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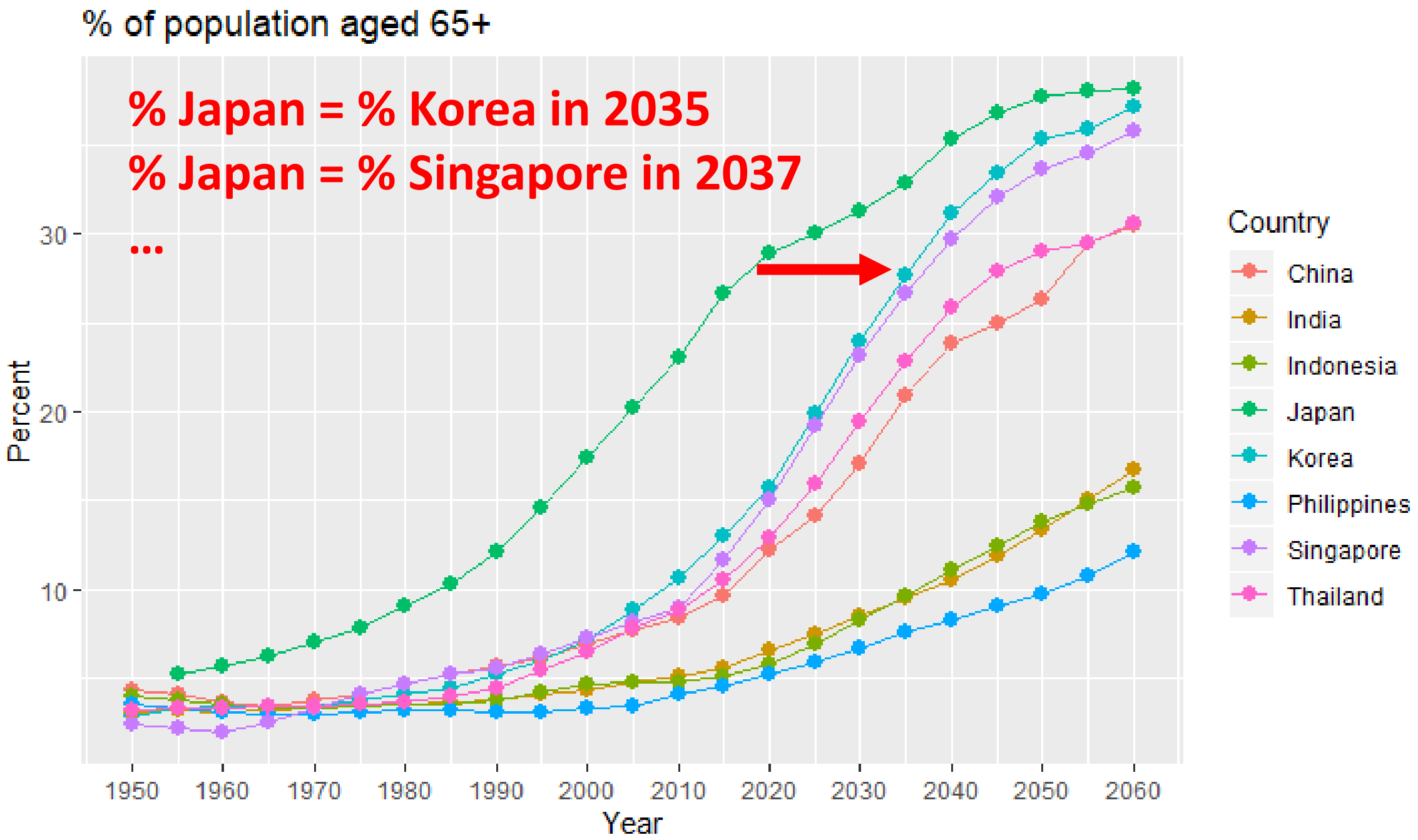
Understanding the challenge of ageing: *Meeting the needs of our future customers*

Yosuke Fujisawa, FIAJ, CERA, Certified Pension Actuary

Senior Health Solutions Manager

Swiss Re, Japan


% of population aged 65+
% Japan = % Korea in 2035
% Japan = % Singapore in 2037
…
Percent
30
20
10
1950
1960
1970
1980
1990
2000
2010
2020
2030
2040
2050
2060
Year
Country
China
India
Indonesia
Japan
Korea
Philippines
Singapore
Thailand

Agenda

Identify the protection gap
Dementia risks

Dementia-friendly society
Insurance products

Risks

Gap

Needs

Solutio
ns

Post-retirement risks
How is Japanese government involved

Realizing Dementia Risks

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Post-Retirement Risks

Outliving assets: At age 65, average life expectancy is 20 years for Japanese male and 25 years for Japanese female. Half of the population will live longer than life expectancy and some will even live to age 100+.

Loss of spouse: Women tend to live longer than their spouses.

Health care and medical expenses: Medical costs during retirement are expected to be $150 on average for a couple of age 65+ male and age 60+ female.

Decline in functional status: The cost of care for older, frail people can be expensive for a couple over their lifetimes, if both need paid care. Nursing home costs vary depending on public/private facilities.

Inflation: Deflation, but the automatic balancing mechanism of the Public Pension will make the actual amount of benefits decrease gradually.

Economic risks: Investment returns are variable and are influenced by both interest rates and stock market returns.

Family risk: Family members, including parents, sick or unemployed adult children, and grandchildren, may need financial help or personal care or support.

Public policy risk: The possibility always exists that taxes, Social Security, Public Health/LTC Insurance benefits/premiums, and other benefits will be changed.

*Developed by reference to "Post-Retirement Risks and Related Decisions (SOA, 2017)"

How is Japanese government involved?

1. Provide Social Security from revenues and premiums
2. Incentives for employer benefits (i.e. defined benefit/contribution pension plans)
3. Incentives for individuals saving, protection and housing for post-retirement risks
4. Incentives for family support
5. Supervision of employer sponsored pension plans and insurance companies

How is Japanese government involved?

1 Provide Social Security

2 Incentives for employers

3 Incentives for individuals

4 Incentives for families

5 Supervision

Public Pension

Public Health Insurance

Public LTC Insurance

Post-retirement risks

- **Outliving assets**
- **Loss of spouse**
- **Health care and medical expenses**
- **Decline in functional status**
- **Inflation**
- **Economic risks**
- **Family risk**
- **Public policy risk**

Decline in Functional Status

Why is this important in Japan?

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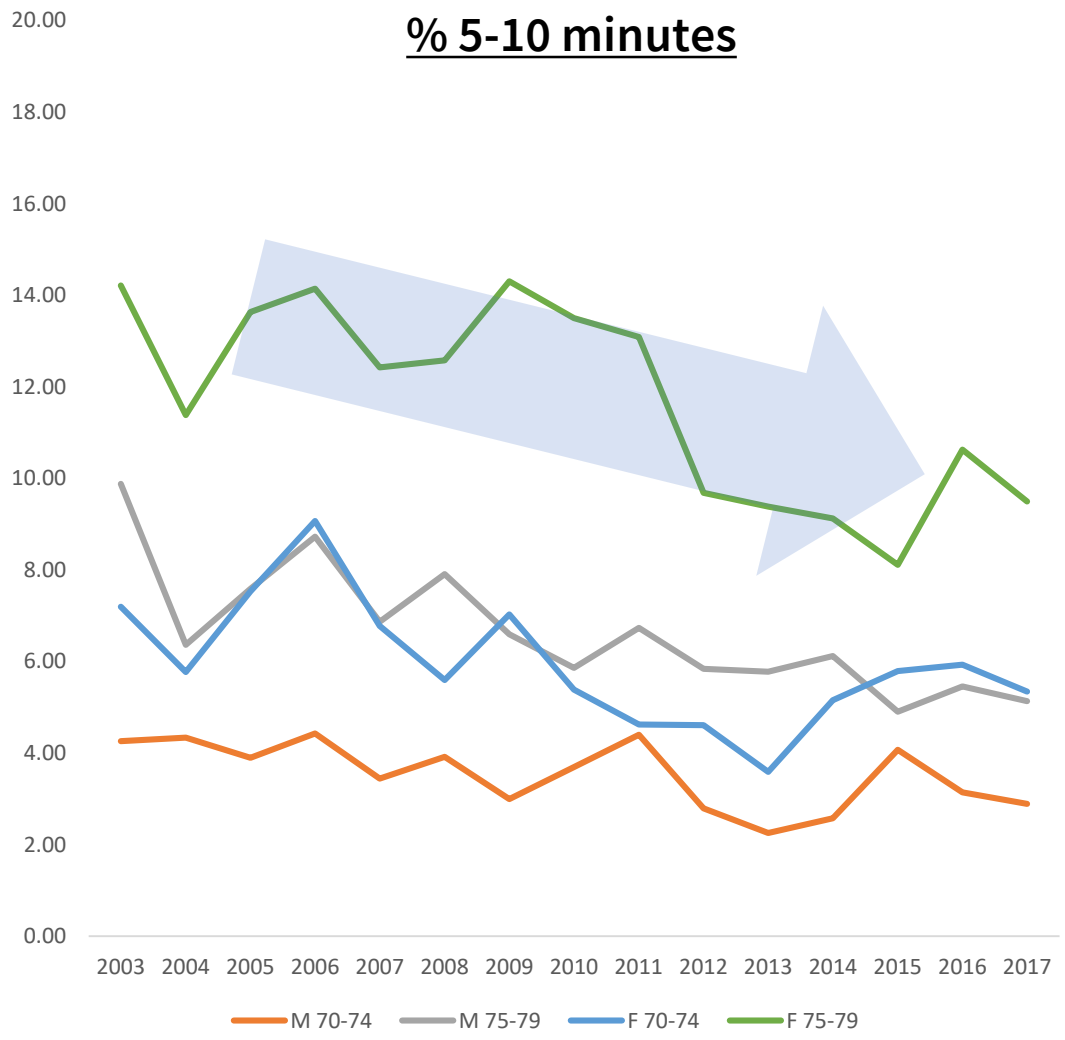
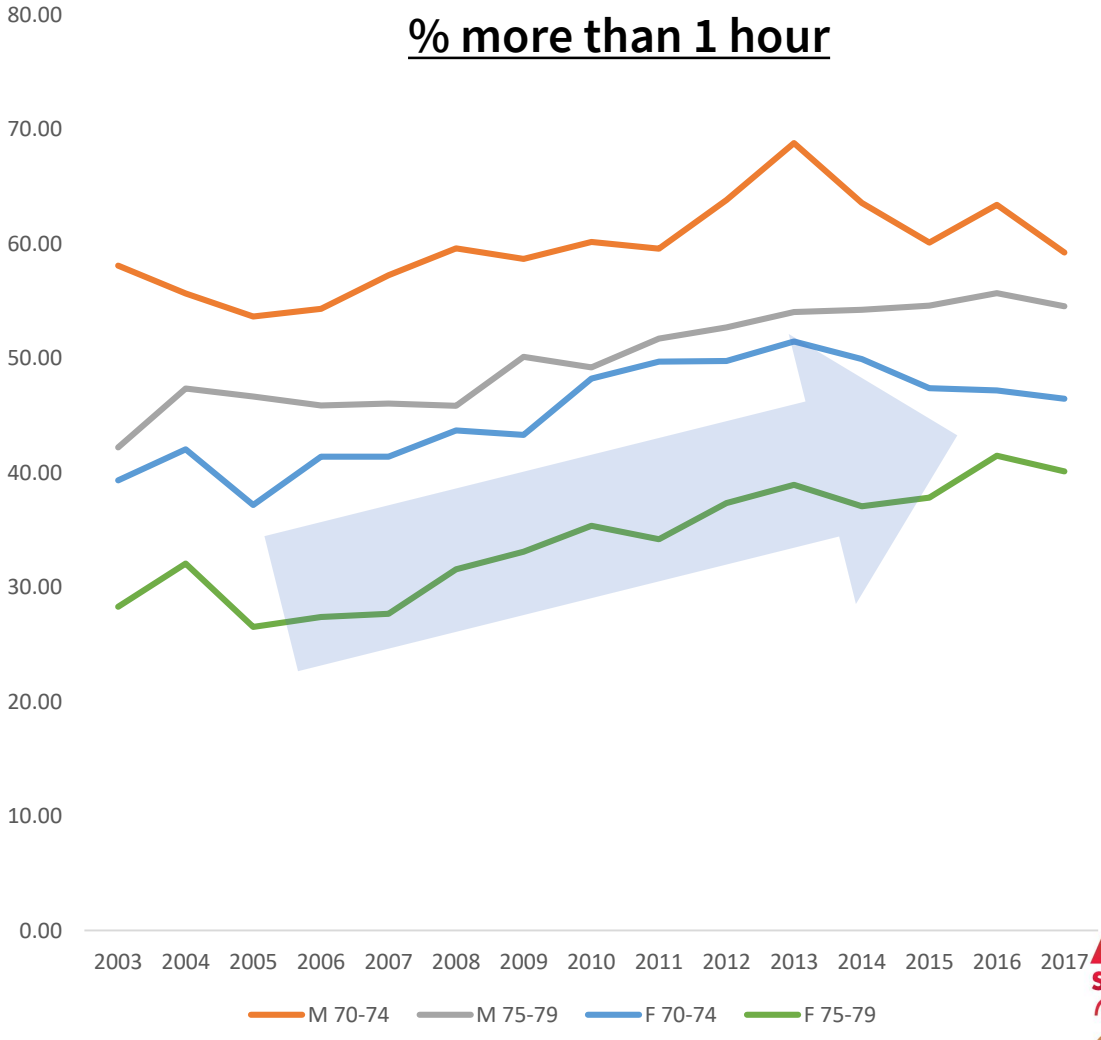
Probabilities of survival to age x by cohort

Cohort	Male			Female		
	Age 80	Age 90	Age 100	Age 80	Age 90	Age 100
Age 65 in 2015	73%	35%	4%	87%	60%	14%
Age 65 in 2025	75%	38%	5%	89%	64%	17%
Age 65 in 2035	77%	41%	6%	90%	67%	19%
Age 65 in 2045	78%	43%	6%	91%	69%	20%
Age 65 in 2055	79%	44%	6%	91%	69%	20%

Source: MHLW and IPSS

How long do you walk without rest?





Source: Japan Sports Agency

Government Initiatives (part of them are shown)

	Main KPIs	2010	2022 (Target)
Overall	Extension of healthy life expectancy (average period of time spent without limitation in daily activities)	Male 70.42, Female 73.62	To extend healthy life expectancy more than the increase in life expectancy
Cancer	Increase in participation rate of cancer screenings	Lung: M 26.4%, F 23.0%	Lung: 40%
		Breast: F 39.1% etc.	Breast: 50% etc.
Cardiovascular Diseases	Improvement of hypertension (reduction in average SBP)	Male 138, Female 133mmHg	Male 134, Female 129mmHg
Diabetes	Increase in percentage of patients who continue treatment	63.7%	75%
Health of elderly people	Restraint of the increase in LTC Insurance service users	4,520,000	6,570,000
	Restraint of the increase in undernourished elderly (BMI 20-)	17.4%	22%
	Decrease number of elderly with back or foot pain (per 1,000)	Male 218, Female 291	Male 200, Female 260
	Promotion of social participation (% involved in community activities)	Male 64.0%, Female 55.1%	80 %
Social environment	Strengthening of community ties	45.7 %	65 %
	Increase in percentage of individuals who are involved in health promotion activities	3.0%	25 %

A Basic Direction for Comprehensive Implementation of National Health Promotion: https://www.mhlw.go.jp/file/06-Seisakujouhou-10900000-Kenkoukyoku/0000047330.pdf

Smart Wellness Community

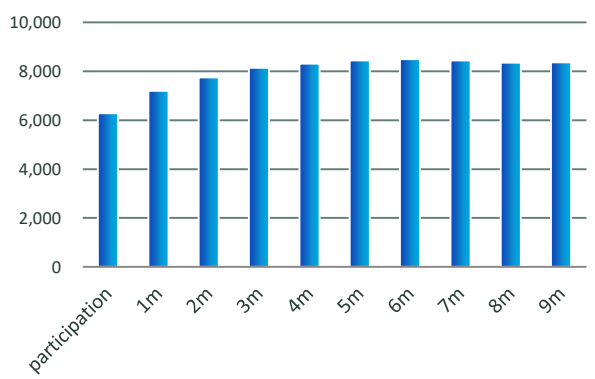
Incentives

	Total	Point
Participation	Join the health point program	1,000 or 3,000
Steps	Increase in # steps	800/m
Events	Join the specified events	20
Change	BMI/muscle improvement	1,000/3m
Continue	Continue to engage the point program	500/6m
Checkups	Do health checkups	1,000/y
Checkups Improvement	Improvement in biometrics results	3,000/y

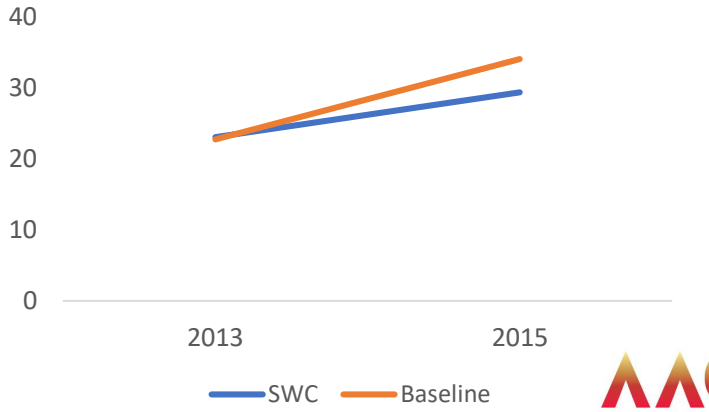
Attitude toward Exercise

Attitude	Total	City A	City B	City C	City D	City E	City F
Indifferent	20% (2,000)	13%	24%	19%	27%	21%	19%
Insufficient	54% (5,391)	44%	48%	55%	54%	59%	60%
Active	26% (2,649)	43%	29%	26%	19%	20%	21%

Average number of steps



Medical costs per year



* 1,000 point = JPY 1,000 = about USD 10

Tsukuba Wellness Research: http://www.twr.jp/

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Insurance with Health Promotion

2016	Neo First
2017	TM Anshin
2018	Sumitomo Dai-ichi NKSJ Himawari
2019	Meiji Yasuda

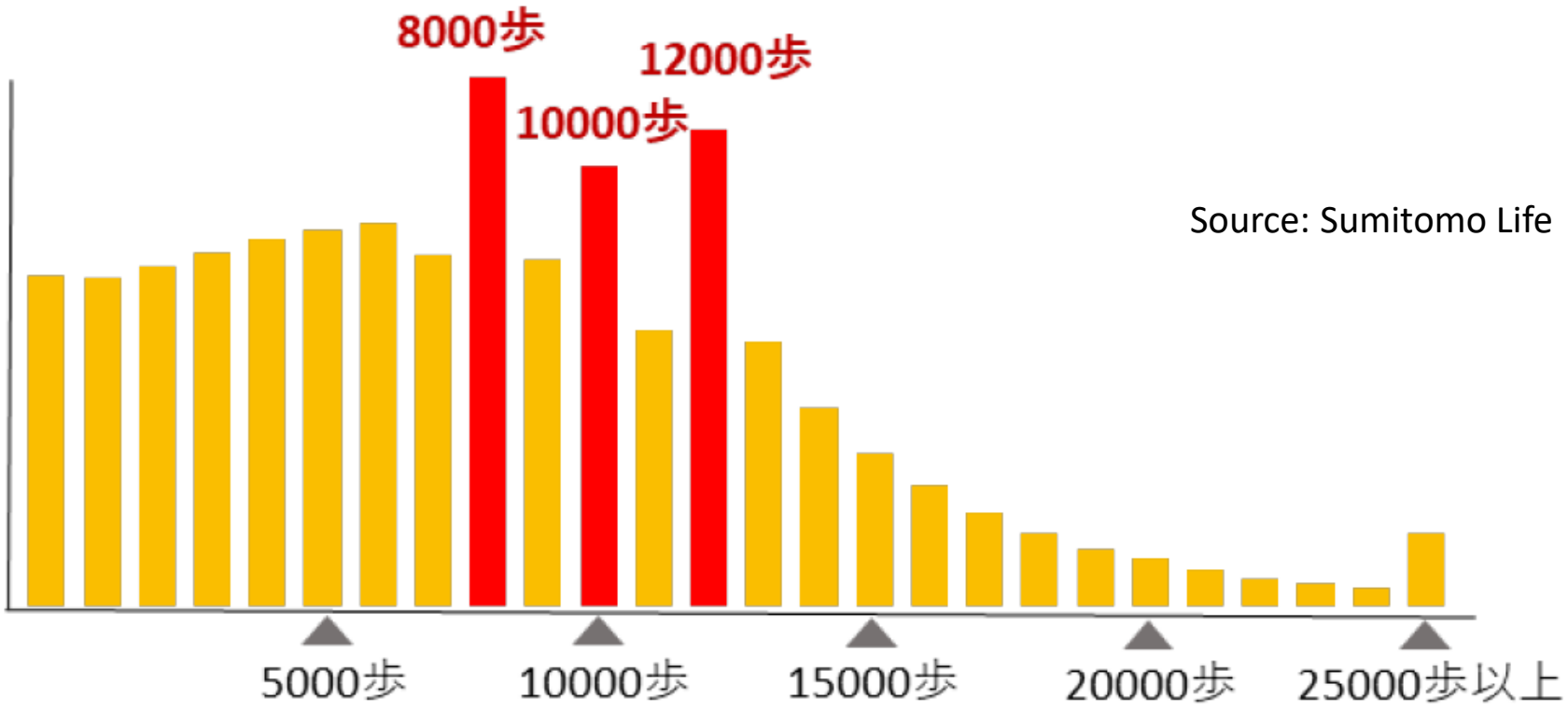
1. Change in Awareness – 93% answers increase in awareness after issue
2. Change in Behavior – 17% answers increase in the number of daily steps
3. Change in Health – 48% answers decrease in blood pressure by 10mmHg

84% answers increase in QOL after Vitality membership

Source: Sumitomo Life

Insurance with Health Promotion

Histogram of daily steps for Vitality members aged 65-



Source: Sumitomo Life

People Live Longer with Physical Health

How about cognitive health?

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Realizing Dementia Risks

Last April, the Nagoya High Court ordered a 91-year-old woman in Obu, Aichi Prefecture, to pay ¥3 million in compensation to JR Tokai for disruption of service after her husband was struck and killed by one of the company's trains. The man, who was **85** at the time of the accident in December 1997, suffered from dementia and had somehow ended up on the tracks. The court said the woman should have been watching him more attentively and was thus responsible for JR Tokai losing money as a result of the accident.

https://www.japantimes.co.jp/news/2014/05/24/national/media-national/getting-past-stigma-dementia/

Fatal traffic accidents involving elderly drivers are on the rise. In April, a car driven by an **87-year-old** former elite government bureaucrat apparently went out of control on the road in Tokyo's Ikebukuro and hit multiple pedestrians, killing a woman and her daughter. Earlier this month, an **81-year-old** man crashed his car into several vehicles at high speed at an intersection in Fukuoka, killing himself as well as his wife who was in the passenger's seat and injuring seven others.

https://www.japantimes.co.jp/opinion/2019/06/15/editorials/preventing-elderly-driver-accidents/

Source: Research on the relationship between cognitive function and safe driving (National Police Agency, 2019)

Government Initiatives about Dementia

Community involvement

Prevention*

* It means not to be dementia, but to delay to be dementia or slow progression even if dementia occurs

2 KPIs

1. # of insurers that sell dementia product to address the onset of dementia
2. # of insures that sell liability insurance for people with dementia and their guardian

Dai-ichi's Dementia Product

Source: Dai-ichi Life

100,000 NB within 4m after launch!

Premium refund

Max SA:
- JPY 10m (USD 100k) for issue age 40-75
- JPY 5m (USD 50k) for issue age 76-85

Issue 2 years

Simple benefit:

Lump sum benefit for 1) diagnose as dementia AND 2) the certification for public long-term care level 1+

Dai-ichi's Dementia Product

Source: Dai-ichi Life

Simple UW:

Are you currently **hospitalized**?

Within the past 5 years, have you visited doctor, had test, or received treatment or medication for **the following illnesses?**

●Alzheimer's ●Lewy body dementia ●Pick's disease / frontotemporal dementia ●Perkinson's / Perkinson syndrome ●Stroke (cerebral infarction / haemorrhage / SAH) ●Brain tumours ●Hydrocephalus ●Depression ●Bipolar disorder (depressive-maniac) ●Schizophrenia ●Alcohol dependence

Have you ever visited doctor, had test, or received treatment or medication for **dementia, MCI, or suspicion** for the diseases?

Have you ever received **certification for long-term care/support needs for the national long-term care insurance** or is your application currently being evaluated?

Dai-ichi's Dementia Product

Source: Dai-ichi Life

Before diagnosis → **After diagnosis**

Prevention

- **Apps**

Prevention

- Brain training
- Walk
- Nutrition

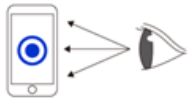
- **Introduce study schools**

Early detection/self-check

- **Apps**

Cognitive function check

- eye move check



- check by panel

Monitor by family

Real time monitoring by family via apps

consult to care experts

- **Call center about dementia**

- **Visit service by ALSOK**

ALSOK agents visit in emergency with family call

Claims support

- **Claims to the proxy claimant**
- **representative service to get medical certificate**
- **SOMPO LTC consulting service**
- **Adult guardianship support**

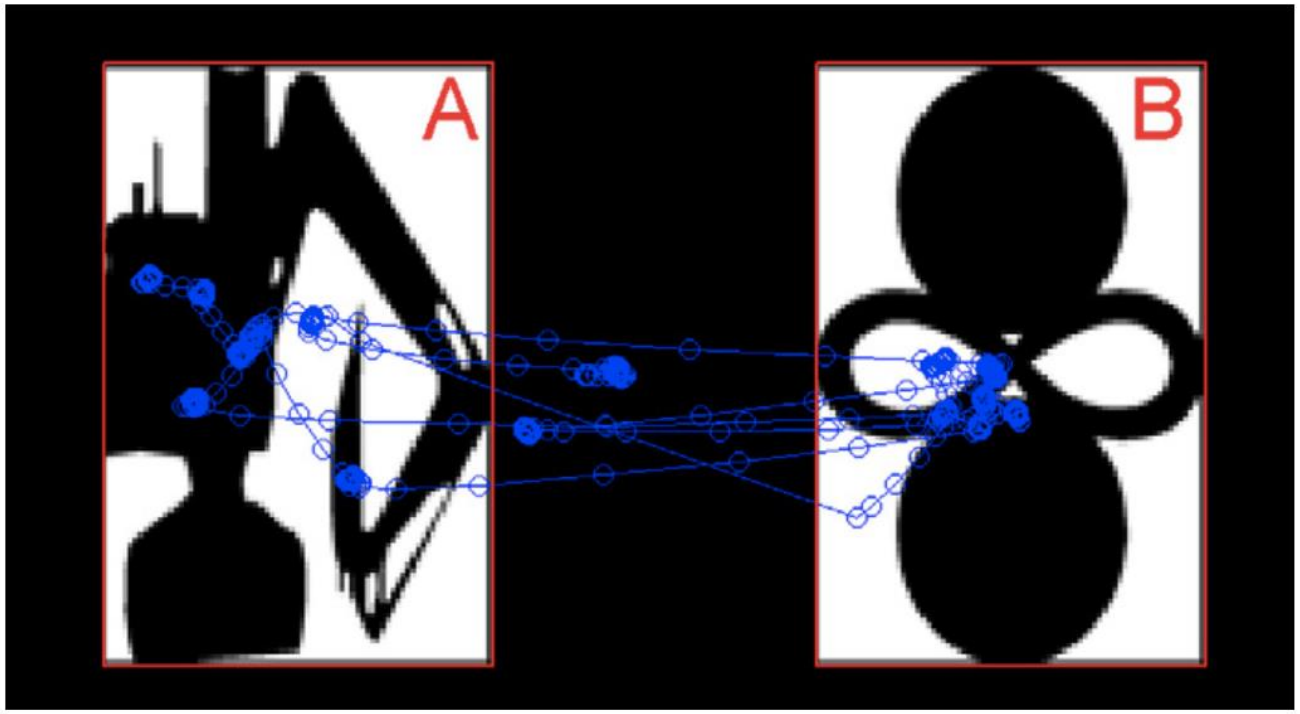
ジャーナル　オブ　ニューロサイエンス　メソッド
Journal of Neuroscience Methods
ホームページ: www.elsevier.com/locate/jneumeth

自動分類アルゴリズムを使用した眼球運動分析による認知機能障害の見分け方

Dmitry Lagun a , Cecelia Manzanares b , Stuart M. Zola b,d,e , Elizabeth A. Buffalo b,c , Eugene Agichtein a,*

a エモリー大学,　理学（数学&コンピュータサイエンス）部 住所：400 Dowman Dr, Suite W401, Atlanta, GA 30322, USA
b ヤーキス国立霊長類研究所　住所：954 Gatewood Road, Atlanta, GA 30329, USA
c エモリー大学　神経学部, Emory University School of Medicine, 住所：1440 Clifton Rd, Atlanta, GA 30322, USA
d アルツハイマー病研究所　住所：Atlanta, GA 30322, USA
e 服役軍人医療センター　調査部　住所：Atlanta, GA, USA

How to identify cognitive impairment by eye movement analysis using automatic classification algorithm



Kobe City Dementia Program (April 2019)

1. Dementia diagnosis subsidy

- For people aged 65+
  - Dementia screening tests for free
- Among those who have suspicious diagnosis
  - Detailed examination for free

Dementia diagnosis

2. Insurance coverage

- Liability insurance
  - Accident by people with dementia
  - Max SA of JPY 200m (USD 2m)
- Life insurance etc.
  - Max SA of JPY 30m (USD 300k)
- GPS monitoring service
- Call center

Source: Kobe city

* Additional municipal tax of JPY 400 (USD 4) per year

Kobe City Dementia Program (April 2019)

Approximation by national estimate

# elderly	# dementia	#MCI
428,000	64,000	56,000
	(15%)	(13%)

9,391 application
(as of June 30th, 2019)

Not only Kobe but also other cities introduced/will introduce the similar program

How will this affect dementia incidence rate in the future?

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Clinical Epidemiology

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REVIEW

Is dementia incidence declining in high-income countries? A systematic review and meta-analysis

This article was published in the following Dove Press journal:
Clinical Epidemiology

Results: The systematic review included seven studies (42,485 individuals), and the metaanalysis included five studies of sufficient quality. Relating dementia incidence of later cohorts to earlier cohorts (reference) yielded a nonsignificant decrease across HIC (IC =0.82; 95% CI 0.51–1.33), with high heterogeneity (I^2=94.9%, P<0.001) and without publication bias (Egger's t=–1.77; P=0.18). Excluding the Japanese Hisayama study, the only study suggesting an increase, indicated borderline evidence for a decrease across Western HIC (IC =0.69; 95% CI 0.47–1.00; I^2=88.1%, P<0.001; Egger's t=–0.34, P=0.77), again with high heterogeneity. Meta-regression did not reveal an association of incidence rate with calendar year or study attributes; however, analyses were low powered.

Trends in dementia incidence in Japan

The age- and sex-adjusted incidence of all-cause dementia and AD, but not VaD, increased from the 1988 cohort to the 2002 cohort (for all-cause dementia: adjusted hazard ratio [aHR] 1.68, 95% confidence interval [CI] 1.38-2.06; for AD: aHR 2.07, 95% CI 1.59-2.70; for VaD: aHR 1.18, 95% CI 0.83-1.69). The 5-year survival rate of all-cause dementia and AD improved from the 1988 cohort to the 2002 cohort (for all-cause dementia: 47.3% to 65.2%; for AD: 50.7% to 75.1%; all $p < 0.01$).

Source: Hisayama study

Dementia-Friendly Society to Make It More Resilient

A harmony of L&H and P&C products

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