

Japan: Health Care Presentation

Royce Yang | Logan Noel | Ben Fogarty | Sara Drango | Elise Zhao

#### Overview

Increase in health care expenditure due to an aging population (avg. life-span 83.7): 11.2 percent of its GDP in 2015, 3rd of 35 OECD countries; behind U.S. (16.9 percent) and Switzerland (11.5 percent).

**Payment schedule:** Fee-for-service, expenditure potentially affected by supply-side factors: medical suppliers tend to increase inducement by 7.5% in response to a 1% reduction in medical fees (Yuda, 2013, significant in high-density areas - comp. pressure).

**General statistics:** \$4,152/capita, (\$126 out of pocket) compared to US: \$9,364/capita (\$1,034 out of pocket); 2.4 physicians/capita compared to US: 2.6/capita\*.

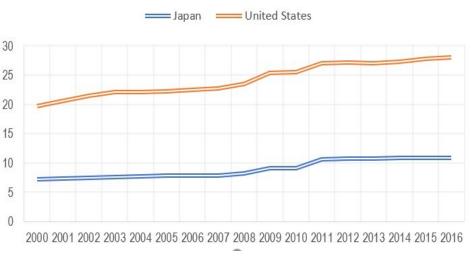
#### **Cost Containment:**

• fee schedule is revised every other year by the government, following stakeholder negotiations. Looks at: the overall rate of increase or decrease of benefit prices, drug and device prices, and prices of services on an item-by-item basis. Govt. does not control quantity: consumption larger than other OECD countries.

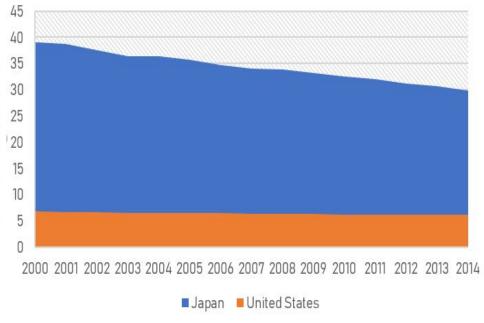
<sup>\*</sup>data as of 2014 (from commonwealthfund.org)

## Health Utilization & Expenditure

# HEALTHCARE EXPENDITURE AS % OF GDP

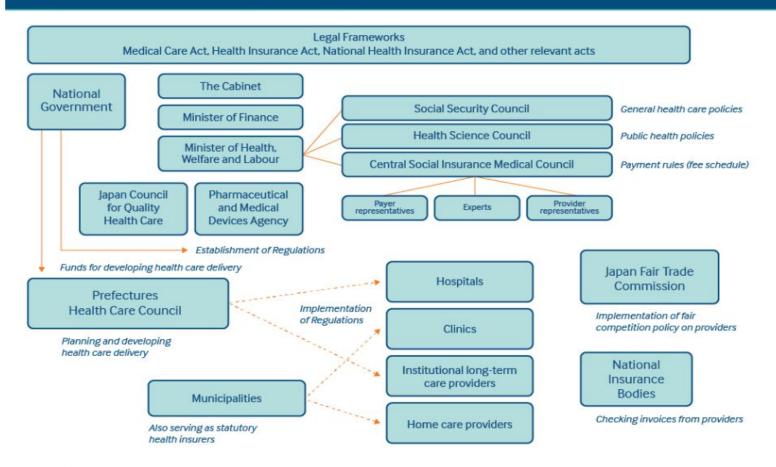


#### Inpatient care - average length of stay (in days)



Source: stats.oecd.org

#### Organization of the Health System in Japan



Note: This chart illustrates a very simplified structure of the complex health care governance in Japan.

#### Health Insurance

- Mandatory by law, but not enforced by penalty (10% uninsured); universal health coverage beginning 1961;
- - Employees' Health Insurance for employees of private firms and public organizations, and their dependents;
  - National Health Insurance (NHI) for the self-employed, retirees, and their depend.
- Public health insurance (SHIS): 70/30 coinsurance; Seniors' insurance (SHSS): 90/10 coinsurance\*
- Monthly premium is scaled to household income\*
- Private insurance is **supplementary**\* and only covers copay, non-covered costs by public health insurance, and (fixed-cost) hospitalization & surgery

<sup>\* =</sup> according to article by Paulsen from Journal of Generic Medicines (2006)

## Hospital Market

- - Establishing a hospital requires government approval
  - Facilities with fewer than 20 beds only require notifying the government
- ≥ 13.2 hospital beds per 1,000 people (highest in the OECD, US: 2.8 per 1,000)²
- □ Types of hospitals:<sup>3</sup>
  - Local Public Hospitals (LPHs)
  - Other Public Hospitals (OPHs)
  - Private Hospitals (PRHs)
- Public and private facilities receive same payment for services according to government fee schedule<sup>4</sup>
- Public hospitals expected to undertake less profitable medical services then compensated by local/national government<sup>5</sup>

Table I Number of hospitals, beds, and staff in Japan (2011)

Ownership	Hospitals	Beds	Staff
LPH, n (%)	968 (11.2)	232,934 (14.7)	313,747 (16.4)
Per hospital (n)		262.2	324.1
OPH, n (%)	685 (8.0)	248,717 (15.7)	362,531 (19.0)
Per hospital (n)		363.1	529.2
PRH, n (%)	6,952 (80.8)	1,101,422 (69.6)	1,233,460 (64.6)
Per hospital (n)		158.4	177.4
Total, N (%)	8,605 (100.0)	1,583,073 (100.0)	1,958,018 (100.0)

Note: Data from Survey of Medical Institutions. Ministry of Health, Labour and Welfare; 2002–2013. Available from: <a href="http://www.mhlw.go.jp/toukei/list/79-1a.html">http://www.mhlw.go.jp/toukei/list/79-1a.html</a>. Accessed April 15, 2015.8

**Abbreviations:** LPH, local public hospital; OPH, other public hospital; PRH, private hospital.

Sources in presenter notes

## Hospital Market (Continued)

- Overuse/Misuse of Emergency Service
  - Low cost of hospitalization may induce moral hazard, encourage hospital visits for minor conditions, and reduce access for those with serious conditions
  - Two small-scale studies estimated that between 50% and 80% of patients at Japanese emergency rooms were considered mild cases<sup>1</sup>
  - Another study indicated that of the 6 million ambulance utilization in Japan during 2014, 49% were for minor conditions<sup>2</sup>

## Physician Market

- Medical School (6 years)
  - High School Students take the standardized Common Achievement Test (CAT) for admission
  - ~7% acceptance rate (2006)
- Residency (2 years)
  - Students and hospitals matched through algorithm similar to US
  - Limited by law to 40 hours / week for first year
  - Contrary to US, hospitals are permitted to offer higher salaries to attract promising residents
    - This has been led to mal-distribution of talented physicians at high paying hospitals (University Hospitals pay \$80,000/year vs. non-University Hospitals at \$114,000)

Sources: Tadahiko Kozu, MD (2006)

Taiji Enari & Hideki Hashimoto (2013)

## Physician Market (Continued)

- Postgraduate Study & Specialization (optional, 5 or more years)
  - New policies instituted by Japanese Medical Specialty Board (JMSB) have prompted criticism because they increase the requirements for specializing in certain subfields (e.g. internal medicine)
- Career
  - Japan has 30% fewer physicians per capita than OECD average
  - Median salary \$125,000 / year at mid career
  - Shortage is particularly acute in rural areas
  - Ministry of Health, Labor, and Welfare (2006): Japanese physicians worked 66.4 (±18.0) hours/week and physicians younger than 30 years old worked an average of 77.3 hours/week

Sources: The Economist (2011)

### Pharmaceutical Market

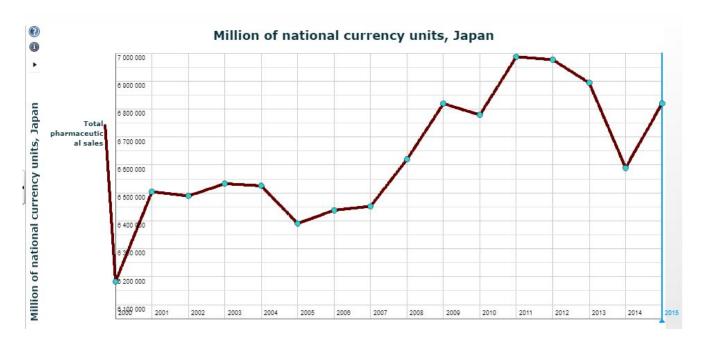
- Second-largest pharmaceutical market in the world, accounting for about 10% of global drug sales
- ▷ R&D
  - Growth in pharmaceutical R&D has slowed dramatically in recent years (to 2% in 2017)
  - Some economists attribute this to government policies designed to increase the prevalence of generic drugs (goal of 80% in 2020 from 56% currently)
  - o Patent law prevents granting extensions on pharmaceutical IP after 20 years
- Advertising
  - DTCA which mentions specific brands is prohibited
- Regulatory Review and Clinical Trials
  - In the early 2000s, new drugs entered the Japanese market approximately three years after the US and European markets due to a long regulatory review period
  - Government initiatives have reduced this lag to less than one year by establishing new agencies, hiring additional personnel, and loosening some restrictions
  - Previously required that drugmakers present data from Japanese-specific clinical trials before approval
  - Now, only require clinical trials from any East Asian site before approving drugs, lowering entry cost for foreign drugmakers and helping to reduce lag
  - Pharmaceutical and Medical Device Act (2014) & Abenomics

Sources: Reuters (2017)

Conducting Clinical Trials in Japan: A CRO Perspective (2013)

Paek et al., (2011)

#### Pharmaceutical Market (Continued)



Total Pharmaceutical Sales (in millions of Japanese Yen)

Data Sourced from OECD.Stat