



Japan Trip Study Meeting
Feb 20th @ FXB-G12

Japan Overview & Healthcare in Japan

Toru Tsuboya, MD, PhD
Visiting researcher, SBS, HSPH



The goal of this lecture

- Get the gross outline of demographics & healthcare in Japan

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Japan Overview & Healthcare in Japan

- Basic Demographics of Japan
- Health at a glance of Japan(OECD)
- Hospitals & Institutions you will visit during the Japan Trip

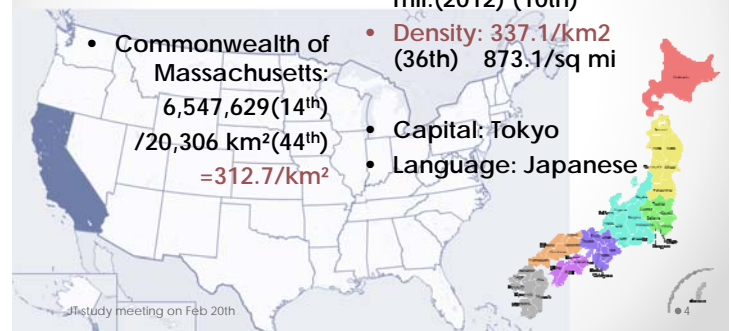


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Japan Overview

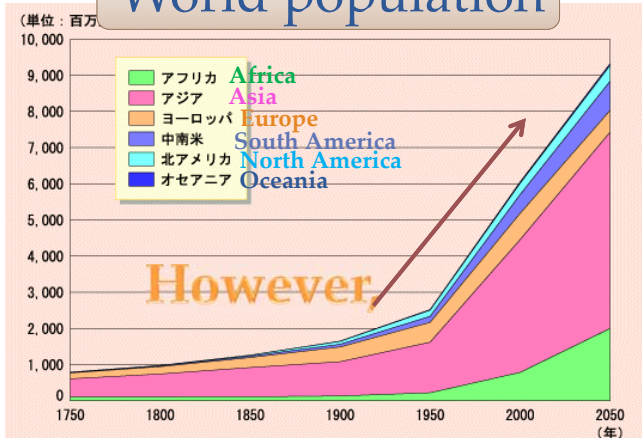
- State of California: 37,253,956(No.1 pop.)
/403,932 km²(3rd)
- Commonwealth of Massachusetts: 6,547,629(14th)
/20,306 km²(44th)
=312.7/km²
- Area: 377,944 km² (62nd) 145,925 sq mi
- Population: approx.126 mil.(2012) (10th)
- Density: 337.1/km² (36th) 873.1/sq mi
- Capital: Tokyo
- Language: Japanese



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World population

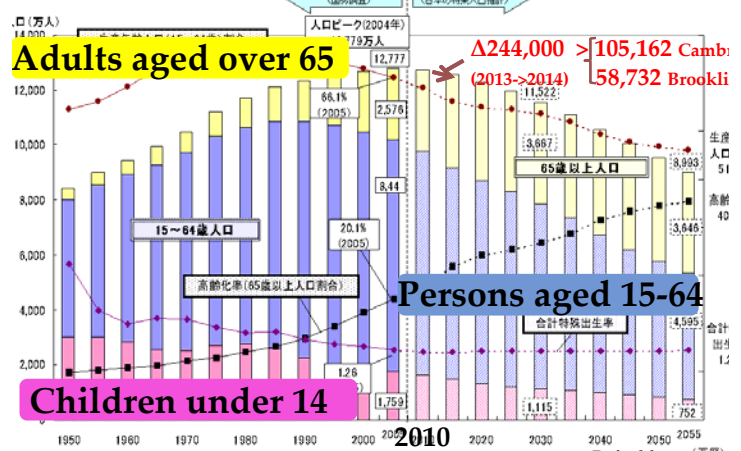


出典：国連『Revision of the World Population Estimates and Projections』(1998年)

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Population in Japan



Adults aged over 65

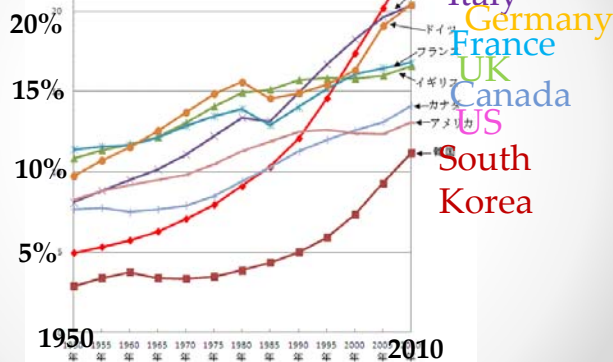
Δ244,000 >105,162 Camb.
(2013->2014) 58,732 Brookli

Persons aged 15-64

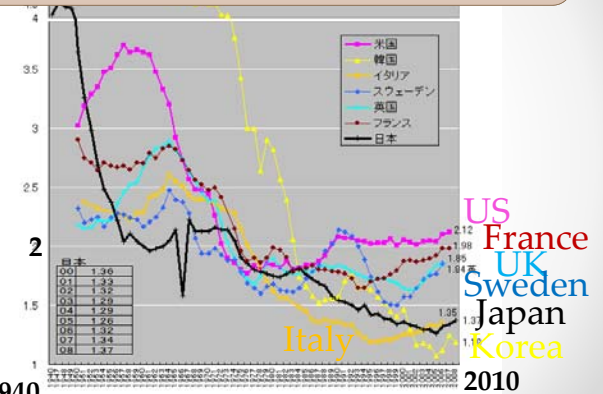
Children under 14

World's fastest aging society

Percentage of adults aged over 65 yrs old

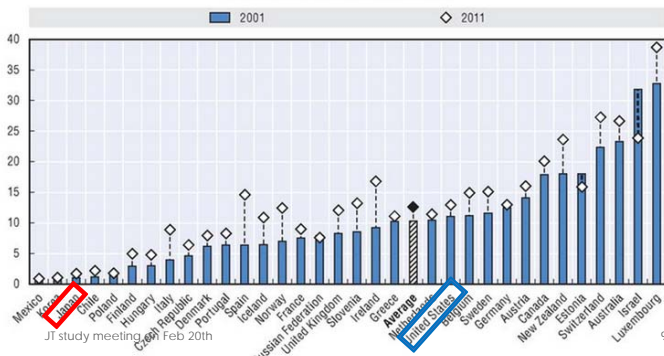


1) Total Fertility Rate (TFR) sharply decreased and remains low



2) The number of immigrants in Japan is small

Foreign-born population, 2001 and 2011
Percentages of the total population



In summary

More

- The number of adults aged over 65 yrs old has been increasing

Less

- Population is decreasing
- Children (total fertility rate)
- Immigrants

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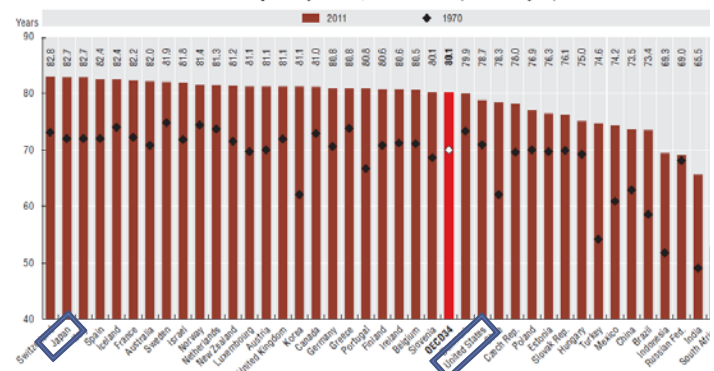


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Japanese people live very long

1.1.1. Life expectancy at birth, 1970 and 2011 (or nearest year)

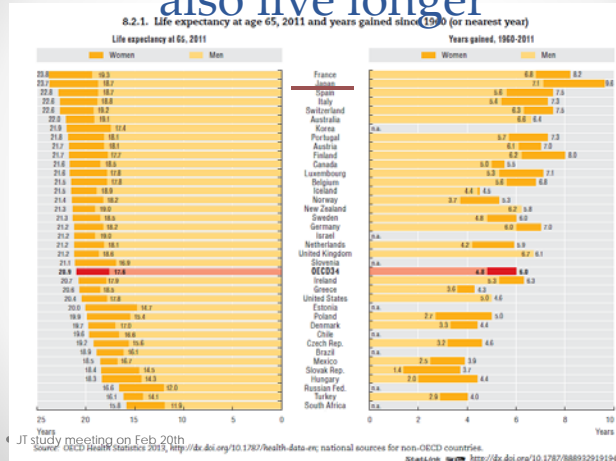


Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>; World Bank for non-OECD countries.

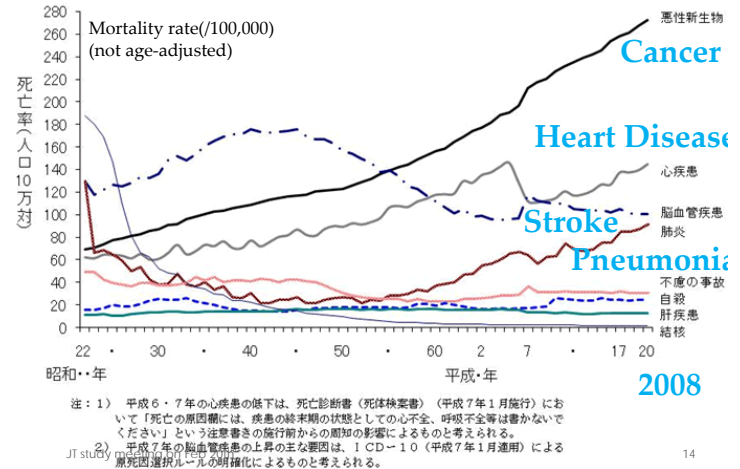
StatLink <http://dx.doi.org/10.1787/88893291>

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Japanese people aged >65 also live longer

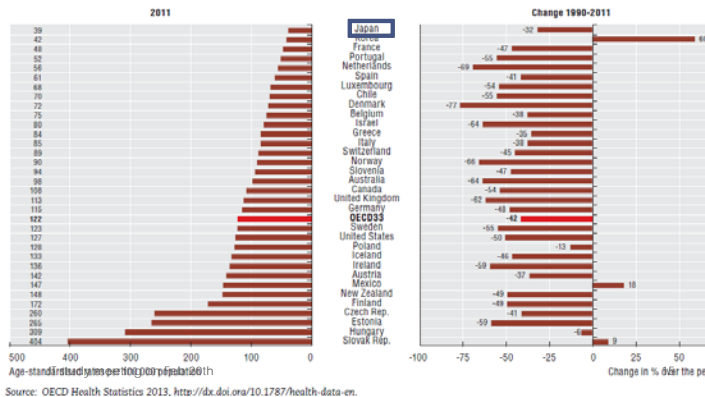


Cause of death in Japan



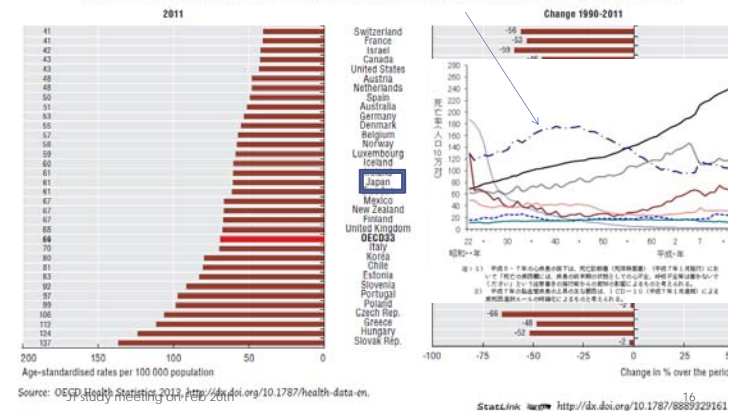
CVD mortality is very low,

1.3.1. Ischemic heart disease mortality, 2011 and change between 1990 and 2011 (or nearest year)



Stroke mortality was very high in the past, but not now

1.3.2. Cerebrovascular disease mortality, 2011 and change between 1990 and 2011 (or nearest year)



Health care cost is low in Japan?

Health care: What the doctor ordered

It took almost two years to dredge it out of the US Congress's meetings and reams of pages to produce the Patient Protection and Affordable Care Act, popularly known as Obamacare. After all that, almost no one was disappointed. It was criticized as going too far, not going far enough, too complex and too much. The Supreme Court upheld the law on Thursday, but it still faces headwinds from critics and a skeptical public.



Japan's health care system is known for its relatively low costs and commitment to primary care.

Nevertheless, virtually everybody agrees that the United States has a health care problem. Almost 50 million Americans are without insurance, creating a burden on hospital emergency rooms and forcing people who need services into deep debt. Too few take advantage of primary care.

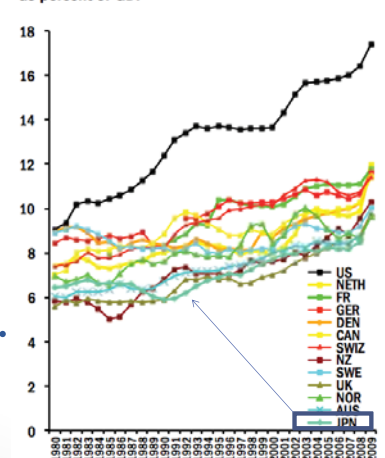
And it's costing a fortune: In 2011, the United States spent 18% of its gross domestic product on health, much more than its allies.

Contrast those figures with Japan. The Asian country of 125 million spent just 8.5% of its GDP on healthcare in 2009, among the best figures in the developed world. Yet, despite lower costs, it's No. 3 on

- We're No. 1! We're No. 1! We're ... <http://www.cnn.com/2012/07/02/us/americans-exceptioal-ism-other-countries-lessons/>
- updated 9:34 AM EDT, Mon July 2, 2012
- <http://www.cnn.com/2012/07/02/us/americans-exceptioal-ism-other-countries-lessons/>

Cost of healthcare in Japan was low, but now not so low.

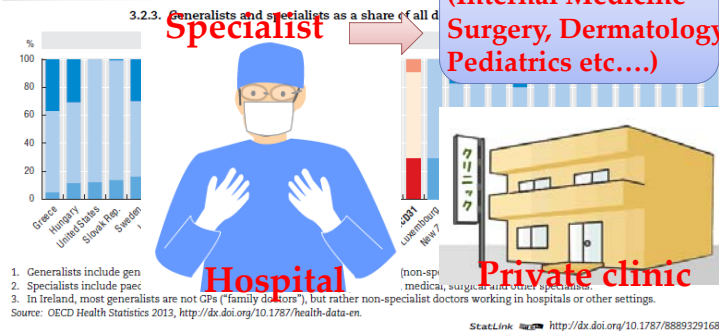
Total expenditures on health as percent of GDP



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No clear border between GP and specialist



No available data in Japan

In summary

More

- Elderly
- Suicide
- Low birth weight infants
- Smoking in men
- Brand medicine
- Time in workplace
- People who believe they are unhealthy
- Visits, Beds, & CT/MRIs

Less

- CVD, cancer, obesity
- Infant mortality
- Alcohol
- Smoking in women
- Mortality of accidents
- Disparity of physician distribution
- Cost of healthcare?(in the past)
- Number of physicians

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Okayama prefecture

- Area:7,112.32 km² (2,746.08 sq mi) (15th/47)
- Population:1,940,411 (21st/47)
- Density:270/km² (710/sq mi)
- →Typical normal prefecture

- Japan---47 prefecture--- city/town/village
- The governor of prefectures is directly elected by the residents in the prefecture

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1000km

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What you can experience during the JT

- **National:** Meet the Minister of Health, Labour & Welfare & Discuss with Mr. Keizo Takemi, LDP Upper House member & medical officers of Ministry of Health.
- **Local:** Discuss with officers in Department of health welfare, Okayama prefecture & Mr. Soichi Kataoka, city mayor of Sojya-city.
- **On-site collaboration:** Social welfare organization (*Saiseikai*), local core hospitals & local medical association (Mitsu), using "Long-Term Care Insurance System in Japan". Go with home-visit physicians
- **Japanese culture:** Homestay, Korakuen etc.
- **You will receive more information&materials by the JT!**

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References

- OECD Health Statistics 2013
- <http://www.oecd.org/health/health-systems/oecd-health-statistics-2013-list-of-variables.htm>
- HEALTH AT A GLANCE 2013: OECD INDICATORS
- <http://www.oecd.org/els/health-systems/Health-at-a-Glance-2013.pdf>
- "Japan: Universal Health Care at 50 Years ", published August 30, 2011 @ the Lancet
- <http://www.thelancet.com/japan>
- Ministry of Health, Labour, and Welfare
- <http://www.mhlw.go.jp/toukei/saikin/hw/hoken/national/22.html>

Good review

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Overview of the Universal Health Care System in Japan

Junichi Naganuma, MD, MPA, MBA
MPH (Health Care Management) Candidate
HARVARD SCHOOL OF PUBLIC HEALTH

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Universal Health Care System in Japan The Basics

- Universal health care established in 1961.
- Every resident required to have insurance coverage.
- 3,500 different insurers exist; heavily regulated by the federal government.
- You cannot choose among the insurers; you must register with a specified insurer based on employment status, place of residence, and age.
- Insurers fall under two broad categories:
 - (1) Employer-based
 - (2) Government/municipality-based

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Japan's Health Insurance System (as of 2008)

Insurance Organization	Insured	Insurer	Number of Subscribers ¹	Copay ²
Health Insurance (HI)				
JHIA-managed HI	Employees at small- & medium- sized companies	Japan Health Insurance Association (JHIA)	36 million	30%
Society-managed HI	Employees at large-sized companies	Company-based HI societies (about 1,500 plans)	30 million	
Mutual Aid Association	Public employees	Mutual aid associations	10 million	
Seamen's Insurance	Seamen	Government	0.2 million	
National Health Insurance (NHI)	Retired, self-employed, etc.	Municipalities (about 1,800)	51 million	30%
New System: Health Care Prgm for Elderly aged >=75	All those aged >=75	Municipality union (prefecture-based)	(estimated 13 million)	10%

1. Total population in Japan 127 million
2. Copayment reduced to 20% for children and 10-20% for those aged >=75

Kobayashi, Y. Five Decades of Universal Health Insurance Coverage in Japan: Lessons and future challenges. *JMAJ* 52(4):263-268, 2009

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Two Goals of Universal Health Care

I. Universal Access to Health Care Services

- Patients can freely select hospitals (and physicians) of their choice and they cannot be denied care.
- Services covered (medical, dental, and drugs) and reimbursements to providers are the same in any health insurance plan and anywhere in the country.
- People on public assistance (2 million people in 2011) are not enrolled in any of the plans.

Ikegami, N, et al. Japanese universal health coverage: evolution, achievements, and challenges. *Lancet*. 2011;378:1106-15.

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Two Goals of Universal Health Care

II. Cost Containment while Ensuring Quality

- Japan's health status is among the best in the world, but % GDP spent on health (8.5% in 2011) is 20th among OECD countries.
- In 2011, total health care expenditure in Japan was 37 trillion yen (US\$370 billion); was 12 trillion yen in 1980.
- But, annual growth rate has decreased since the 1980s (10% in 1980 to 5% in 2011).
- How? Fees for all health care services are set and revised every two years by the Ministry of Health and physician groups; fees are the same across the country.

Hashimoto, H, et al. Cost containment and quality of care in Japan: is there a trade-off? *Lancet*. 2011;378:1174-82.
<http://www.who.int/countries/jpn/en/>

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Public Assistance & Safety Net for the Poor

- People on public assistance (2 million people in 2011) are not enrolled in any social health insurance plan and are exempt from both premium contribution and co-pay.
- Medical expenditures paid by public assistance: 4% of total.
- Services provided to them are the same; providers are paid at the same fee schedule rate.
- But municipal governments have been reluctant to provide coverage because they have to fund 25% of expenditure from their budget (federal government pays the remaining 75%).

Ikegami, N, et al. Japanese universal health coverage: evolution, achievements, and challenges. *Lancet*. 2011;378:1106-15.

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Universal Health Care: not a Panacea

1. Unhappy Patients

- Long waiting times/overcrowding in hospitals
- Frequent hospital/clinic visits and over-prescription

2. Unhappy Providers

- Low morale and job satisfaction; leads to "brain drain"
- Low reimbursement rates

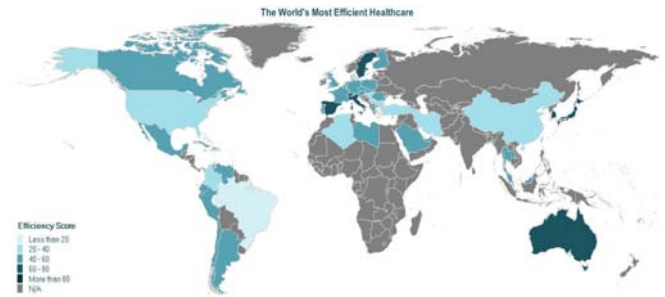
3. Unhappy Payers

- Only one payment system applied across all plans, but administrative burden still results with 3,500 different plans

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How does Japan compare with the rest of the world?

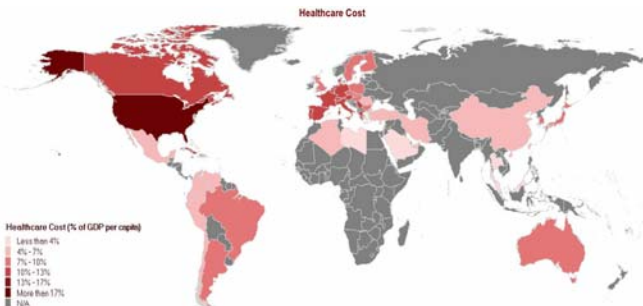


Davidson, KA. The Most Efficient Health Care Systems in the World. *The Huffington Post*. Aug 29, 2013.

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How does Japan compare with the rest of the world?



Davidson, KA. The Most Efficient Health Care Systems in the World. *The Huffington Post*. Aug 29, 2013.

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Most Efficient Health Care Systems in the World (2013 Bloomberg ranking)

Rank	Country	Efficiency score	Life expectancy	Health-care cost as % of GDP per capita	Health-care cost per capita (in USD)
1	Hong Kong	92.6	83.4	3.8%	\$1,409
2	Singapore	81.9	81.9	4.4	2,286
3	Japan	74.1	82.6	8.5	3,958
4	Israel	68.7	81.8	7.8	2,426
5	Spain	68.3	82.3	10.4	3,027
6	Italy	66.1	82.1	10.4	3,436
7	Australia	66.0	81.8	8.9	5,939
8	South Korea	65.1	80.9	7.2	1,616
9	Switzerland	63.1	82.7	11.5	9,121
10	Sweden	62.6	81.8	9.6	5,331
14	UK	55.7	80.8	9.4	3,609
17	Canada	53.4	80.9	10.8	5,630
46	US	30.8	78.6	17.2	8,608

Three criteria: (1) Life expectancy (weighted 60%), (2) Relative per capita cost of health care (30%), and (3) Absolute per capita cost of health care (10%)

<http://www.bloomberg.com/visual-data/best-and-worst/most-efficient-health-care-countries>

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Future Challenges for Japan

1. Aging Society

- Proportion of people aged ≥ 65 will increase from 22% in 2008 to 30% in 2020, and their share of health expenditure is projected to increase from 52% to 66%.

2. Changes in Workforce Pattern

- Increase in hiring of non full-time workers from 18% of total employed in 1988 to 34% in 2010 (employers do not have to enroll these non full-time workers in their employer-based plans).

3. Increase in those Unwilling/Unable to Enroll in the National Health Insurance (NHI)

- It is estimated that 1.6 million people in Japan are willingly not paying insurance premiums.
- Although mandatory, there is no penalty for those who do not comply.

Ikegami, N, et al. Japanese universal health coverage: evolution, achievements, and challenges. *Lancet*. 2011;378:1106-15.

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One Possible Solution

Consolidate Health Insurance Plans

Advantages of consolidation:

1. Equalize premium contribution rates across plans
2. Increase total funding by raising contribution rates
3. Improve administrative efficiency by expanding risk pools

Three ways to consolidate:

1. Allow everyone to choose their own plan (Germany) --- No
2. Unify all plans at the national level (South Korea) --- No
3. Unify plans regionally and untie insurance coverage from employment status --- Maybe

Ikegami, N, et al. Japanese universal health coverage: evolution, achievements, and challenges. *Lancet*. 2011;378:1106-15.

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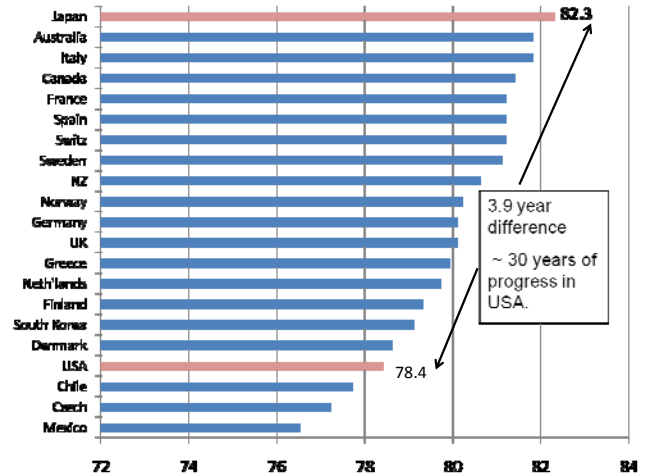
Japanese longevity: more than the tofu.



Ichiro Kawachi, M.D., Ph.D.
Professor of Social Epidemiology
Harvard School of Public Health



World Life Expectancy at Birth, 2011

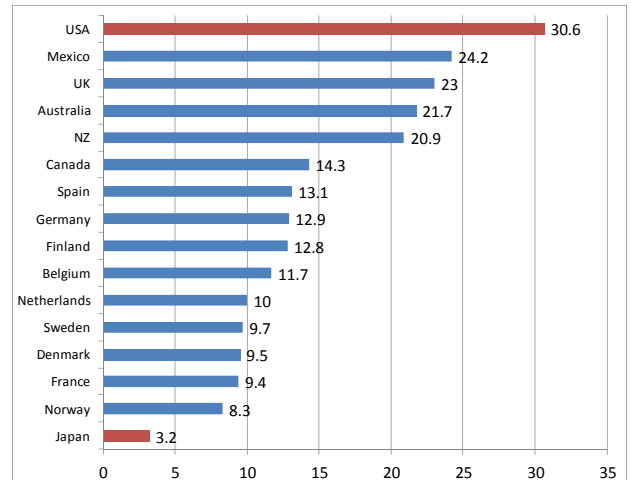


But even Japanese diet is not 100% healthy

- ❑ High glycemic load (white rice)
- ❑ High salt intake (soy sauce, miso)
- ❑ High alcohol intake (males)

However, there are many *default options* in Japanese dining culture, which result in dietary restraint.

World Prevalence of Obesity (%)



Cultural contrasts in dining defaults

USA



Food served in one big heap.

Japan



Food tends to be served in itty-bitty courses.

Cultural contrasts in dining defaults

USA



Hard to tell how much food on menu item.



JAPAN



You get exactly what's advertised in wax display case outside the restaurant.

Some "Paradoxes" of Japanese Lifestyle

- ❑ High smoking rates in men ($\approx 40\%$) compared to 20% in USA



© Andy Gray/Photo.com

Social and Geographical Inequalities in Suicide in Japan from 1975 through 2005: A Census-Based Longitudinal Analysis

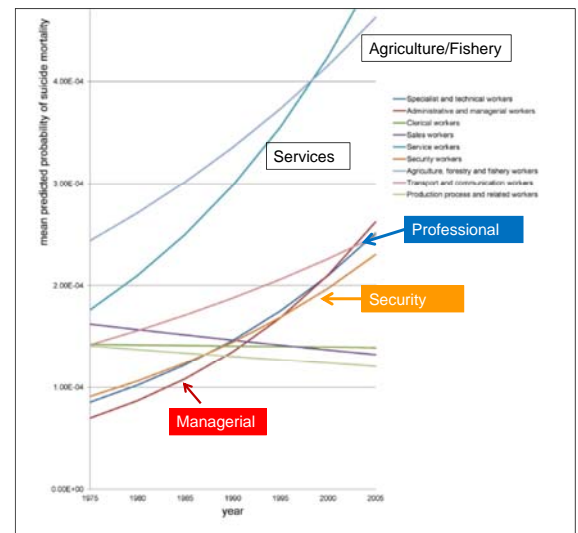
Etsuji Suzuki^{1*}, Saori Kashima², Ichiro Kawachi³, S. V. Subramanian³



- ❑ Occupation-specific trends in suicide rates
- ❑ 1975-2005 (i.e. straddling economic collapse of 1991).

Suzuki E, Kashima S, Kawachi I, Subramanian SV. Social and geographical inequalities in suicide in Japan from 1975 through 2005: a census-based longitudinal analysis. *PLoS One*. 2013;8(5):e63443.

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"How to sleep like a Japanese salary man on the subway"

From Blog of Anton Tyrberg, Swedish student living in Sendai.



Challenges for Population Health in Japan in 21st Century

- ❑ Rising inequality (格差社会)
- ❑ Aging society
- ❑ Declining fertility / population
- ❑ Rising health care and long-term care costs.

Japan: Universal Health Care at 50 Years 1

What has made the population of Japan healthy?

Nayu Ikeda, Eiko Saito, Naoki Kondo, Manami Inoue, Shunya Ikeda, Toshihiko Satoh, Koji Wada, Andrew Stickley, Kota Katanoda, Tetsuya Mizoue, Mitsuhiro Noda, Hiroyasu Ito, Yoshihisa Fujino, Tomotaka Sobue, Shoichiro Tsugane, Mohsen Naghavi, Majid Ezzati, Kenji Shibuya
Lancet 2011; 378: 1094-105.

- Three distinct phases of life expectancy improvement in Japan since WW II.

1950-1975: rapid improvement.

1975-1995: maintained pace of annual LE gains.

1995-present: increasing stagnation.

1950-1975

- Rapid economic growth.
- Decline in child mortality surpassed USA in mid-1960s.
- Improvements attributed to:
 - high background literacy & education
 - strong health system, incl. introduction of universal care
 - egalitarian society
 - “culture of hygiene”

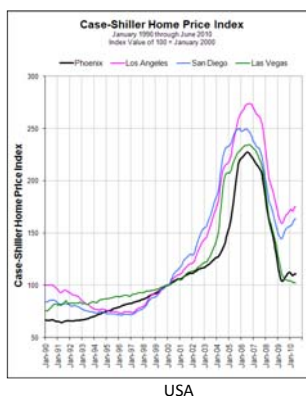
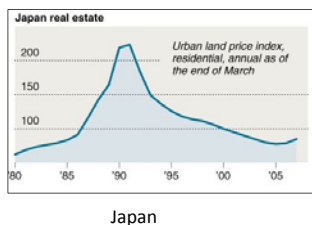
1975-1995

- Japan *kept pace* with LE progress in other high-income countries, but did not outperform them.
- Period straddles collapse of 1980s “bubble” economy.

1995-present

- “Lost two decades”.
- Pace of decline in mortality has been slower than other nations.
- Japan has fallen behind Sweden, Italy and Australia in annual LE gains for men.
- “If recent trends continue, other nations are likely to achieve lower rates of adult mortality than Japan.”*
(Chris Murray, Lancet 2011).

Contrast between two asset bubble collapses



What can the USA learn from Japan's “Lost Two Decades”?

- Collapse of real estate bubble in 1989.
- Banking crisis.
- Sharp rise in unemployment.
- Liquidity trap, after Reserve Bank dropped interest rate to zero.
- Downward spiral of consumer spending and deflation.
- Massive economic stimulus through public works schemes – but little impact on economic growth.

Contrasts between Japan and USA

JAPAN

- Income inequality increased after the bubble collapse.
- High rate of consumer saving prior to economic crisis.
- Health insurance not linked to employment.
- Unemployment reached 5.5% at peak of recession.

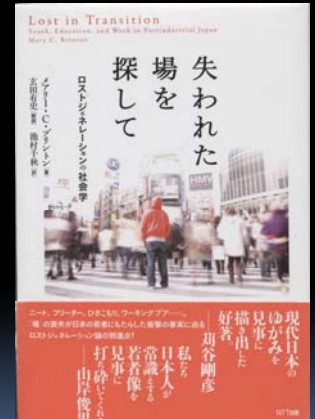
USA

- Income inequality highest in OECD prior to bubble collapse. Continues to rise in aftermath.
- Zero consumer saving prior to crisis. Positive afterwards.
- Workers can lose health insurance if they lose jobs.
- Unemployment remains stuck near 7%.

Lost in Transition

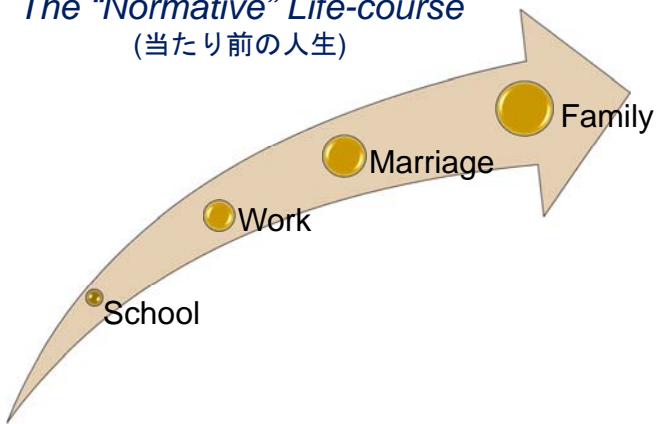
Youth, Education, and Work in Postindustrial Japan.

Mary C. Brinton

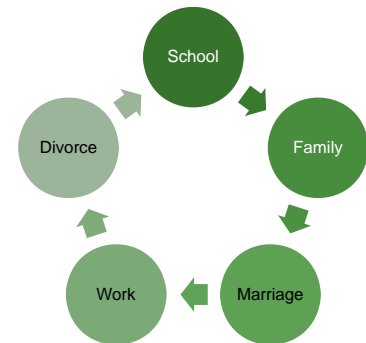


October 2010

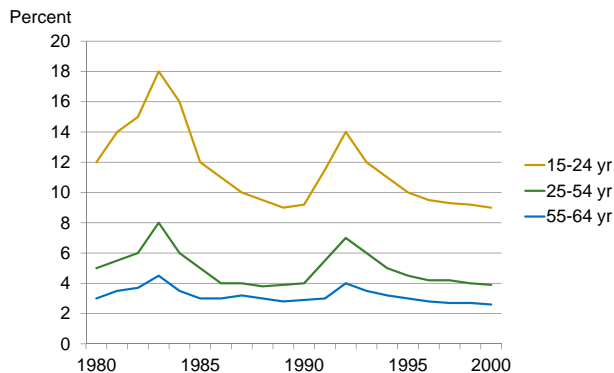
The "Normative" Life-course (当たり前的人生)



Contrast to pattern in United States...

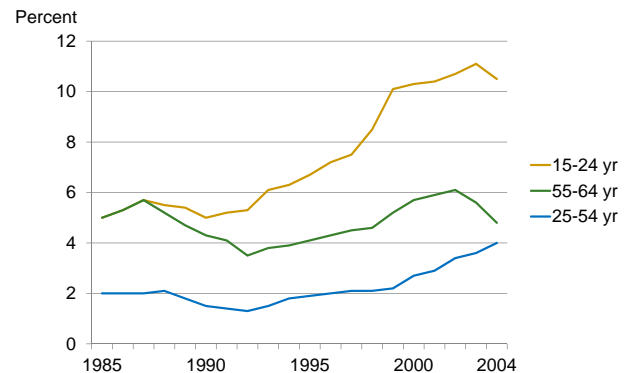


U.S. Pattern of Unemployment by age group



The Displacement Effect

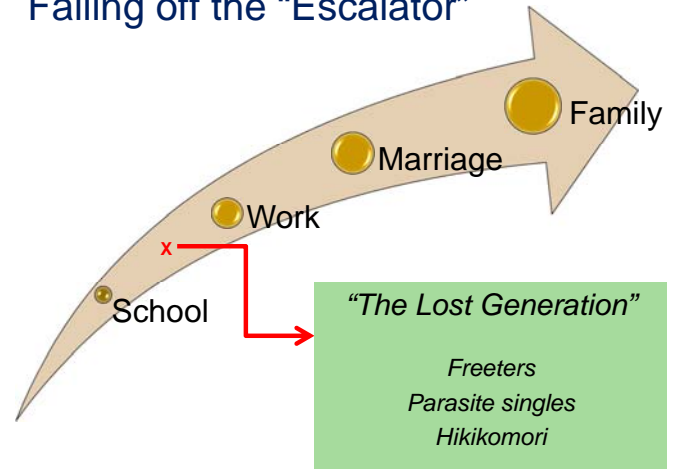
Trends in Japanese male unemployment by age



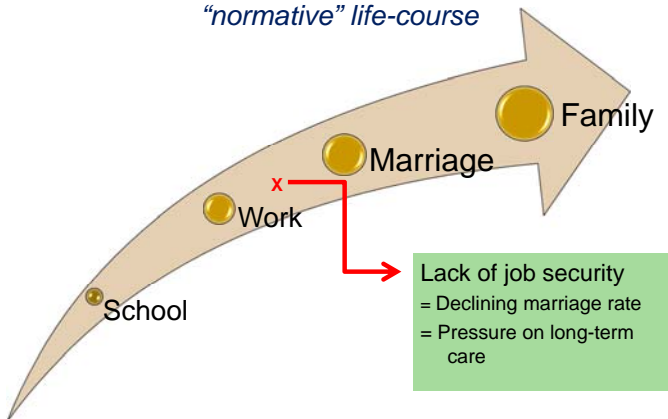
Implications

- In the U.S. when a worker loses job in mid-life, it is possible to “start over” by going back to school & retraining.
- In Japan, having a career is difficult if a person does not find employment immediately after leaving school.
- Re-employment is also very difficult if you lose your job in middle age.

Falling off the “Escalator”



Further implication of the disruption in “normative” life-course



SOCIAL COHESION



GIFT EXCHANGE

Ochugen (お中元) and Oseibo (お歳暮).



Conclusions

- Japan has many sources of resilience – including strong social cohesion & family stability rooted in traditional values.
- However, the pattern of economic recovery during the past twenty years (“the Lost Two Decades”) pose several threats – including job insecurity, declining fertility, and a looming long-term care crisis.
- These trends pose a challenge to the long-term health achievement of the nation.

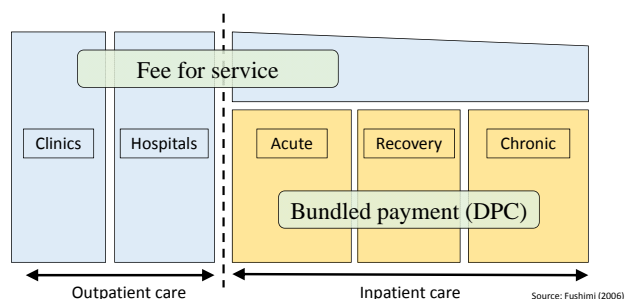
A way of solution? Overview of home medical care and long-term care in Japan

Shinichi Tomioka, MD, MSc
Research Fellow,
Takemi Program in International Health, HSPH
Japan Trip 2nd Study Session, Feb 24th 2014

Contents

1. Financing health care, review of the facts
2. Home medical care
3. Long-term care insurance system

1. Payment for providers



- All outpatients care + some of inpatient care are paid by fee for service.
- Hospitals can opt in or out bundled payment.
- FFS for outpatient care may be causing supplier induced demand

2. Prevention from catastrophic payment

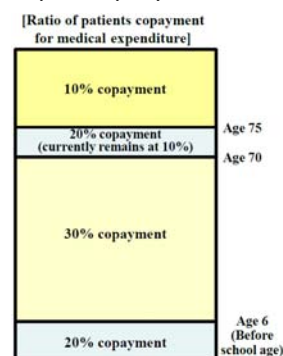
• High Cost Medical Treatment System

Any amount that exceeds the fixed monthly limit will be paid in order to ensure that the financial burden on the patient does not become too great.

Monthly limit

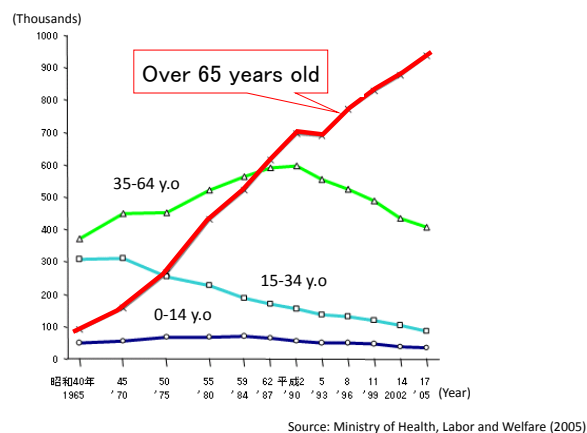
- High income: \$1500
- Middle income: \$800
- Low income: \$350

Note: for those who are eligible for public assistance, copayment is not applicable.



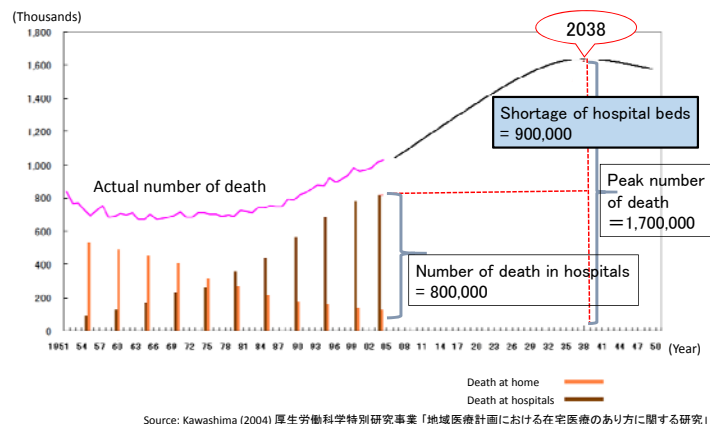
+ Fixed fee:
first visit \$27
after second \$7
prescription \$4-7

Number of inpatients by age



Three main drivers toward home care

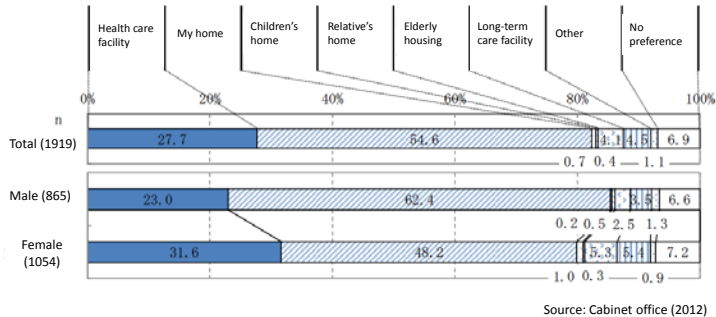
1. Peak volume of death in 2038 and hospital beds shortage



Three main drivers toward home care

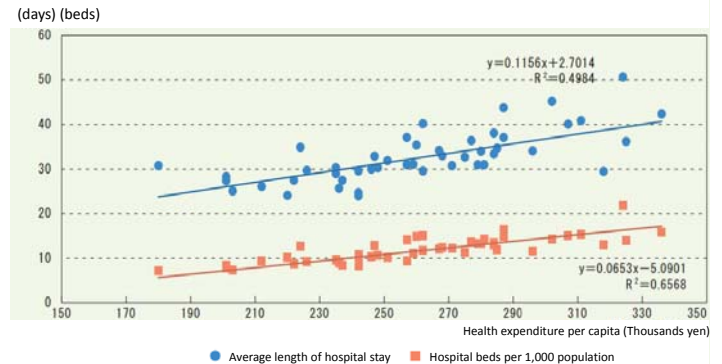
2. Patients' desire to stay at home until death

Q. Where would you like to stay if you were diagnosed as a terminal state?

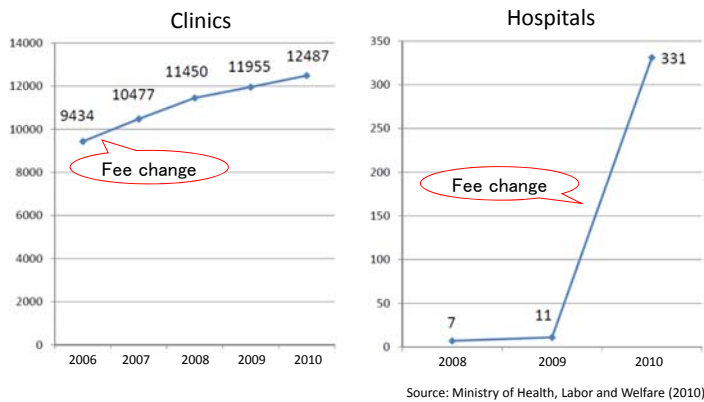


Three main drivers toward home care

3. Cost containment by encouraging out of hospital care

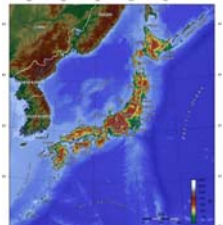


Number of providers offering home medical care



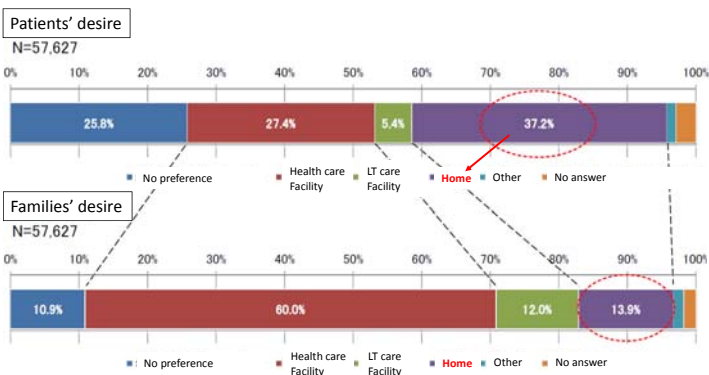
However, Japan suitable for home care?

- Small housings to lay out a bed
- Narrow roads to park a visiting car
- Long stairs to reach patients
- Geographically isolated areas
- Cost effective? Profitable for providers?
- Above all, who would take care of home patients at usual time

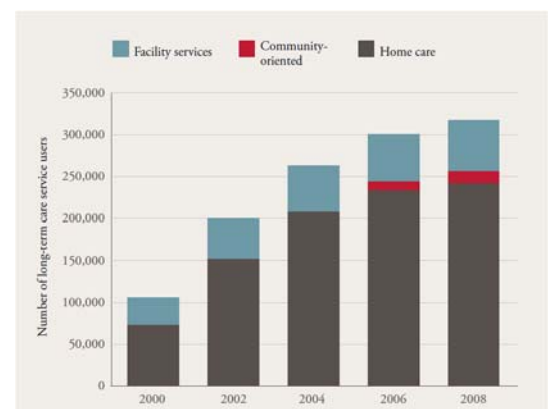


Difference of desire between patient and family

Q. Where would you like to stay for health care treatment?

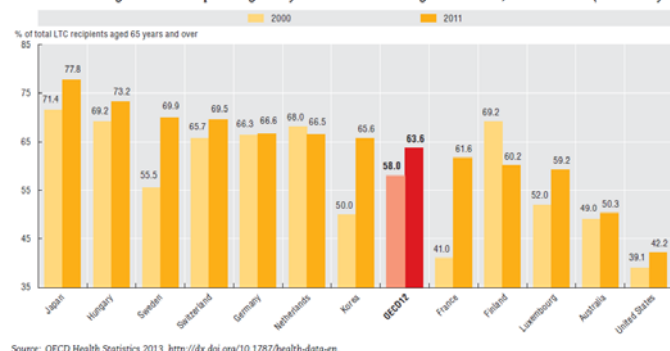


Number of long-term care service users by service type

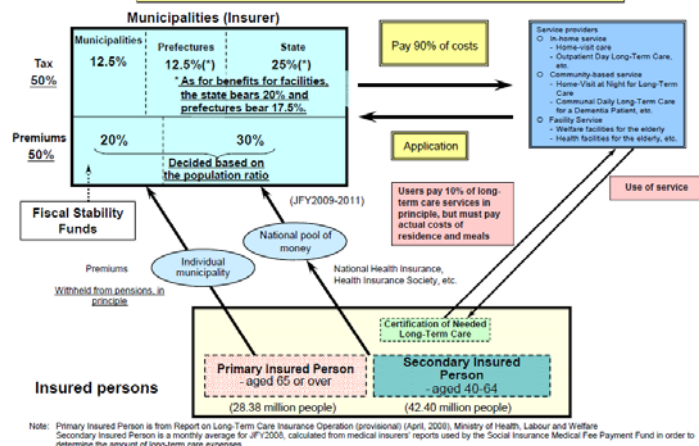


Long-term care designed to help patients' family member

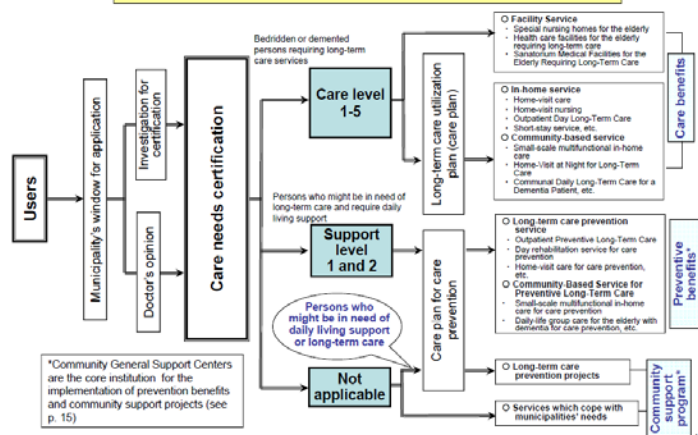
8.5.2. Share of long-term care recipients aged 65 years and over receiving care at home, 2000 and 2011 (or nearest year)



Structure of Long-Term Care Insurance System



Procedures for the Use of Service



Assessment of care needs, benefits available and user contributions

Level	Benefit ceiling per month for government funding*	Description of typical needs
Support level 1	¥49,700	Almost independent; may need some assistance to maintain independence and prevent deterioration
Support level 2	¥104,000	Needs some support with activities of daily living (ADLs)
Care level 1	¥165,800	Requires support with ADLs and some care
Care level 2	¥194,800	Requires care at level 1 and support with more ADLs
Care level 3	¥267,500	Needs substantial support with ADLs and almost comprehensive care
Care level 4	¥306,000	Cannot live without comprehensive care. Almost bed-bound
Care level 5	¥358,300	Bed-bound. Needs comprehensive care

Source: Adapted from Tokyo Metropolitan Government, 2012

Challenges of long-term care

- Shortage of care workers for its low salary and socially low status
- Great discretion of care managers who are qualified to make care plans for care recipients, however their health care knowledge is quite inadequate
- Long waiting list for publicly financed long-term care institutions, whilst high price for privately financed ones.
- Rapid growing cost

Today's summary

- "Generous" health care system
- Coverage for all population
- Adequate prevention from catastrophic payment
- Deeply covered service (free access, high consultation)

Overview of home medical care & long-term care

- Rationale and challenges

Needs for overcoming ageing society