

Healthcare System Innovation for Aging Society -Issues and Direction-

APEC Life Sciences Innovation Forum
Health Financing Mechanisms & Options
Sep. 19, 2010

Prof. Akira Morita
University of Tokyo

1. Introduction

- APEC member states face Common Challenges on Healthcare Policy listed below as discussed at the Singapore Session, “Healthcare in Asia of 2010:
 - Healthcare costs continue to rise faster than general inflation.
 - More doctors have not necessarily led to price reduction.
 - Greater health care spending has not always led to better health.
 - Patients’ expectations continue to rise.
 - Employers and taxpayers are increasingly reluctant to pick up the bill.
- In the face of these challenges, how can we deliver **equally high quality of healthcare** and keep **fiscal stability**?
- What is **the best financial combination for healthcare delivery between public spending and out of pocket** including private insurance?

2. Basics of Japanese Healthcare System (1)

- Main Features in finance and delivery of healthcare
 - In Asia, Japan is one of the pioneers to accomplish **universal public healthcare insurance** in 1961.
 - The Japanese people have **access to high quality healthcare service** in exchange for low financial burden.
 - Under the public healthcare insurance, Medical Fee, universal price scheduled by Japanese Government, is paid for healthcare services. Minimum quality of healthcare service is uniformly regulated throughout the state as well.

- Healthcare Insurance System

There are five kinds of Insurance:

- 1) National Health Insurance (managed by municipal governments for unemployed and self-employed)
 - 2) Government Managed Health Insurance (for small company employee)
 - 3) Union Managed Insurance (managed by unions for company employee, and premium paid by both employer/employee equally)
 - 4) Mutual Aid Insurance (for public servants and private school teachers etc.)
 - 5) Special Support for Elders' Insurance (for over 75 years old)(1/2 public expenditure)
- *We, the Japanese people, on the condition of monthly insurance premium paid, generally get healthcare service in any hospitals and clinics throughout the state.*

Healthcare Insurance System in Japan

Governmental Office



【Special Support for Elders' Insurance】
47 insurers, 13million members※1



public expenses

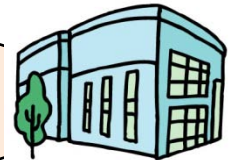


【Healthcare Finance】

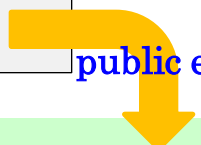
support



Contribution by each insurer



public expenses



The Insurers

【National Health Insurance】

【Government-Managed Health Insurance】

【Society-Managed Health Insurance】

【Mutual Aid Insurance】

Number of Insurers: 1818

1

1541

76

Number of members※2: 47.5mill.

36mill.

30mill.

9.5mill.

Over 75

Pay for 10% costs in general

70~74 years old

Pay for 20% costs in general

School age~69 years old

Pay for 30% costs

Under school age

Pay for 20% costs



premium



premium



※1 Expectation in 2008
※2 in 2007 March

the Insured(the Patient)



2. Basics Japanese Healthcare System (2)

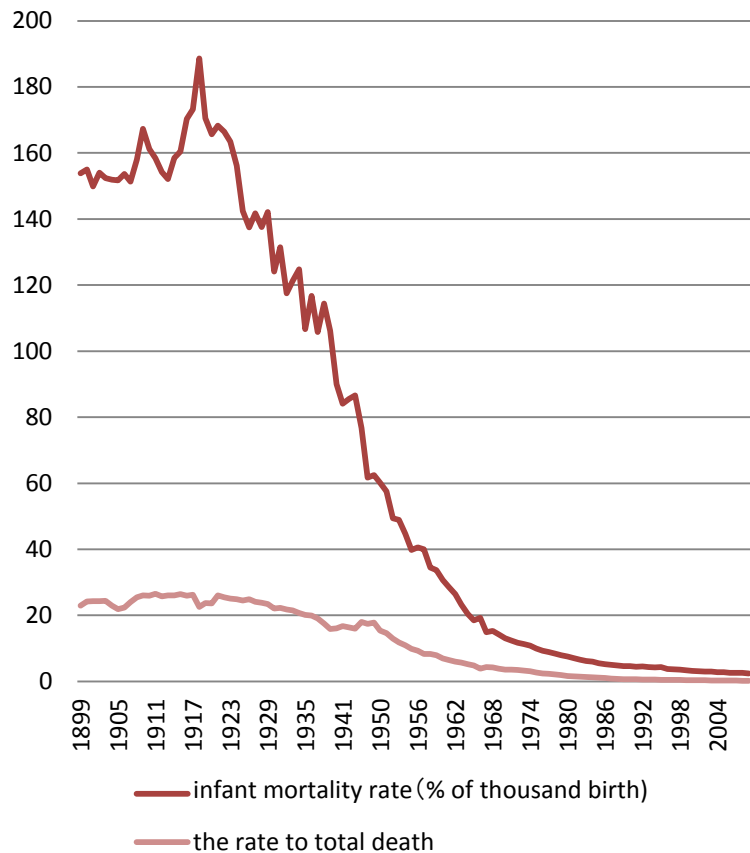
- Coverage Decision Making, Medical Fee Scheduling, and Payment Structure
 - **Medical Fee** (including drug price) paid as well as covered service under public healthcare insurance is *uniformly scheduled* by the “**Central Social Insurance Medical Council**”, an advisory committee for Minister of Health Labor and Welfare.
 - Council board consists of three groups and twenty members; seven representatives for insurers, seven for doctors, dentists, and pharmacists, and lastly six for public.
 - Medical Fee is merely an official price for insurers to pay for covered healthcare services provided by hospitals and clinics. Then, *Patients generally have to pay for 30% of healthcare service costs* under each healthcare insurance (10 or 20 % for over 70 years old). The price scheduled by the Japanese Government is *not mandatory but referential* in market, so hospitals and clinics can purchase drugs and devices etc. by market price.

2. Basics Japanese Healthcare System (3)

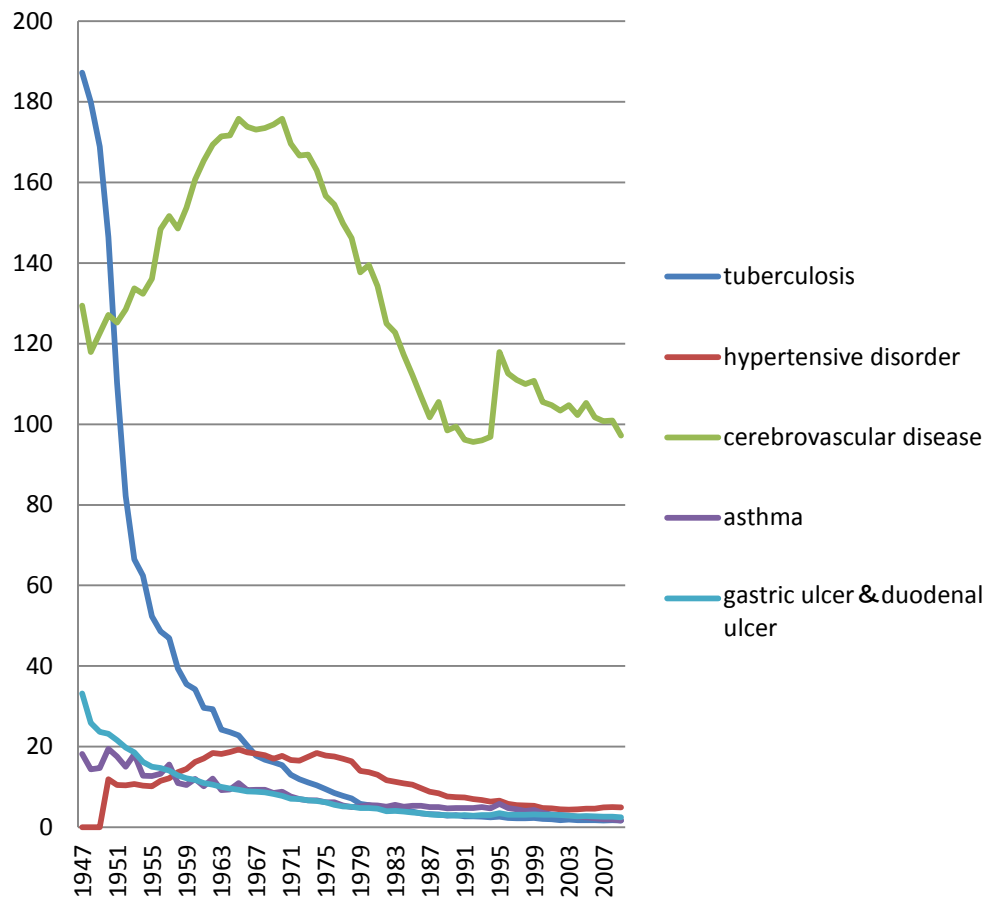
- *Incentive mechanism for efficiency in healthcare has been weak, because payment for service is calculated by cost based, not prospect based with some exceptions.*
- *Healthcare system had worked until about 1990, though healthcare cost increased by rapid progress of medical technology and widespread use of healthcare service. Healthcare system kept secure since the number of working age population were more compared with the other in population pyramid and rapid economic growth continued for long term.*
- *In the end, health condition of Japanese People became dramatically better than before and top leveled high life expectancy has already been accomplished.*

Improving the Health Condition

Infant Mortality Rate (%, of thousand birth)

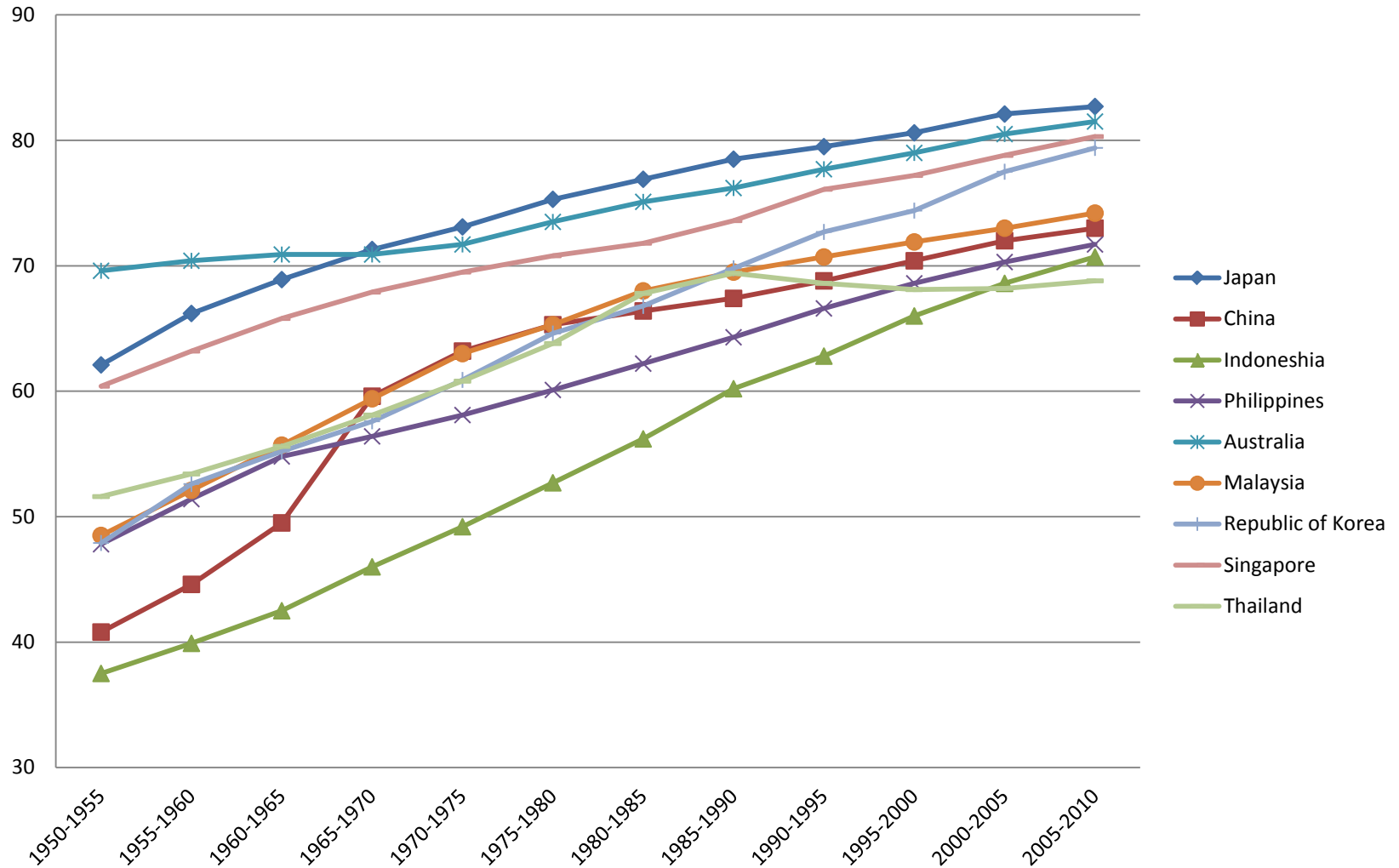


Transition of Mortality Rate by Cause of Disease (% ,of 100 thousands person)



Source: Vital statistics(2009)

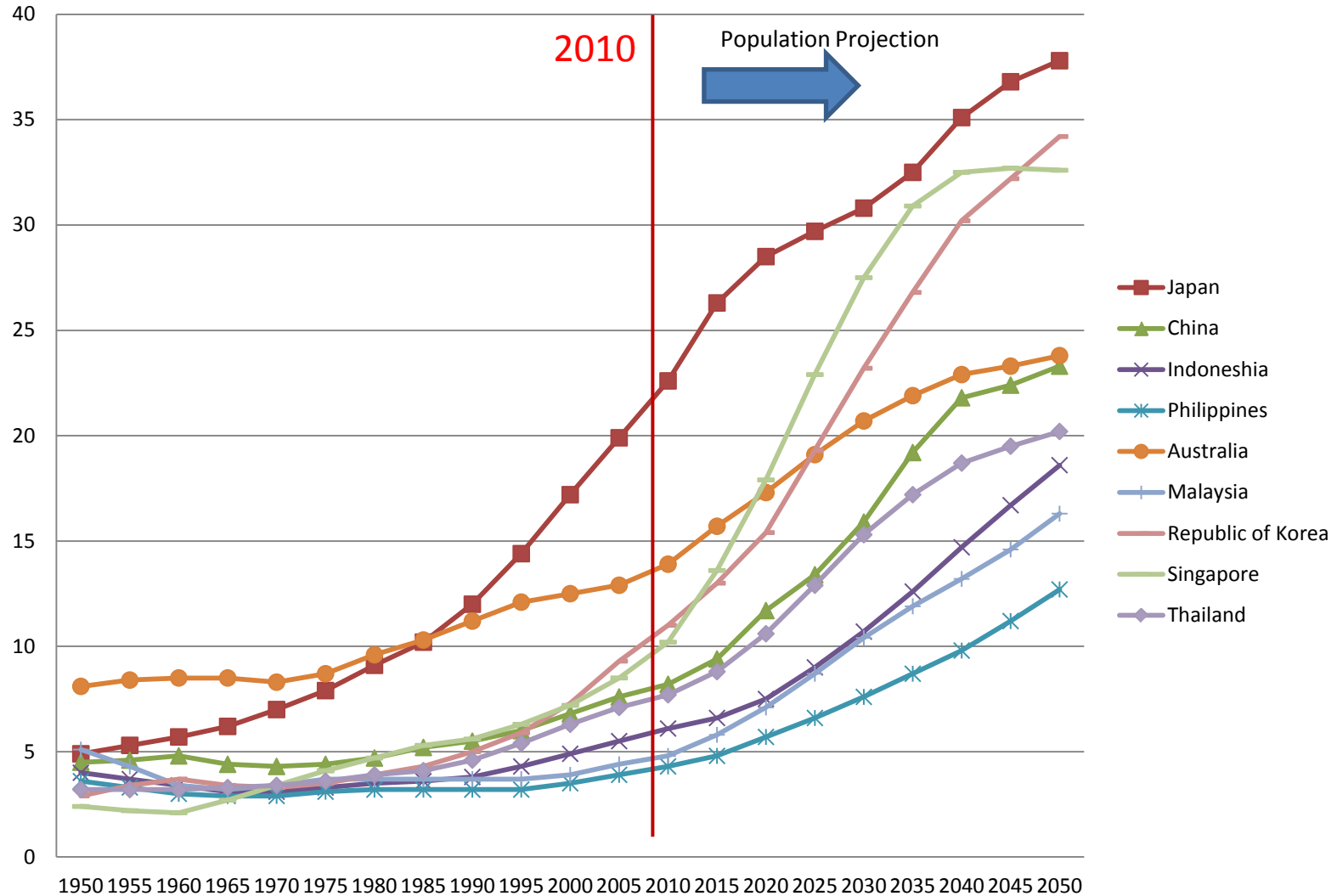
Life Expectancy at Birth, Both Sexes Combined (years)



3. Aging and Crisis in Healthcare System (1)

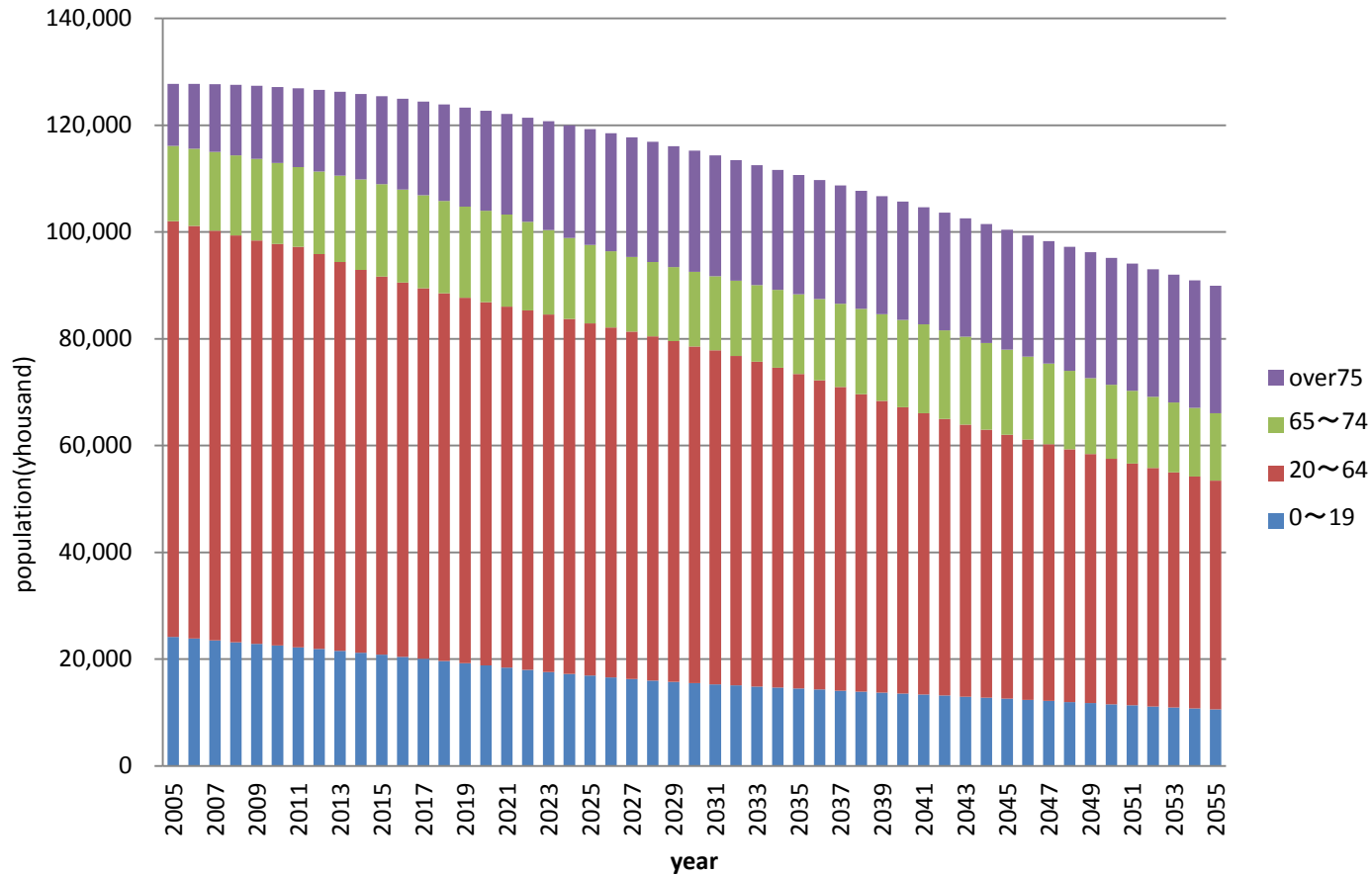
- Population age structure has rapidly changed toward a large older generation since 1990 (especially over 65 years old). In Japan, aging has been accelerated by universal public healthcare insurance, progress of healthcare technology and downward trend in the birthrate with modernization.
- *With populations aging, growth rate of healthcare cost exceeds economic growth rate and existing healthcare system is at risk of failure.*
- Components of Crisis
 - 1) More people in aging
 - Structural change in disease from infectious to chronic
 - Living for longer time with complicated diseases thanks to advanced medicine
 - 2) Population decline
 - Local healthcare became weak because of gap between demand and supply to healthcare service in thinly populated rural areas, advanced medical technology and hospitals aggregated for affording the technology.
 - In rural areas, physicians are shortly supplied because burden for physicians working in hospitals has been increased in delivering high advanced medical technology.

Percentage aged 65 or over (%)



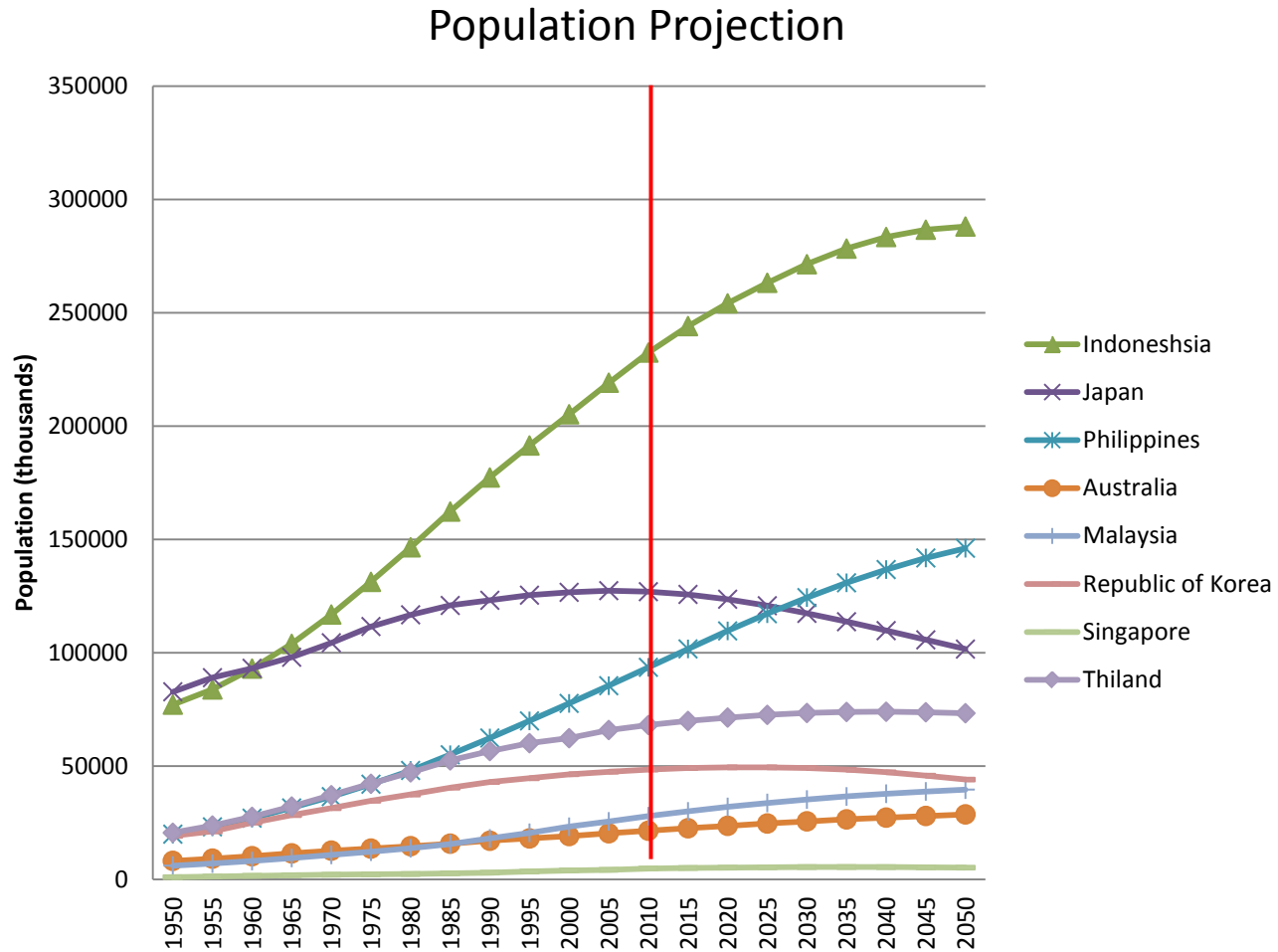
Population Decline in Japan

Population Projections by age groups(2006)



Source: National Institute of Population and Social Security Research Population Projection for Japan: 2006-2050

Population Decline in APEC



Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2008 Revision, <http://esa.un.org/unpp>, Wednesday, August 25, 2010; 4:28:54 AM.

3. Aging and Crisis in Healthcare System (2)

3) Increasing Medical Cost

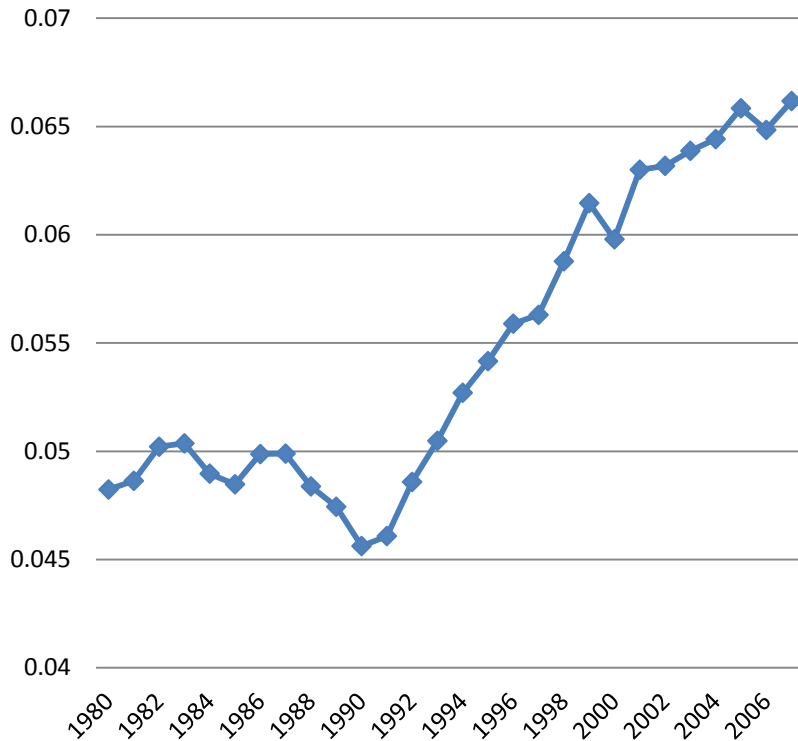
- Absolute amount of cost grows; **\$350 billion in 2009** and **6.62% of GDP (2007)**
- Rapid increasing cost in recent years; growth rate impossible to cover in the near future
- Financing ratio between out of pocket and public spending (including both insurance and the other public expenditure) is around 20% to 80%.

4) Crisis in healthcare insurance

- ***Extreme difficulty of National Health Insurance*** (managed by municipal governments for unemployed and self-employed including increasing retired, less paid, and poor health elders)
- ***Much public fund has been used for covering the deficits of the National Health Insurance.*** The other insurance such as Government Managed Health Insurance, Union Managed Insurance and Mutual Aid Insurance also faces heavy deficits for increasing insured elders. In addition, budget restraint became more heavier than before.

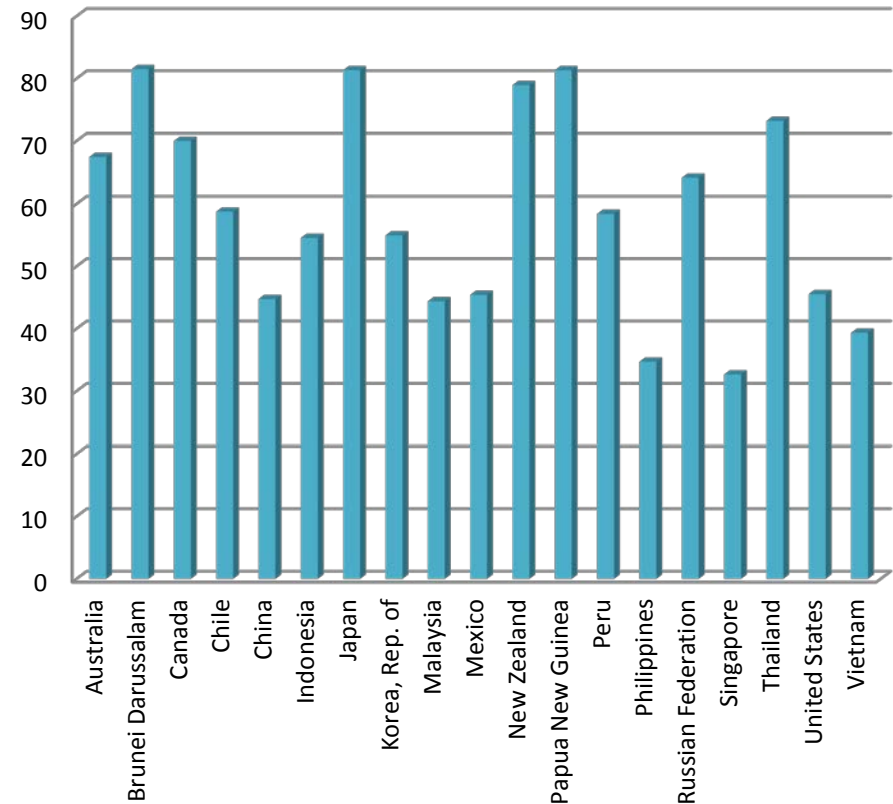
Increasing Healthcare Cost

Total expenditure on health as % of gross domestic product in JAPAN



Source: Estimates of National Medical Care Expenditure(2007) and System of National Accounts(2007)

Health expenditure, public (% of total health expenditure)



Source: World Health Organization National Health Account database 2010

3. Aging and Crisis in Healthcare System (3)

5) Deficiencies in Healthcare system

- *Gap became huge between the system and rapid change of demand for healthcare.*
 - Effective primary care delivery/function of general practitioners has not been accomplished.
 - More connected healthcare is needed between clinics and advanced hospitals, among clinics and among hospitals.
 - Separated regulations for delivery and financing between healthcare and longterm nursing care as well.
 - Time lag for access to new drug and medical device between Japan and U.S./EU continued in spite of action plan of MHLW and PMDA.
- *Present payment system of scheduled medical fee lacks any incentive mechanism for efficient allocation of healthcare resources.*

3. Aging and Crisis in Healthcare System (4)

- *In the end, we have to face unavoidable **dilemma** that assuring **quality of healthcare service** would be difficult with tight budget restraint if we keep **universal public healthcare insurance** secure; more burden of future generations would be charged if we depend on more public expenditure.*
- Disparity in access to healthcare service would widen among Japanese people if co-payment or out of pocket for high advanced medical technology service is allowed.
- At present, ***dual use of public healthcare insurance for covered service and out of pocket for uncovered service** is not allowed* with some exceptions. In other words, if we want to combine covered services with an uncovered service, we have to owe 100 % of healthcare cost for all services provided. To soften this kind of penalty for combined use of public healthcare insurance and out of pocket for uncovered service is the most important issue in Japanese health.

4. Direction for needed Reforms (1)

- *It is primal to make healthcare service **efficient**. The strategies for efficient healthcare service are (1) **introducing market mechanism** by institutional changes and (2) efficient **allocation of limited healthcare resources**.*

1)-1 Systemic reforms by **deregulations** and **more transparency in regulations** etc.

- *Giving companies incentive for innovation of medical technology and promoting competition.*
- For example, introducing attractive price for R&D of innovative medical device and drug, and transparent and simplified approval process not only for shortening time lag for access to new drug and medical device between Japan and U.S./EU but reducing administrative cost.
- In addition to internal affairs, global harmonization in regulations should be promoted in accordance with growing global market.
(However, we face an unavoidable dilemma between safety assurance by post market surveillance and deregulated approval system.)

4.Direction for needed Reforms (2)

- Introduction of competition by fair evaluation to doctors and hospitals/clinics, and scheduling medical fee based on quality of healthcare services.
(There is some possibility to create disparity of services as well as unequal access to services among the state and Japanese People.)

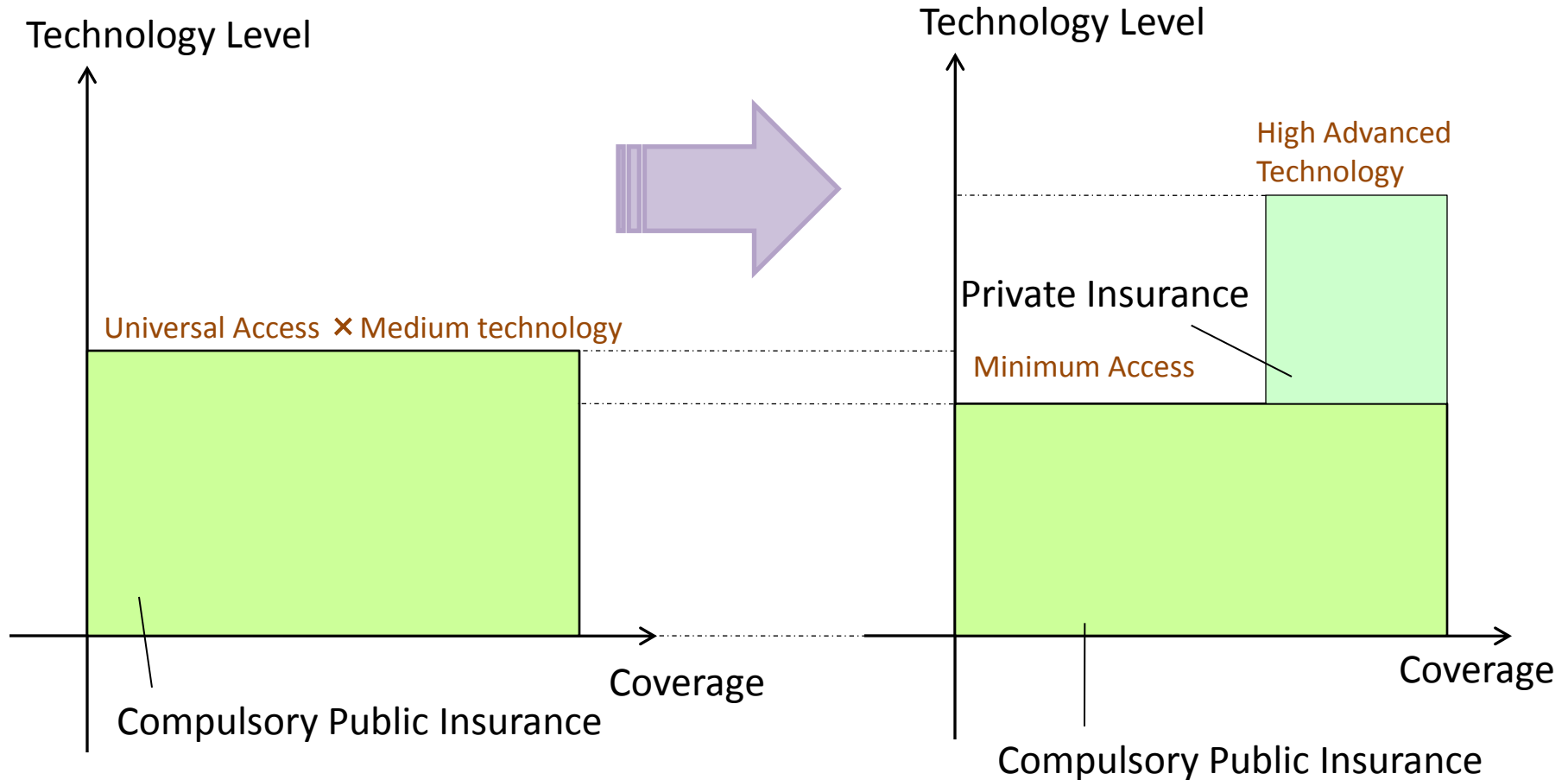
1)-2 Reforms in healthcare insurance

- *Making insurance administration/review **efficient and transparent** by advancing integration and reorganization of insurers*
- *Dilemma between **universal equal access** to healthcare and **disparity** in available services.*
- Balancing public expenditure and out of pocket
- One of the possible solutions is to establish a dual insurance system consisting of compulsory public insurance for minimum access to high advanced technology and private insurance for beyond the minimum access.

Reforms in Healthcare Insurance

Now

Dual System



4.Direction for needed Reforms (3)

2) efficient allocation of limited healthcare resources

- *Patients' choice to hospitals and clinics is unlimited throughout the state but **resources are not efficiently allocated** such as personnel and material contributions needed for healthcare. For example, disparity in doctors, and hospitals/clinics, excessive purchase and use of medical devices, and unconnected healthcare between clinics and advanced hospitals, among clinics and among hospitals etc.*
- One of the main reasons in inefficiency and the least used resource is **medical information**. To make meaningful use of medical information was not practical at all because of huge financial cost and much time for its introduction. *However, recent IT progress has already become a promising solution to the problems on cost.*
- We lag behind in the statewide application of IT as a reasonably alternative resource because:
 - First, **privacy concern** is big about establishing core infrastructure of patient ID.
 - Second, **trustworthiness of IT** is insufficient and **cost of initial investment** is very high for IT introduction.
 - Third, **hospitals and clinics are inactive** for IT introduction.

4. Direction for needed Reforms (4)

- Recently, it is seriously discussed to introduce **ID system**. We find trend toward meaningful use of IT based on ID infrastructure enable to (1) keep tabs on patients, hospitals/clinics, allied health professional, and healthcare resources, (2) record all medical practices, and (3) deliver effectively all needed information for optimal resource allocation.
- **Positive Effects by Healthcare IT:**
 - 1) Sharing personal health information by hospitals and clinics for enhanced quality of care.
 - 2) Researching comparative cost effectiveness of healthcare by all patient's clinical data through realtime statistical procedure.
 - 3) Using effectively resources by understanding allocation of resources and operating rates.
 - 4) Managing optimally for hospitals and clinics
- *Total effect by use of IT in healthcare is uncertain because higher quality of healthcare causes increasing healthcare demand though the IT accomplishes enhanced quality and effective allocation of healthcare resources. However, cost introducing IT in healthcare must bring us the biggest benefit if it is optimally used.*

Positive Effects by Healthcare IT

① Quality

Sharing personal health information by hospitals and clinics for enhanced quality of care



② Research

Researching comparative cost effectiveness of healthcare by all patient's clinical data through realtime statistical procedure.



③ Efficiency

Using effectively resources by understanding allocation of resources and operating rates.

Healthcare IT



④ Optimality

Managing optimally for hospitals and clinics

5. Conclusion

- **Direction for needed Reforms in Japanese Healthcare System**
 - 1) *We should keep universal healthcare insurance secure.*
 - 2) *Debate is needed to allow individual financial burden for only high advanced medical technology service in spite of gap between accessibility to healthcare among Japanese People. We should research on making promising insurances in case of allowing dual use of public healthcare insurance for covered service and out of pocket for uncovered service.*
 - 3) *Reforms are needed to eliminate hurdles for effective healthcare system: incentive should be given for private actors by deregulations and more transparency in regulations etc.*
 - 4) *We should make use of informative resources like clinical data for efficient allocation of limited healthcare resources by investing IT.*
- *Aging society will be destiny for most Asian states after Japan, the first runner in aging. Speed in increasing cost is rapid with aging as well as progress of health technology. In Japan, universal public healthcare insurance contributes for life span extension. We are very happy If Japan could be a lesson for other APEC member states. We should engage in collaborated research trials in Asia for seeking uncertain solutions.*