Aging Asia: Social insurance sustainability, chronic diseases and long term care
2009 February Stanford Conference
Financing healthcare in rapidly aging Japan

Naoki Ikegami, MD, MA, PhD
Professor & Chair
Dept. of Health Policy & Management
Keio University, Tokyo
nikegami@a5.keio.jp
Population of Japan by Age and Sex, 1950

Male

Female

in thousand
Population of Japan by Age and Sex, 2000
Population of Japan by Age and Sex, 2050

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 ~ 4</td>
<td>400</td>
<td>300</td>
</tr>
<tr>
<td>5 ~ 9</td>
<td>300</td>
<td>200</td>
</tr>
<tr>
<td>10 ~ 14</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>15 ~ 19</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>20 ~ 24</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>25 ~ 29</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>30 ~ 34</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>35 ~ 39</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>40 ~ 44</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>45 ~ 49</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>50 ~ 54</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>55 ~ 59</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>60 ~ 64</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>65 ~ 69</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>70 ~ 74</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>75 ~ 79</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>80 ~ 84</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>85 +</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: The data is pre-determined.
Composition of 65〜74 and 75+ in Japan

In population

2005

- 0〜64: 80%
- 65〜74: 11%
- 75+: 9%

2025

- 0〜64: 70%
- 65〜74: 12%
- 75+: 18%

In health expenditures

2005

- 0〜64: 49%
- 65〜74: 22%
- 75+: 29%

2025

- 0〜64: 35%
- 65〜74: 16%
- 75+: 49%
Need to change the focus of healthcare

• In twenty years, two-thirds of all patients in Japan will be 65+
  – If patients seen by obstetricians and pediatricians are excluded, then close to three-quarters will be 65+
  – My advice to medical students: You should not become a doctor unless you like talking to old people

• Typical hospitalization for frail, elder patient: Admitted on a stretcher, discharged on a wheelchair

• Disease management programs won’t work when the patient has multiple diseases as is often the case with elders

⇒How can the financing be changed?
Financing healthcare in an aging society

• Issues I would be raising:

(1) Can the younger generation’s burden be mitigated?
(2) Can total health expenditures be contained?
(3) Can health insurance for elders be reformed?
(4) Can end-of-life care expenditures be contained?
(5) Is long-term-care affordable?
(1) Can the younger generation’s burden be mitigated?

- Increasing the elder’s co-payment rate and premium contributions
  - Co-payment: Most now pay 10%, those with high income 30%
  - When co-payment exceeds $400 per month, the rate becomes 1%
  - Premium contributions: Decreasing tax exemption for income from pensions
- Containing total health expenditures (explained later)
- Policy not adopted: Societal savings approach
  - Premiums deposited in savings pool for each generation
  - Younger generation will have to pay not only for their current and future expenditures, but also for elders until the program matures
  - Difficult to estimate future healthcare costs (cf. US Medicare)
- Policy not adopted: Health savings account (HSA)
  - HSA is only for minor events, major events covered by catastrophic insurance
  - The 80:20 rule in health expenditures
    - 80% of expenditures incurred by 20% of the patients

- Top <1% of claims: 26%
- 1~10% of claims: 38%
- 10~25% of claims: 14%
- Bottom >75% of claims: 22%

* Claims are billed every calendar month

(2) Can health expenditures be contained?

- Yes! Japan ranks 22\textsuperscript{nd} among the OECD countries in the percentage of healthcare expenditures to GDP: 8.0%.
- Despite rapid aging of society, wide diffusion of technology and no waiting lists
  - Highest per capita number of CAT scans, MRI in the world.
- The mechanism: Fee schedule (tariff) controlling the price, conditions of reimbursement
  - Money flows through a single pipe from all payers to all providers
  - Global control over both hospital and physician fees
  - Extra-billing and balance billing prohibited
  - Fees reduced individually on targeted items
    - Example: CAT scans and MRI fees were cut by 30\% in 2002, when the global volume-weighted revision rate was reduced by only 2.7\%
    - Has compressed increases in costs due to advances in technology.

- National Medical Expenditures (NME) is the government compiled data used for budgeting
  - NME is 80% of OECD estimates because OTC drugs, preventive health etc. not included
  - Nominal NME and GDP are used for the analysis

- NME and GDP
  - In the 1980s, increased at same rate so that the ratio of NME to GDP remained constant at 5%
  - After 1990, with the decline in the GDP growth rate, NME increased more than GDP: Ratio of NME to GDP increased to 6.0%

- NME and the fee schedule revision rate
  - Revision rate: Volume weighted rate for all services, drugs etc.
  - Strong correlation: 0.78
  - Price regulations have been effective
  - In 2002, revision rate was -2.7% which led to 0.7% reduction in NME
Annual Changes in Gross Domestic Product, National Medical Expenditures (NME) and revision rate, Japan, 1980-2002
Decomposing increases in NME: 1980-2002

Annual rate of change decomposed to the following:

1. Due to demographic factors
   - Population growth: 0.8% decreasing to 0.1%
   - Population aging: 1.0% increasing to 1.7%
     • Assumption: Per capita expenditures remain the same for each age group
     • Cumulative effect of both constant at 1.8% during this period

2. Fee schedule revision rate: 0.46%
   - 1% less than the CPI which was 1.46%

3. The residual not explained by 1+2: Changes in volume (No. of visits and admissions) and technology: 2.8%
   • Less than the annual growth rate of the GDP which was 4.0%
   • Cf. For Medicare, the growth rate due to technology was 1% in excess of the GDP
(3) Can health insurance for elders be reformed? The case of the new insurance for elders 75+

- New insurance for all elders 75+: Implemented April, 2008
  - On 75th birthday, all had to exit their former plan and join this plan
- Political fiasco for government
  - One reason for Prime-minister Fukuda’s resignation
- Three main reasons for its unpopularity
  - Official name “Health Insurance for Later Period of Old”
    - Resentment against the unfamiliar term → Next stage after “later”, death
    - Came to be referred to as “hurry up and die insurance”
  - Forcing low-income elders to pay premiums
    - Those who had been covered as dependents of their child had to start paying
  - Slightly different benefits for the 75+
    - Over 99% the same, but still some differences
The new item just for the 75+

- One item introduced just for 75+ that led to uproar: Consultation fee for end-of-life care
  - $20 fee to discuss for one hour end-of-life issues
- Criticized as not being consultation, but persuasion to end life quickly in order to contain costs
- Uproar led to freezing its implementation
- Should have been introduced for all, not just 75+
- Indicates difficulty of establishing different rules just for elders → Must maintain intergenerational equality
(4) Can end-of-life care expenditures be contained?

- Whether at end-of-life or not is revealed only ex post (after death)
- Patient’s wish when in critical condition
  - To be aggressively treated and cured if at all possible
    - Difficult to deny this wish, even if the chances of recovery are slight
    - More likely if young and the onset is sudden
  - Not to receive aggressive treatment that will prolong suffering
    - Option should be made available
    - More likely if old and the onset is gradual
- Growing trend: Most deaths now occur after 75 in Japan
  - Proportion of all deaths occurring after 75: only 1/3 in 1968, but 2/3 in 2008
  - Few people die when young or middle-aged
  - The proportion of those opting for aggressive treatment should decline
  - Although the absolute number of deaths will increase, from 1 million deaths (2002) to 1.7 million deaths (2038), the proportion of deaths occurring after 75 would also increase
Caveats in containing end-of-life care costs

• Public opinion against explicit discrimination of healthcare provision according to age
• End-of-life care costs may not be so high
  – On an individual basis, end-of-life care costs may constitute one fifth of total life time expenditures
  – But for society, on a cross-sectional basis, the Ministry has estimated that healthcare costs for the last month of life would be only 3% of total expenditures
(5) Is long-term-care affordable?

• Typical reaction in US: Too expensive. Universal healthcare is our first priority.

• Yet, Germany and Japan have implemented public long-term care
  – Affordable, controllable and manageable
  – Both countries spend LESS money than the US Medicaid and Medicare on LTC
  – Explained in detail in Professor Campbell’s presentation
What are long-term care services?

- Personal care: ADL (Activities of Daily Living) assistance in dressing, eating etc.
- Domestic care: IADL (Instrumental ADL) assistance in meal preparation, cleaning, shopping, medication management
- Home modifications (ramps, hand rails), emergency alert systems
- Transportation to & from adult day care centers, healthcare facilities
- Services by physicians generally not included, except when the physician is employed by the institution
- Occupational training would be included for non-elders having physical, learning and mental disabilities
  - Introducing LTC just for elders would be more feasible, and would have more popular support
Copernican shift: Public LTC Insurance is not only needed, but could also be less expensive

Healthcare system
- Services become medicalized
- Public expectations: Best care available
- Expensive professional staff has dominant role
- Patients find it difficult to exercise choice

LTC system
- Services are a combination of health and social care
- Public expectations: Decent level of care
- Low-wage staff has dominant role
- Clients find it easier to exercise choice

LTC may be the best way of containing healthcare costs
Calculating LTC expenditures

• Expenditures = No. of eligible in each eligibility level multiplied by the benefit amount ($) of each level
• Number eligible: Based on eligibility criteria
  – Number and severity of ADL deficits etc. = Extent of support needed for walking, eating etc.
  – Of the 65+, could cover 10% (Germany) to 16% (Japan)
    • Japan extends coverage to those who need only light care
• Amount of benefits: From parsimonious to generous
  – The balance can be left to be paid by the user
  – Public responsibility is to cover a “decent level” of services
• Both the eligibility criteria and the benefit amount are set by policy-makers, not physicians
• Much less pressure to provide the best available service for all
The future

• Where Japan is now, the US will be 30 years later

• Plan according to what has been, or has not been, shown to be possible in Japan, NOT on beliefs or wishes

  (1) Younger generation’s burden can be mitigated
  (2) Total health expenditures can be contained
  (3) Public opposes targeting cost containment on elders
  (4) End-of-life care expenditures may not be significant
  (5) Long-term care is affordable