What Is the Harvard-Flagship Health Reform Approach?

Today, I will give a brief presentation on the question: “How can we think about the performance of a health system?”

The following two points should be kept in mind when thinking about a health system. First, a health system is a means to an end, not an end in itself. In other words, a health system is intended to achieve several purposes. The second point is that a health system is complex because it involves many actors who need to work together (Slide 1).

As is well known, analyzing the performance of a health system is very difficult. There is no international consensus for the evaluation parameters that should be used. To help address this problem, four professors at the Harvard School of Public Health have collaborated to develop the “Harvard-Flagship Health Reform Approach” (referred to below as the Harvard-Flagship Approach), in collaboration with the World Bank Institute (Slides 2, 3). *3

The Harvard-Flagship Approach evaluates three items, “Health Status,” “Customer Satisfaction,” and “Financial Risk Protection” as the ultimate performance goals of a health system, from technical, ethical and political points of view (Slides 4, 5).

In this approach, we propose that five elements, Financing, Payment, Organization, Regulation and Behavior (of patients, physicians, input producers, etc.), be used as control knobs to bring about improved performance. Three factors, Efficiency, Quality and Access are used as intermediate performance measures related to them.

One example of another approach for evaluating health systems is the World Health Organization (WHO) approach. This uses three items, “Health Status,” “Responsiveness” and “Fairness in Financial Contribution,” as indices for assessment. These are similar to three final performance measures of the Harvard-Flagship Approach, but the Harvard-Flagship Approach differs in providing methods and policies for attaining the performance goals (Slide 6).

The Japanese Health System: What are its strengths?

In analyzing the Japanese health system with the Harvard-Flagship Approach, let us look first at health status. According to the 2005 statistics of the Organization of Economic Cooperation and Development (OECD), Japan has the longest average life expectancy, and its infant mortality rate is also the lowest. According to WHO’s World Health Report 2000, Japan’s health status is the best in the world and can be considered excellent (Slides 7–10).

*1 This article is based on a presentation made originally in Japanese at the Japan Medical Association Research Institute 10th Anniversary Public Lecture hosted by the Japan Medical Association at the JMA Hall on April 13, 2007.
*2 Professor, Harvard School of Public Health, Boston, USA (reich@hsph.harvard.edu).
*3 The collaboration resulted in the course taught around the world jointly by the Harvard School of Public Health and the World Bank Institute, under the name “Flagship Course on Health Sector Reform and Sustainable Financing” and in the book, Getting Health Reform Right: A Guide to Improving Performance and Equity (by Marc J. Roberts, William Hsiao, Peter Berman, and Michael R. Reich, published by Oxford University Press, 2004).
Also from the perspective of financial risk protection, Japan’s health system can be considered very good, much higher than the United States, for example, due to its universal coverage, free access to hospitals and clinics, comprehensive benefit, and its catastrophic coverage (for high-cost medical care) (Slides 11, 12).

The Japanese Health System: What are its challenges?

One of the major challenges for the Japanese health system is related to health expenditure. According to OECD’s 2005 data, Japan’s figure for health expenditure as a portion of gross domestic product (ratio to GDP) is approximately half that of the U.S., which is the highest, and about as low as that of the U.K., which is the lowest among the OECD countries. Japan’s per capita expenditure is also the lowest. However, due to the fact that since the beginning of the 1980s, the population structure has been rapidly aging, and national medical expenditure has also been increasing, Japan is facing challenges for future spending (Slides 13–15).

Japan also confronts challenges related to customer satisfaction. The results vary according to different surveys (from 19% to 82.4%), but its ranking among the major developed countries is quite low; therefore, we could say that Japan’s health system ranks “fair to poor” on customer satisfaction. The reasons for this low rating could be the limited explanation and transparency in doctor-patient relations, and the lack of access to high-technology health services (Slides 16, 17).

What Can Be Done?

As mentioned above, one characteristic of the Harvard-Flagship Approach is that it proposes specific methods for designing and introducing solutions.

Let me briefly mention two such methods. First, the approach uses adjustments of the five control knobs in order to improve performance and equity. Second, the approach uses a diagnostic tree to move from problems to interventions using the control knobs.

Now, let us briefly examine two examples: Low Public Satisfaction and Growing Chronic Diseases. Please note these are only partial analyses for illustrative purposes (Slide 18).

First, one needs to construct a diagnostic tree for Low Public Satisfaction. Inadequate quality, limited access to high-tech services, and rising costs are all factors that contribute to the low rating on public satisfaction. Japan’s aging population is an important factor that contributes to the rising medical costs. All of these causes are affected by the five control knobs (financing, payment, organization, regulation, and behavior) (Slide 19).

In the case of adjusting the financing control knob to improve public satisfaction, one specific example that could be proposed is to consider partial introduction of private health insurance in Japan. As a result, one could anticipate the following consequences: (1) greater choice on procedures, (2) better quality for patients, and (3) better satisfaction for patients. However, from the ethical point of view, one must also be concerned about possible equity effects and the political role of private insurers. By introducing private health insurance, the political balance could change. For example, the private insurance industry in the U.S. exerts huge political influence over domestic health policy decisions (Slides 20, 21).

For the next example, one begins again by constructing a diagnostic tree for Growing Chronic Diseases. Inadequate exercise, changing nutrition, and changing family structure are all factors that contribute to the increase of chronic diseases in Japan. Aging again is an important factor in the changing family structure. All of these causes are affected by the five control knobs (financing, payment, organization, regulation, and behavior) (Slide 22).

Here, let us consider how adjustments of the Behavior control knob could affect chronic diseases in Japan. We mentioned that many chronic disease problems in Japan (and elsewhere) are related to two behavior changes: individual nutritional consumption, and individual habits of physical exercise (Slides 23, 24).

Recently, in Japan, two Vice Ministers of the Ministry of Health, Labor, and Welfare began a public diet. This is a specific example of adjusting the behavior control knob. One of the Vice Ministers, Professor Keizo Takemi, succeeded in losing 4 kg in 4 months, demonstrating a successful change in his personal health status and also raising the issue of personal behavior as a matter of public debate. However, it will not be easy
to expand his personal success to change the behavior of other people in Japan (Slide 25). This will require more efforts, including the possible use of other control knobs to affect Japan’s health system performance.

The Harvard-Flagship Approach as a Tool for Health Reform in Japan

I would like to suggest three conclusions from this brief presentation. First, health reform is not easy. It is a complex process that involves technical, ethical, and political decisions. For Japan, we must think about who and how this process can be made to work effectively (Slide 26).

Second, my presentation suggests that the Harvard-Flagship Approach of five control knobs can help guide analysis and decisions about health reform in Japan. The Harvard-Flagship Approach is effective for systematically organizing ideas about health system reform, such as which of the three performance goals should be prioritized and what kind of society one hopes to create. The approach can also be used to help structure public debate and deliberation about these critical decisions for Japan’s future health system (Slide 27).

Third, my presentation suggests that health reform at the individual level may not be easy—but that it is possible. This can be seen in Professor Takemi’s example of remarkable success in becoming more healthy (Slide 28). His example provides an inspiration for all of us and for Japan.

Acknowledgements

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The Harvard-Flagship Health Reform Approach

Decisions to Reform the Health System

- Technical Analysis
- Ethical Analysis
- Political Analysis

Applying the Harvard-Flagship Approach to Japan

- What can we say about the performance of the Japanese health system?
- What can we learn about opportunities for health reform?
- Let’s look at each of the three performance goals.
THE PERFORMANCE OF JAPAN’S HEALTH SYSTEM ANALYSIS WITH THE HARVARD-FLAGSHIP HEALTH REFORM APPROACH

Final Goal 1: Health Status: Excellent

<table>
<thead>
<tr>
<th></th>
<th>Japan</th>
<th>Canada</th>
<th>UK</th>
<th>Germany</th>
<th>US</th>
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</thead>
<tbody>
<tr>
<td>Life Expectancy (2003)</td>
<td>81.8</td>
<td>79.7</td>
<td>78.5</td>
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<tr>
<td>Infant Mortality Rate (2003)</td>
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<td>5.3</td>
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</table>

(OECD 2005)

WHO The World Health Report 2000

<table>
<thead>
<tr>
<th>Overview</th>
<th>Goal attainment</th>
<th>Health Level (GPI)</th>
<th>Health Distribution</th>
<th>Responsiveness</th>
<th>Financial contribution</th>
<th>On-time health services</th>
<th>Overall health system performance</th>
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<tr>
<td>France</td>
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</table>

Final Goal 2: Risk Protection: Very Good

- Universal Coverage: 100% mandatory enrollment
- Free access: No barrier for any hospitals or clinics
- Comprehensive Benefit: Inpatient, Outpatient, Drugs & Devices
- Catastrophic coverage: 30% Co-payment but ceiling of $700/month

TOTAL HEALTH EXPENDITURE (2003)

<table>
<thead>
<tr>
<th></th>
<th>US</th>
<th>Germany</th>
<th>Canada</th>
<th>Japan</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of GDP</td>
<td>15.0</td>
<td>11.1</td>
<td>9.9</td>
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<tr>
<td>Per capita (ppp)</td>
<td>$5,635</td>
<td>$2,996</td>
<td>$3,001</td>
<td>$2,139</td>
<td>$2,231</td>
</tr>
</tbody>
</table>

(OECD 2006)

The Japanese Population is AGING


But the future is uncertain because...
Changes in the National Medical Expenditure

- National medical expenditure
- Medical expenditures for the elderly

Third, let's look at customer satisfaction as a goal of the health system

What Can Be Done?

- Decisions about health reform require adjustments to one or more control knobs to improve performance
- The Harvard-Flagship Health Reform Approach uses diagnostic trees to move from problems to interventions using the control knobs
- Briefly we show two examples: for public satisfaction, and for chronic disease

Final Goal 3: Public Satisfaction: Fair to Poor

- Least satisfied among developed countries\(^1\)
- Satisfaction rate varies by surveys 19\(^%\)\(^2\) - 82.4\(^%\)\(^3\)
- Major complaints: Lack of explanation & transparency

First Construct Diagnostic Tree

- Low Public Satisfaction → Inadequate Quality → Financing → Inadequate Quality → Limited Access To High Tech → Rising Cost → Aging

Then Consider Control Knobs

- Low Public Satisfaction → Inadequate Quality → Financing → Inadequate Quality → Limited Access To High Tech → Rising Cost → Aging
Financing Control Knob

- Consider partial introduction of private health insurance in Japan, to give:
- Greater choice on procedures
- Better quality for patients
- Better satisfaction for patients
- BUT be careful for equity effects and political role of private insurers

First Construct Diagnostic Tree

- Growing Chronic Diseases
  - Inadequate Exercise
    - Changing Nutrition
      - Changing Family Structure
        - Aging
          - Financing
          - Payment
          - Organization
          - Regulation
          - Behavior

Behavior Control Knob

- Many chronic disease problems in Japan (and elsewhere) are related to behavior change, including:
  - Changing individual nutritional consumption
  - Changing individual habits of physical exercise

Behavior Control Knob

- Japanese Diet members go on Public Diet

- Not so easy to change behavior

Conclusion #1

- Health reform is a complex process that involves technical, ethical, and political decisions.
Conclusion #2

- The Harvard-Flagship Health Reform Approach of five control knobs can help guide decisions about health reform in Japan.

Conclusion #3

- Health re-form, even for the individual form, is not easy – but it is possible.

武見俊大臣 体重・頭面の変化記録