
Merck	<ul style="list-style-type: none">• Diabetes Management App
Novartis	<ul style="list-style-type: none">• Games for treatment of low vision

※Personal Health Record

1) <https://www.eisai.co.jp/ir/library/annual/pdf/pdf2021vcr.pdf> (P15), accessed April 2023

2) <https://www.eisai.co.jp/hhc/activity/076.html>, accessed April 2023

3) <https://www.dimesociety.org/digital-health-digital-medicine-digital-therapeutics-dtx-whats-the-difference/>, accessed April 2023

4) <https://www.jpma.or.jp/opir/news/064/07.html>, accessed April 2023

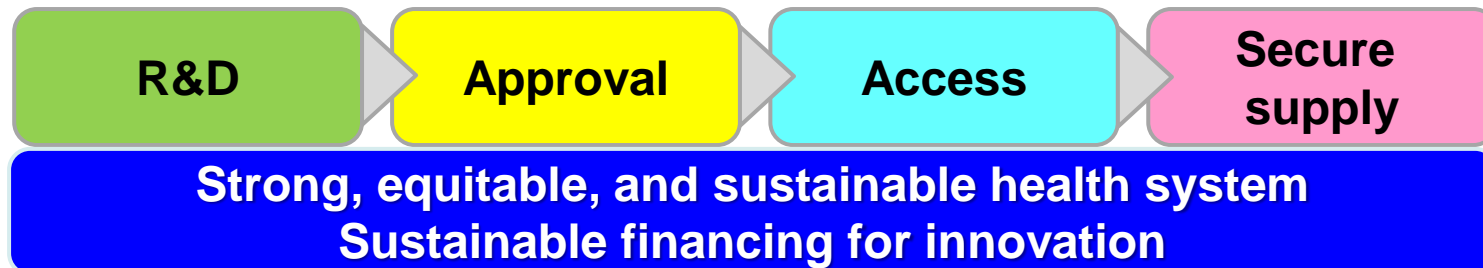
Proposals from the pharmaceutical industry for the G7 Hiroshima Summit Health Agenda



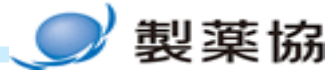
In Nov 2022, JPMA and IFPMA submitted a proposal to the Japanese government on their expected leadership in G7 Hiroshima Summit

【Outline of the proposal】

- “**More resilient, equitable and sustainable health system**” and “**Sustainable financing for innovation**” are essential to promote innovation and equitable access to medicines and to sustain them in an emergency.
- (1) **Sustainable Universal Health Coverage (UHC)** , (2) **Pandemic preparedness and response**, (3) **Antimicrobial Resistance (AMR)** are 3 important pillars in the proposal.
- We request the Japanese government to take the lead in G7 summit and Health Ministers' call to realize our proposals.



Call for Active Discussions on Health Challenges of Aging, from Japan Faces a Super-Aging Society



Expected leadership of the Japanese government in G7 Hiroshima Summit

- | | |
|-------------------------------------|---|
| (1) Prevention ·
Early Detection | Specific goals and measures for preventive intervention and early detection of dementia, including prevention of frailty and reduction of risk factors such as lifestyle diseases, in order to extend healthy life expectancy |
| (2) Public Private
Partnership | Industry-academia-government partnerships led by governments to accelerate the development and evaluation of prevention programs for dementia and NCDs, participation in early-stage clinical trials and develop innovative therapeutics and diagnostic technologies |
| (3) Regulatory
Convergence | International regulatory convergence to achieve the creation of and access to new drugs needed for the elderly, even in areas of high development difficulty |
| (4) Digital
Transformation | International data exchange utilization including aggregation and utilization of digital information, such as clinical data, real-world data, health data and real-time drug demand/supply data, which are research resource and health infrastructure |