Medical Technology Leadership Forum

Overview of Japanese healthcare system

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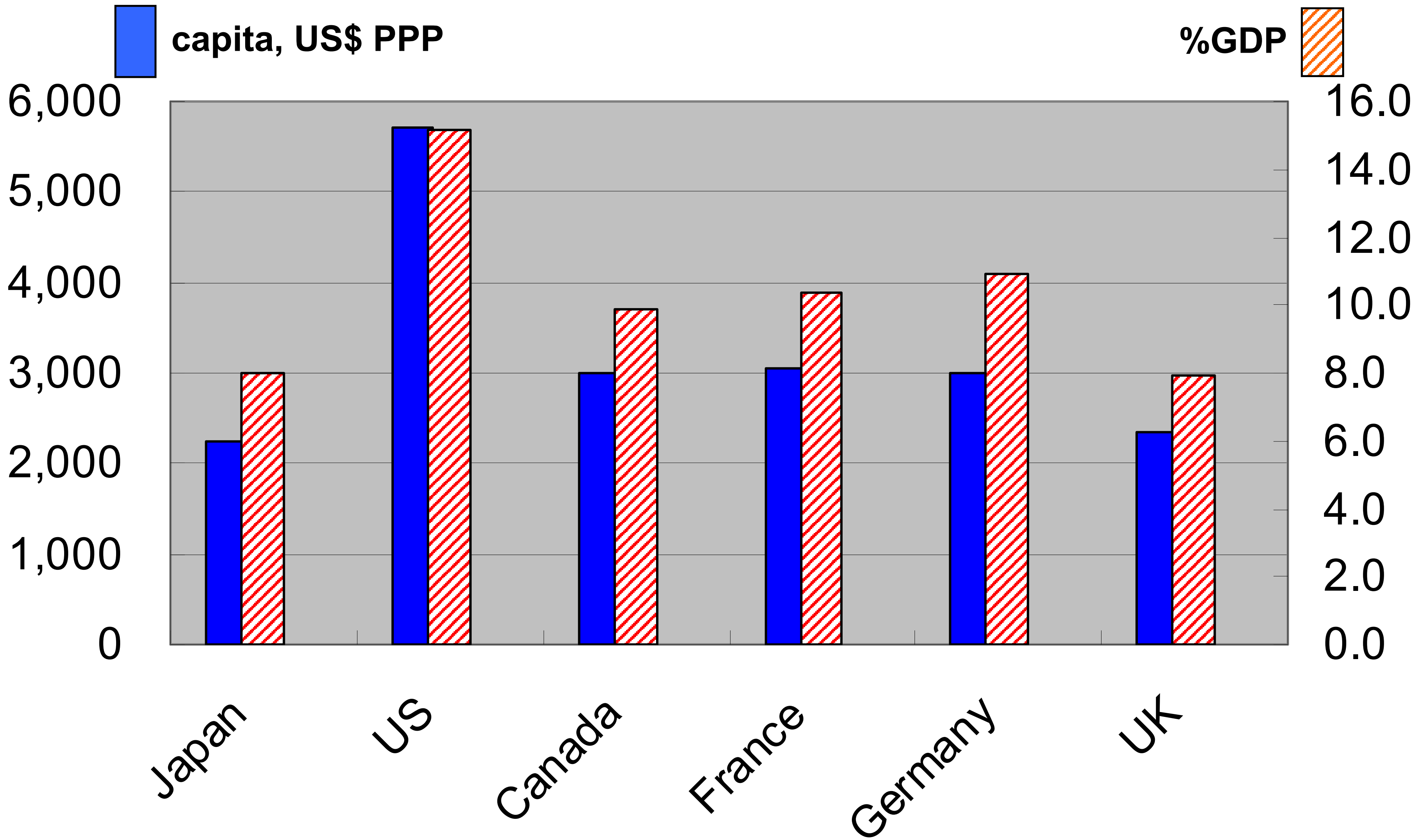
Outline of lecture

1. The present system
   – Financing, providers and payment
2. Drivers of change
   – Fiscal: Cost containment
   – Patient demand: Cost escalation
3. Reform scenarios
   – Deregulation and market competition (MOF)
   – Health planning and government pressure (MHLW)
   – The third way

The Japanese health care system: Low expenditures, best health indices

1. **Low expenditure levels: 8.0% of GDP (2003, OECD)**
   - **Lowest among G7 countries**
   - **Expenditures actually decreased in 2002, and predicted to decrease again in 2006**
2. **Basically egalitarian system with universal coverage**
   - **Social Health Insurance (SHI) subsidized by taxes**
3. **Excellent health indices**
   - **Infant mortality rate: 4 per thousand**
4. **No waiting lists: unrestricted access to virtually all hospitals: may have to wait but seen on same day**

Healthcare expenditures, per capita PPP US$, ratio to GDP (2003)



Source: OECD Health Data 2006, OECD (2006)

Key aspects: Financing

- SHI provided by either employer or by municipality
  - Multiple plans but basically same benefits and no choice of plans
  - Big differences in average income and age among SHI plans
- National government taxes subsidize SHI plans enrolling those with low average incomes
  - National government finances fixed percentage, one quarter, of SHI expenditures from general budget
  - National budget dictates SHI expenditures
- Cross-subsidization among plans based on ratio of elders
  - Plans enrolling relatively more elders subsidized from the pool; plans enrolling less elders must contribute to the pool
- Local government taxes provides subsidies for the plans that insure the self-employed and pensioners

Key aspects: Providers

- Private-sector dominated
  - 80% of hospitals, 95% of clinics
  - But, public-sector provides most of high-tech care because they have additional revenue from government subsidies
- Physician dominated
  - Hospital CEO legally must be a physician
  - Almost all private-sector hospitals owned by physicians
  - Entry of investor-owned hospitals prohibited
- Traditional model
  - 98% of physician clinics solo-practices
  - Little functional differentiation: tertiary care hospitals from clinics, acute care hospitals from nursing homes
  - Even premier medical centers have low volume compared with US

The KEY aspect: Payment

- Single payment system set by government
  - Applied to all SHI plans and virtually all providers
- Government decides not only the size of pie (macro management), but also how the pie is divided (micro management of procedure fees and drug prices etc.)
- Traditional model
  - Fee-for-service for both inpatient and outpatient care
  - DPC (the new inclusive payment system for inpatient care) bundles only lab tests and drugs; surgical fees and devices continued to be billed fee-for-service
  - The conditions for billing are set by government
    - Example: The fee for diagnosing a CT scan image can only be billed once every calendar month for each patient

Ensuring compliance to regulations

- Providers must provide patients the break-downs of services provided and the co-payment amount; and bill the patient right after the consultation, or on the day of discharge
- Peer review of claims
  - Claims to plans submitted at the beginning of every calendar month
  - Peer reviews by committees in each of the 47 prefectures
  - If an item is judged inappropriate, then payment denied for that item
- Inspections made by a team from the government inspectorate and local medical association
  - Made about every one to ten years for hospitals
  - More frequent if provider has bad reputation
    - Information from local providers, patients, dissatisfied hospital employees etc.
  - Billed services listed in claims matched with medical records
  - If no record, then assumed that services had been billed inappropriately and provider must back retrospectively pay that the amount billed for the past 6 to 12 months

Revisions of the fee schedule: 1^{st} Step

- Revisions made every two years
- 1^{st} Step: Set global (volume weighted for all fees and drug prices) rate of revision (made in December)
  - Ministry of Finance (MOF) demands a reduction
    - Revision rate must be set in order to draw the next year's budget
  - Provider organizations (Japan Medical Association etc.) demand an increase
  - Ministry of Health, Labor & Welfare (MHLW) acts as secretariat and provides data
  - Politicians (Diet men) work to realize a compromise
- Final decision made by the Cabinet (Prime-Minister)

Revisions of the fee schedule: 2nd Step Drug and device prices

- Providers can buy drugs and devices in the market at less than the prices set by the fee schedule because of competition among manufacturers and wholesalers

⇒How to reduce excess profit of the providers?

- Prices reduced by two methods:
  - Survey of market price: wholesalers' books etc.
    - Prices reduced so that new price will be only 2% greater than the volume weighted average market price of each drug
      - Old list price \$10→Market price \$9→New list price \$9.02
    - Confidentiality of survey data assured to all concerned
    - Device price reductions are applied to their functional group, and not individually
  - Unilateral decreases in price for new drugs selling better than projected, or for drugs that have had generics introduced
  - Cumulative effect: average price of pre-existing drugs one third that of 20 years ago; ratio of drug costs to total has decreased from 39% to 20%
    - Device prices have also been reduced but their share has increased

Setting the price of new drugs and devices

- Once approved, almost always on listed in formulary
- Prices set relative to that of nearest existing drug, device
  - Extent of innovativeness determines the range of increase
- The process of evaluating innovativeness has become stricter and more open
- International prices also used as benchmarks
  - If prices are 50% higher than the average of the list price in US, UK, Germany and France, then reduced
  - US price drives up drug prices, drives down device prices
- Unclear whether prices are higher in Japan or not
  - Different drugs and devices used
  - US: difficult to obtain volume-weighted average prices
- Information on cost-effectiveness not required in Japan

Revisions of the fee schedule: 3rd Step Individual fees

- Two surveys conducted in the year prior to revision
- Survey of the balance sheet of hospitals and clinics reveals which sectors are profitable
  – Clinical specialties (ophthalmology, ENT etc.)
  – Clinics, hospitals, type of hospital (acute, large etc.)
- Survey of the claims that reveals the volume of each itemized service provided
- Fees individually reduced if:
  1) Sector that provides the service is showing a profit
  2) Volume has expanded sharply → Indication of inappropriate use
  3) Costs have decreased → Example: Material for renal dialysis
- Fees may be increased if in line with policy objectives
  – Example: End-of-life care in homes, not hospitals etc.

Examples of targeted cuts in fees for diagnostic imaging

(in Yen, 120 Yen=US$1)

	2000	2002	2006
CT scan (head)	6550	6200	6600*
CT scan (body)	8800	8300	6600*
CT scan (limbs)	6100	5700	6600*
MRI (head)	16600	11400	10800**
MRI (body)	17800	12200	10800**
MRI (limbs)	16900	11600	10800**

*8500 if multi-slice; **12300 if more than 1.5 Tesla

Council that makes 2nd and 3rd revisions

- Central Social Health Insurance Council
- 30 members appointed by Minister, subject to approval by Diet
  - 8 from providers (5 physicians, 2 dentists, 1 pharmacist)
  - 8 from payers (SHI plan, corporate and labor representatives)
  - 4 from academia
  - 10 specialist members (drug & device companies, nurses etc)
  - Integrity rules: Two members from payers arrested for taking bribes from dentist association
- Sub-committees to discuss technical aspects
- Recommendations on revisions made to the MHLW Minister (early March)
- MHLW publishes the revised fee schedule (late March) which is enforced from April 1, the start of fiscal year

Actual process of revision

- Revising fees and setting conditions is very technical
- Negotiations left to provider groups and MHLW
  - Other committee members can only state general principles, such as more information to patients etc.
  - MHLW has a special division with ten full-time physician bureaucrats who calculate implications of revisions, set conditions for billing, negotiate with provider groups etc.
- At the end of the day, all revisions must be within the macro budget limit of the 1st step
  - Survey of claims data is used to calculate the impact of revising each items on total expenditures
  - If the fee for an item is increased, then the fee for another item must be decreased
  - Minor adjustments will be made after the revision has been made by directorates issued by the Ministry

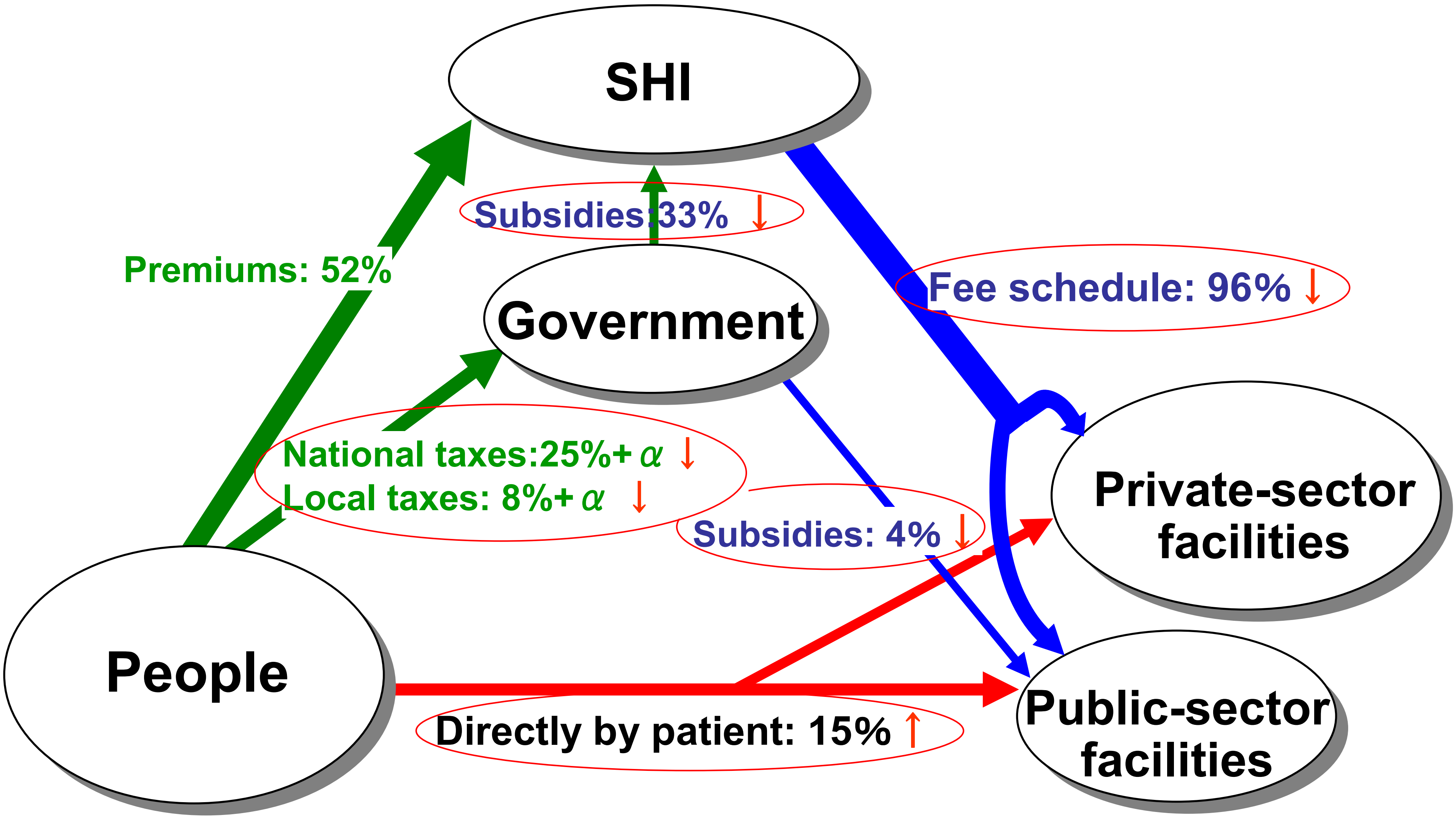
Decomposing expenditure increases

- National medical expenditures increased at an annual rate of 5% from 1980-2002
  - 2% due to demographics (mainly due to population increases in 80s, to aging from 90s)
  - 0.5% due to price increases (<consumer price)
  - 2.5% due to advances in technology (<GDP)
- Even with reductions in fees and prices, expenditures will increase due to aging and advances in technology

2. Drivers of change: Fiscal

- Growing national debt: 1.8 times GDP
  - Economic recession throughout 90s
  - Decrease in revenue: Corporate profits ↓ , Income tax cuts to heat the economy and make it less progressive to encourage entrepreneurship
  - Increase in expenditures: Public works to heat the economy
- Government committed to start reducing debt by 2012
  - Health expenditures have become target within social security
    - Public pensions difficult to cut back
    - Fear that healthcare costs would become explode
  - Since one quarter of SHI expenditures financed by national government taxes, SHI expenditures must be contained

Flow of money in the Japanese system



Impact on patients

- Increase in co-payment rates:
  - For the employed: 10%→20%(97)→30%(03)
  - For elders: token→10%(03)→30% for elders with high incomes (06)
  - But, catastrophic coverage for all: If the monthly co-payment exceeds the ceiling, then the rate above this amount becomes 1%
    - 80:20 rule of health care costs: 80% of the total costs come from 20% of the patients → One reason why the total paid by patients is still only 15%

Impact on providers (1)

- Declining revenue, margin; increasing costs
- Increase in bad debts
  - Not able to pay co-pays, uninsured marginal workers
- Need to improve efficiency
  - Operate at higher capacities
  - Selective pursuit of product lines
- Need to build strategic alliances with others
  - Must have mutually complimentary functions

Impact on providers (2)

- Public-sector hospitals are hit by reductions in subsidies from national and local governments
  - National government hospitals have been turned over to a public corporation: able carry over to next fiscal year, to set their own wage levels
  - Many local government are trying to divest their hospitals to quasi-government corporations or to the private sector
- Increase in pressure for efficiency on physicians
  - More pressure to conform to hospital standards
  - Some are quitting hospitals for private practice clinics
  - Provincial areas particularly hit by shortages

Drivers of change: Patient's demands

- Japanese physicians have tended to be paternalistic, non-communicative
  - Medical records have only been made available to patients in 2006 but the process remains cumbersome
- Demand for more information, transparency
  - "Informed consent" has become a popular word
- Demand for quicker approval of new technology that is available in other countries
- Greater demand for the best→ Cost escalation

Conflict in the two drives

- Containing costs leads to rationing
  - More restraints on SHI benefits→ More restrictions on the conditions for reimbursing services, drugs and devices
    - BUT, new drugs and devices cannot be explicitly denied for cost reasons
  - Less access for patients, especially low income patients
- Greater transparency leads to higher costs
  - Patients, as consumers, demand the best
  - Providing information to patients also costs time money
- Hospitals and physicians caught in between
  - Governments mandate quality, but do not increase the budget
  - Only solution? → Decrease physicians’ and other health workers’ income?

Ministry of Finance’s reform plan

- Contain only SHI benefit expenditures
  - Increase patients’ payment by introducing deductible: First 1000 Yen ($9) per visit not covered
  - Reduce fees for procedures, drugs, devices etc
- Allow extra-billing and balance billing outside SHI
  - Currently, strict restrictions on both: Restricted to single rooms, procedures still under development etc
  - Limit SHI benefits to a “basic package”
  - Deregulation and market competition

Problems in MOF reform plan

- Deductibles would be unpopular in elections: Disparity will be a major topic
  - Lead to increases in the number refusing to pay premiums
    - Employers do not have to provide coverage if they work 30 hours or less
- If SHI expenditures are capped, new technology would have to be mainly financed by cuts in physicians' income
  - But current shortage, or mal-distribution of physicians
  - Economy ↑→ Labor shortage in nurses and other workers
- Deregulation leads to a new market for private insurance: Demand for healthcare is transformed to a demand for gap insurance because people prefer to premiums when they are healthy, rather as patients as they are risk adverse

MHLW reform plan (Ministry of Health, Labor & Welfare)

- Legislation passed by Diet, June, 2006
- Emphasis on prevention of “metabolic syndrome”
  - More exercise, better diet through screening and counseling
- Reduction of the average length of stay
  - Regional differences in costs due to differences in the length of hospital stays, not to the admission rate per population
- 47 prefectures (states) in Japan to be responsible for meeting above targets through regional health planning etc., to be penalized by decreases in subsidies for SHI from national government if targets are not met
- Reorganize health insurance plans on a prefectural basis

Problems in the MHLW reforms

- Preventive intervention is more likely to increase costs because of more treatment: Easier to take pills, than to change lifestyles (exercise, diet)
- Shortening length of stay may contain hospital costs but would increase costs in other areas: Healthcare costs are like a balloon: squeeze one part, other parts expand
- Regional health planning has not worked so far

The third way (1)

- Transfer decision-making to prefectures
- Role of national government: Adjust for demand factors such as income levels and age structure of their population
- Premium levels would reflect local service provision levels
- Pressure on governors and prefecture assemblies to improve healthcare provision
  - Health and social care is number one issue in local elections: But the only way they could and have responded so far is by building hospitals, subsidizing from general tax revenue the health plans for the self-employed and pensioners
  - In national elections, minor issue (in Japan), dwarfed by macro-economic policy, defense, education etc.
  - People would vote for better health care, even though it would raise premiums→ Educate public on benefits of healthcare, not just the costs
- Develop and invest in databases to compare quality among prefectures, hospitals
  - Support by industry: IT, pharmaceutical, device industries

The third way (2)

- Deregulate price of drugs and devices for providers who opt to be paid by inclusive fees: DRG-PPS for inpatient and outpatient care
  - Outside of US, DRG-PPS includes physician fees
- Volume discounts will lead to concentration of services to high volume providers: Costs ↓, Quality ↑
- Expand staff of government agency to which clinical trial data are submitted
  - Quick AND Clean evaluation
  - Expand use of bridging (use of non-Japanese data in clinical trials) for Phase 3

In conclusion

- The Japanese health care system is a combination of public-sector SHI financing, and private-sector dominated delivery systems
- Macro and micro management of the fee schedule has been the key factor in containing costs and maintaining equity
- The reform plans of the Ministry of Finance, and that of the MHLW have their problems
- The third way is the way forward