



Global movement for inclusive societies for older persons

Innovations in community-based strategies

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Building societies for older ages

Building societies for all ages



Equity

Autonomy

Dignity

● Inlusiveness =

- Participation, engagement
- Responsive systems
- Focus on functional and cognitive decline and needs (ADL, IADL)
- Understanding and addressing inequities
- Determinants of health; active ageing approach
- Data and evidence driven

● Innovation =

- Transforming systems
- Informal and formal care
- Person centred, home/community based
- Frugal, affordable, appropriate
- Coordinated care
- Integration, with focus on cultures and incentives
- Technological enablers
- Quality assurance

Presentation

1. Older Adults Population Trends & Epidemiology
2. Living longer and healthier
3. Global movements
 - a. MIPAA, UHC, Post-2015
 - b. AFC
4. Innovation: Integrated, person-centred communities & systems
 - a. Data and evidence

Population Trends and Epidemiology

The number of older persons will **triple**
from 500 million today to 1.3 billion in 2050

One in four people will be 60 years or older

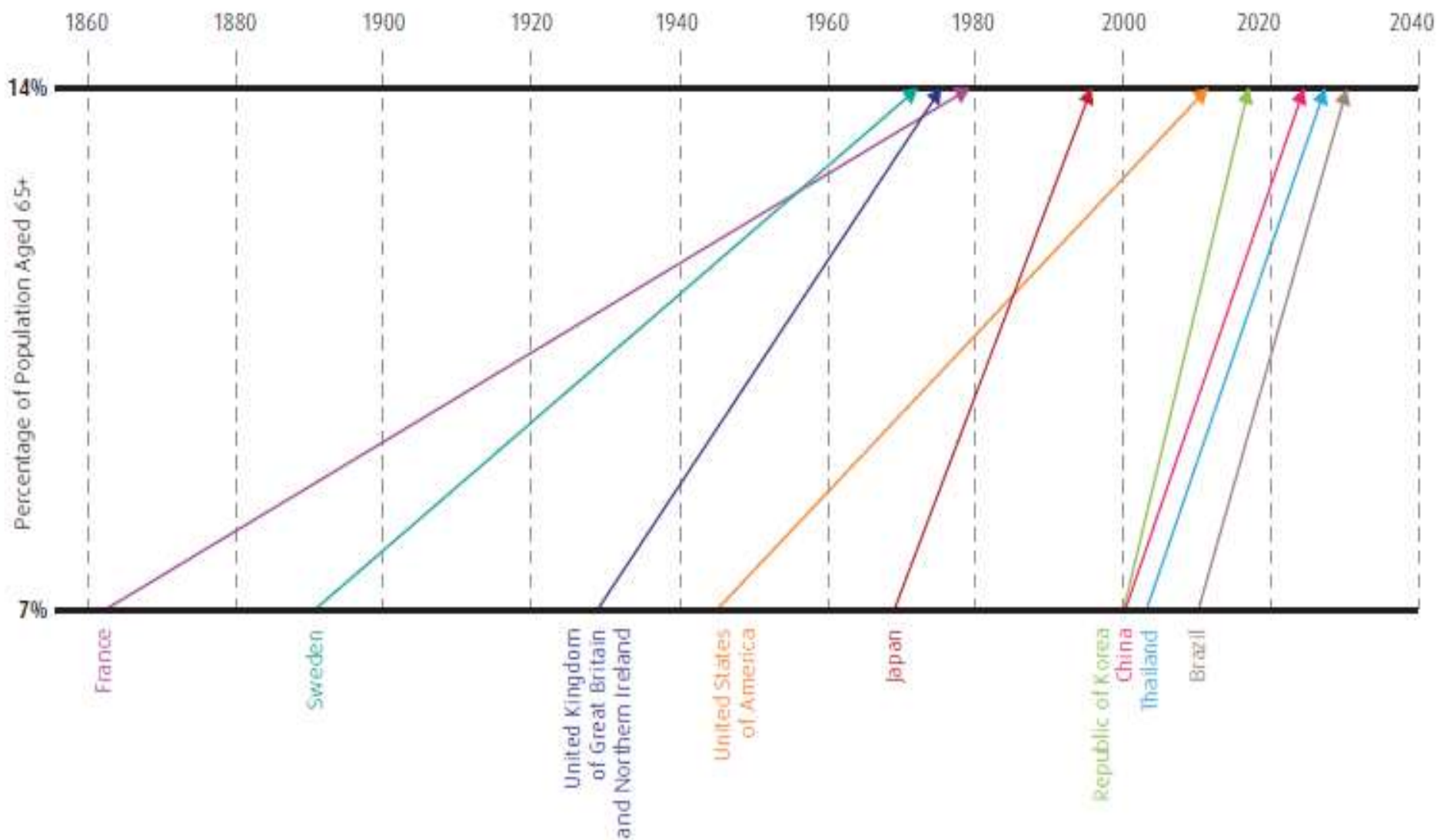
Within this group, **one in four people** will be 80 years or older

ESCAP - 2012

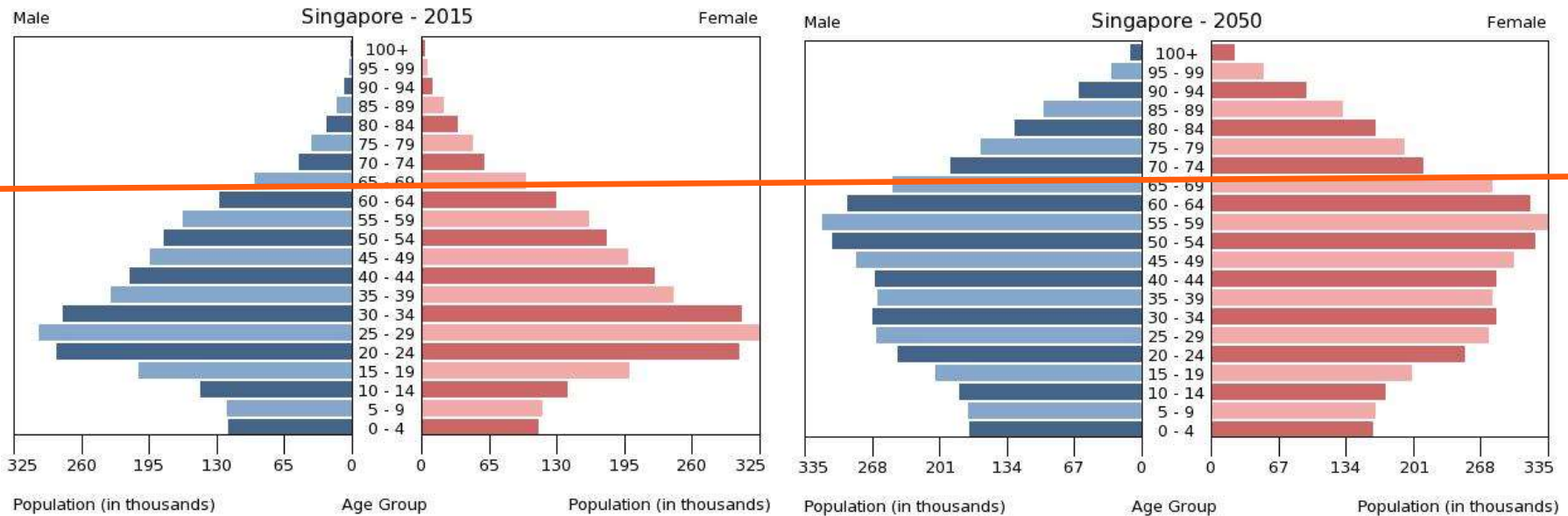
Demographic changes

- **Decreasing fertility**
- **Increasing life expectancy**
- **Speed of ageing**
- **Increasing dependency ratio**
- **Feminization of ageing**
- **Increasing older old**
- **Increasing number single**
- **Living alone or in couples**
- **Rising inequities/poverty**
- **Broader: urbanization, migration, immigration**

Rapid Ageing: accelerating speed, low preparation time



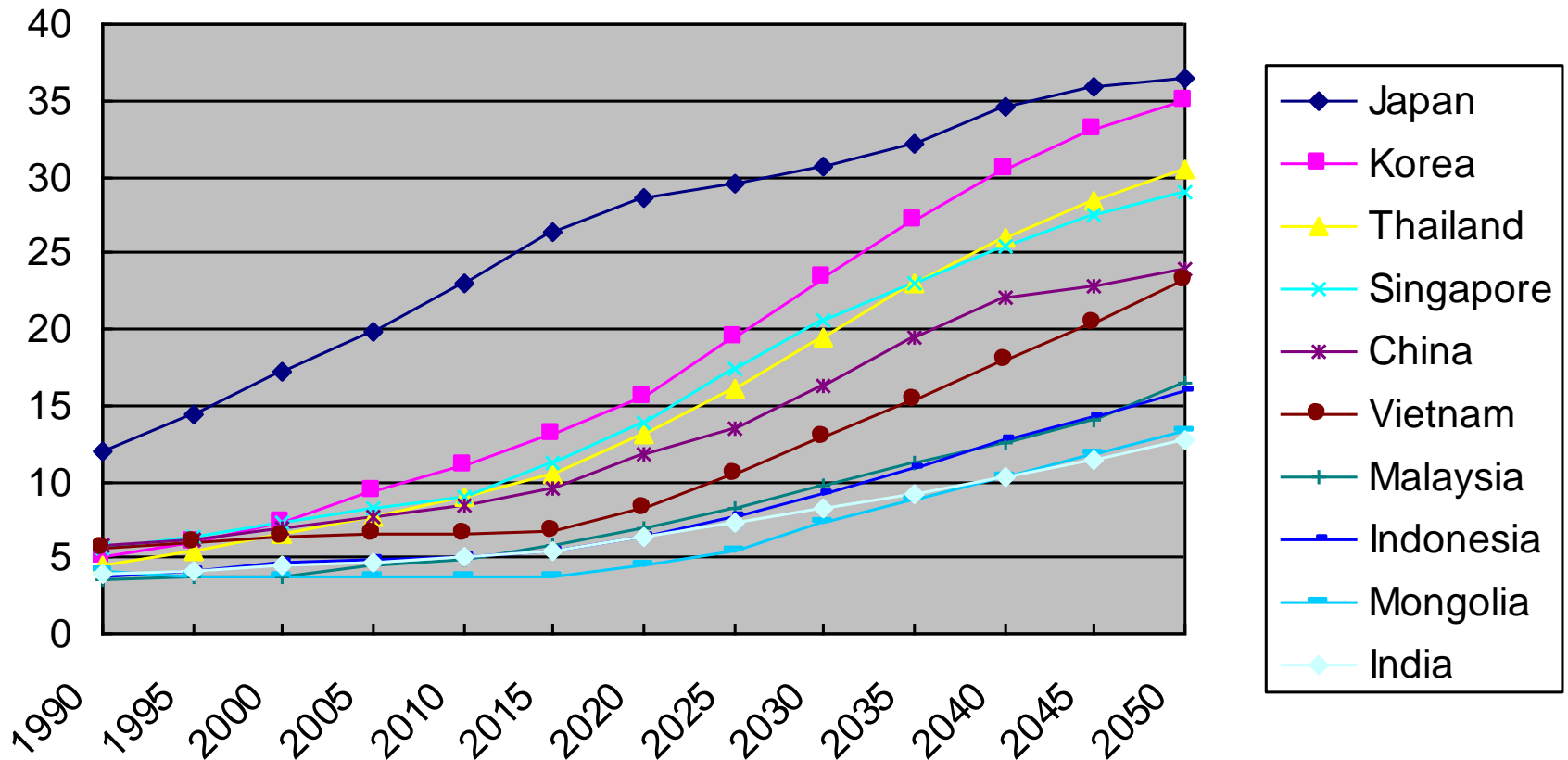
Singapore: Age pyramids



Source: US Bureau of the Census

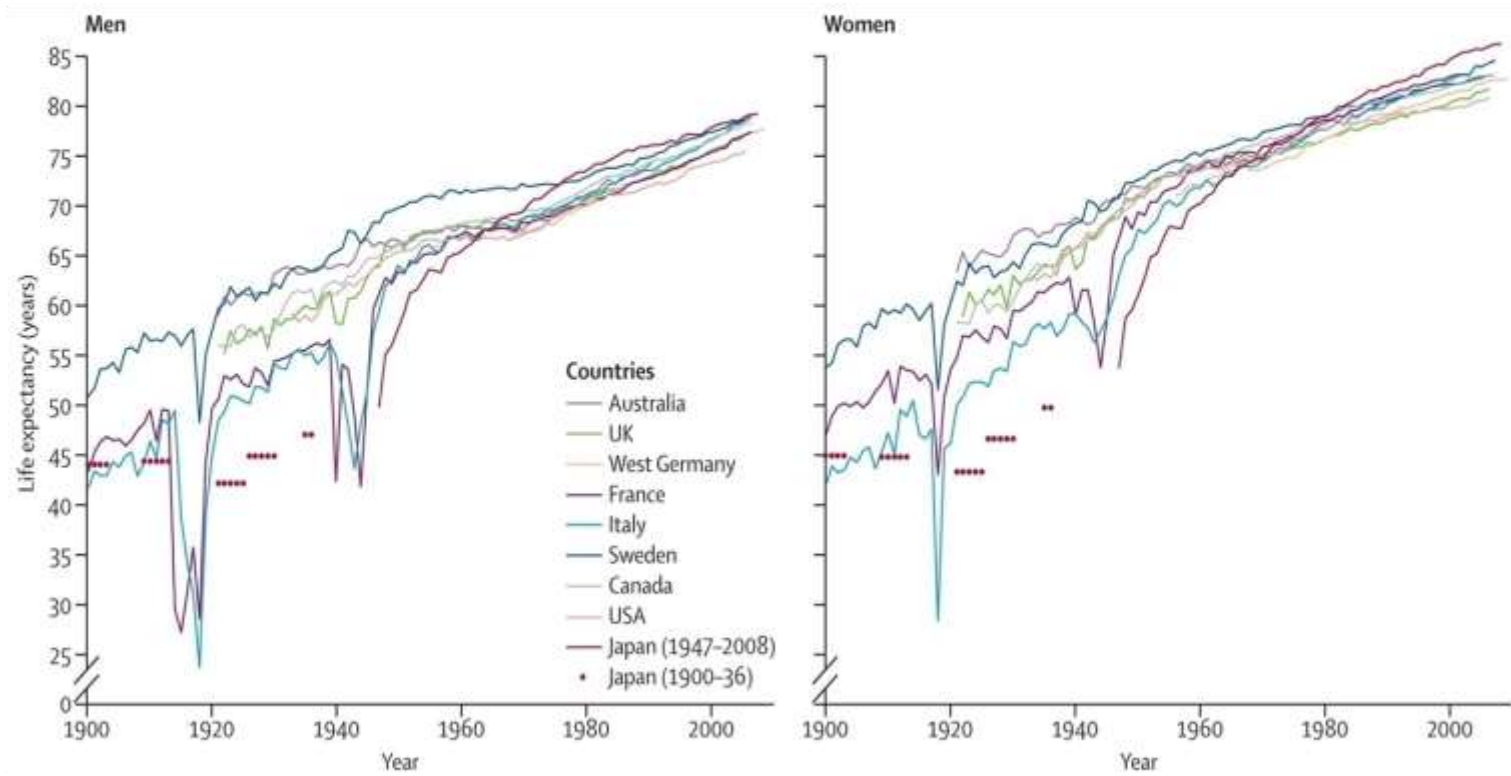
<http://www.census.gov/population/international/data/idb/region.php?N=%20Results%20&T=12&A=separate&RT=0&Y=2050&R=-1&C=SN>

Population ratio of 65 years of age or older in Asia region, 1990-2050



Data extracted from: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2012 Revision, <http://esa.un.org/unpd/wpp/index.htm>

Trends in life expectancy at birth, 1900–2008



Source: Figure 1, What has made the population of Japan healthy?, Lancet Special Series on Japan

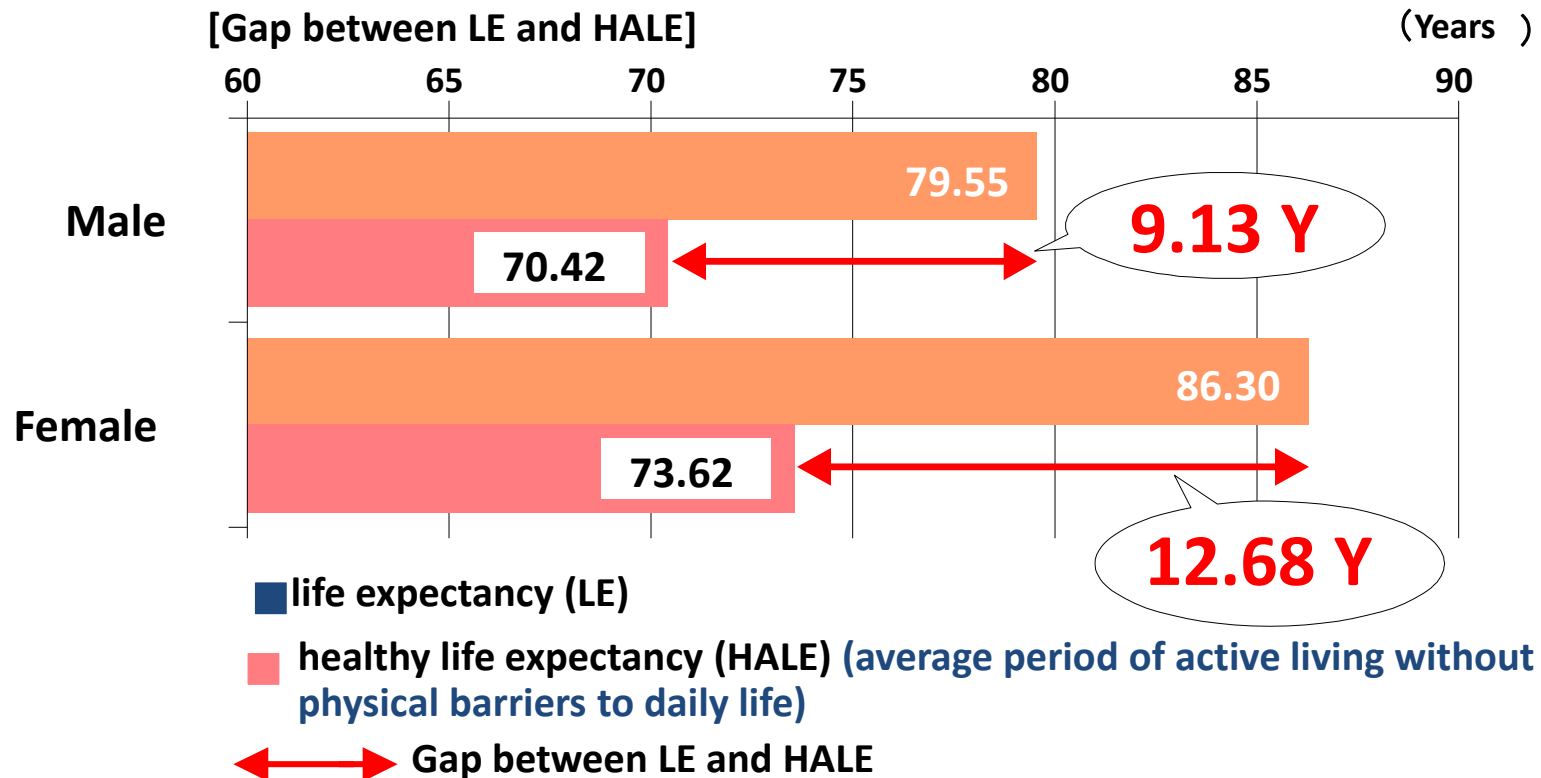
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Need to narrow the gap (about 10 years) between life expectancy (LE) and healthy life expectancy (HALE)

Male LE and HALE are about 70 years and about 80 years respectively.

Female LE and HALE are 74 years and 86 years respectively.

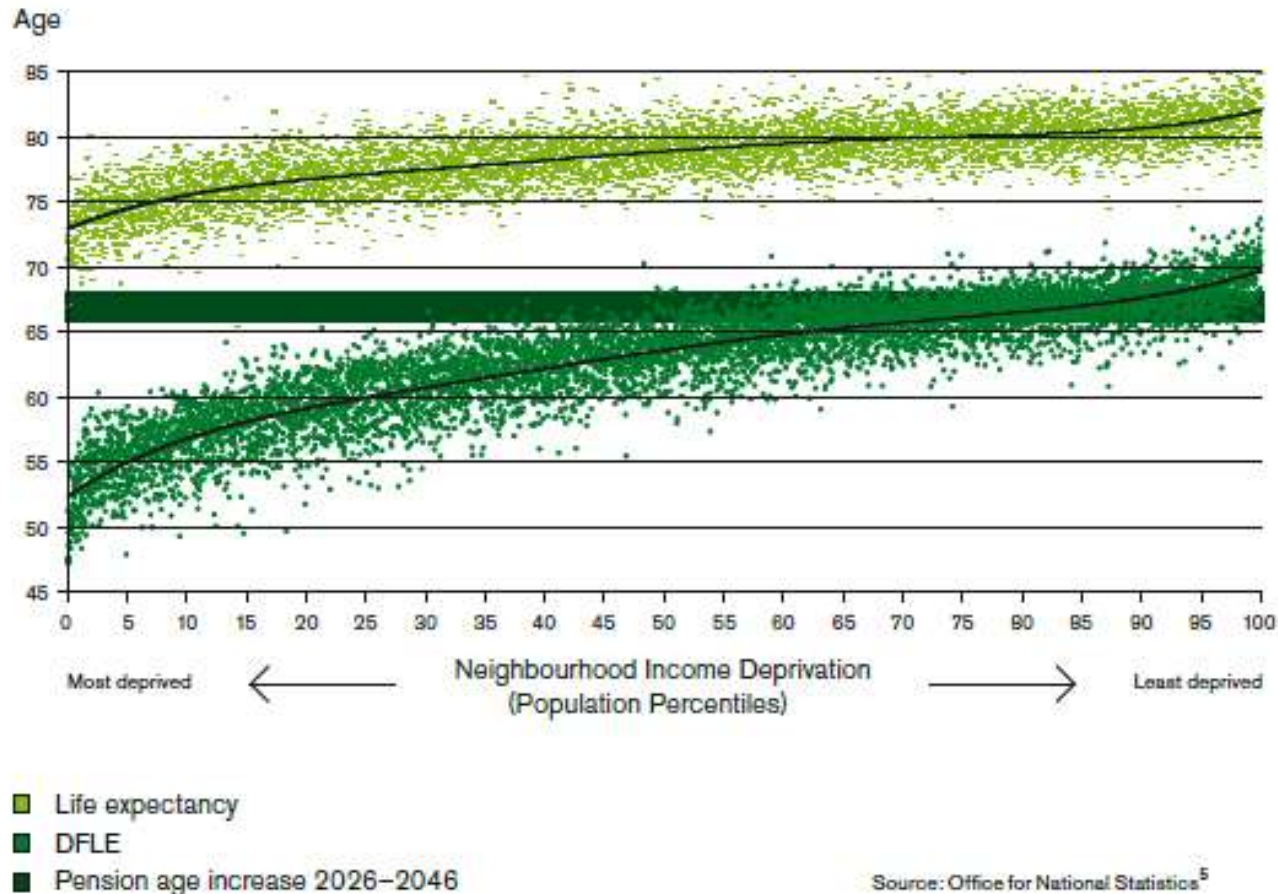
The gap between LE and HALE is increasing in the last decade.



Source: LE data derived from the Complete Life Table (2010), Ministry of Health, Labour and Welfare (MHLW). HALE data derived from the report of "Future prospects of healthy life expectancy and cost-benefit of measures against lifestyle diseases" research project funded by MHLW.

Rising Inequities and their impact: Example of the UK

Figure 1 Life expectancy and disability-free life expectancy (DFLE) at birth, persons by neighbourhood income level, England, 1999–2003

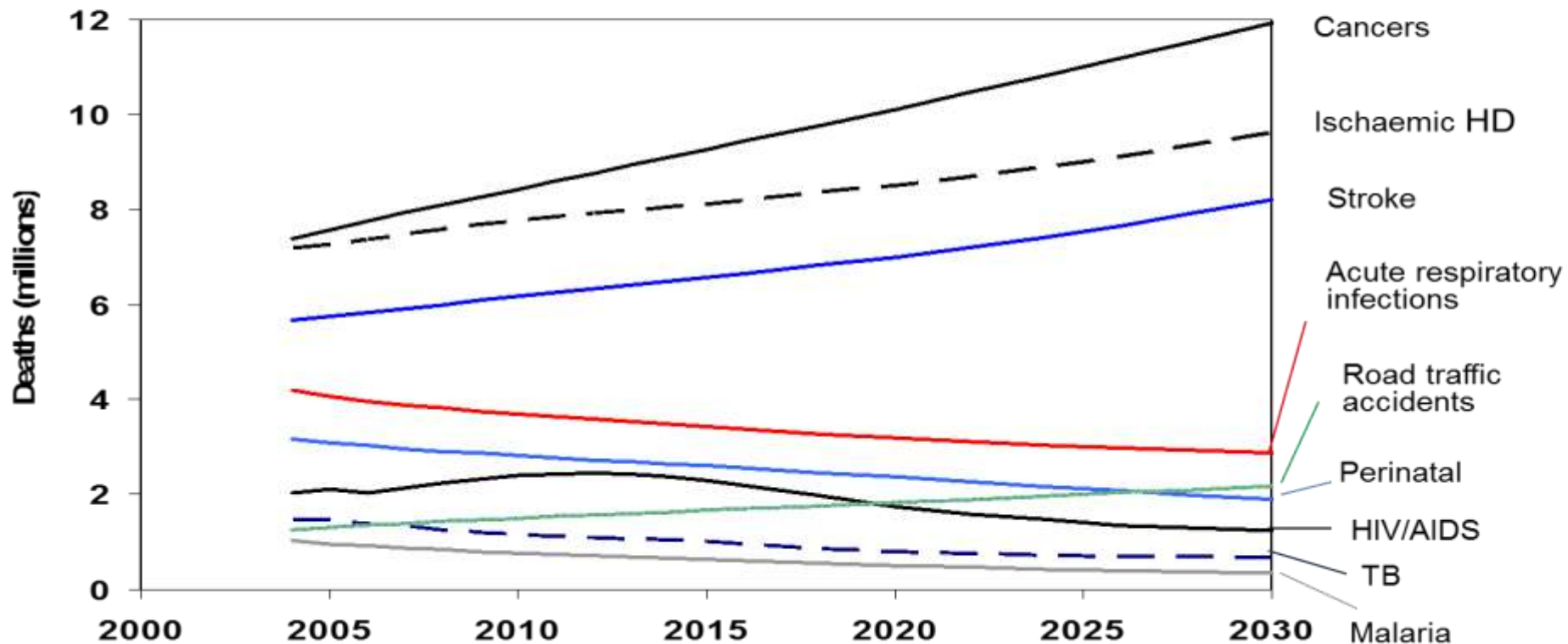


Source: Office for National Statistics⁵

Source: Marmote, 2013; Steverink, N., *Successful development and ageing: theory and intervention*, in *Oxford Handbook of Geropsychology*, N. Pachana and K. Laidlaw, Editors. 2014, Oxford University Press: Oxford.

Growing number of cases of non-communicable diseases as causes of deaths

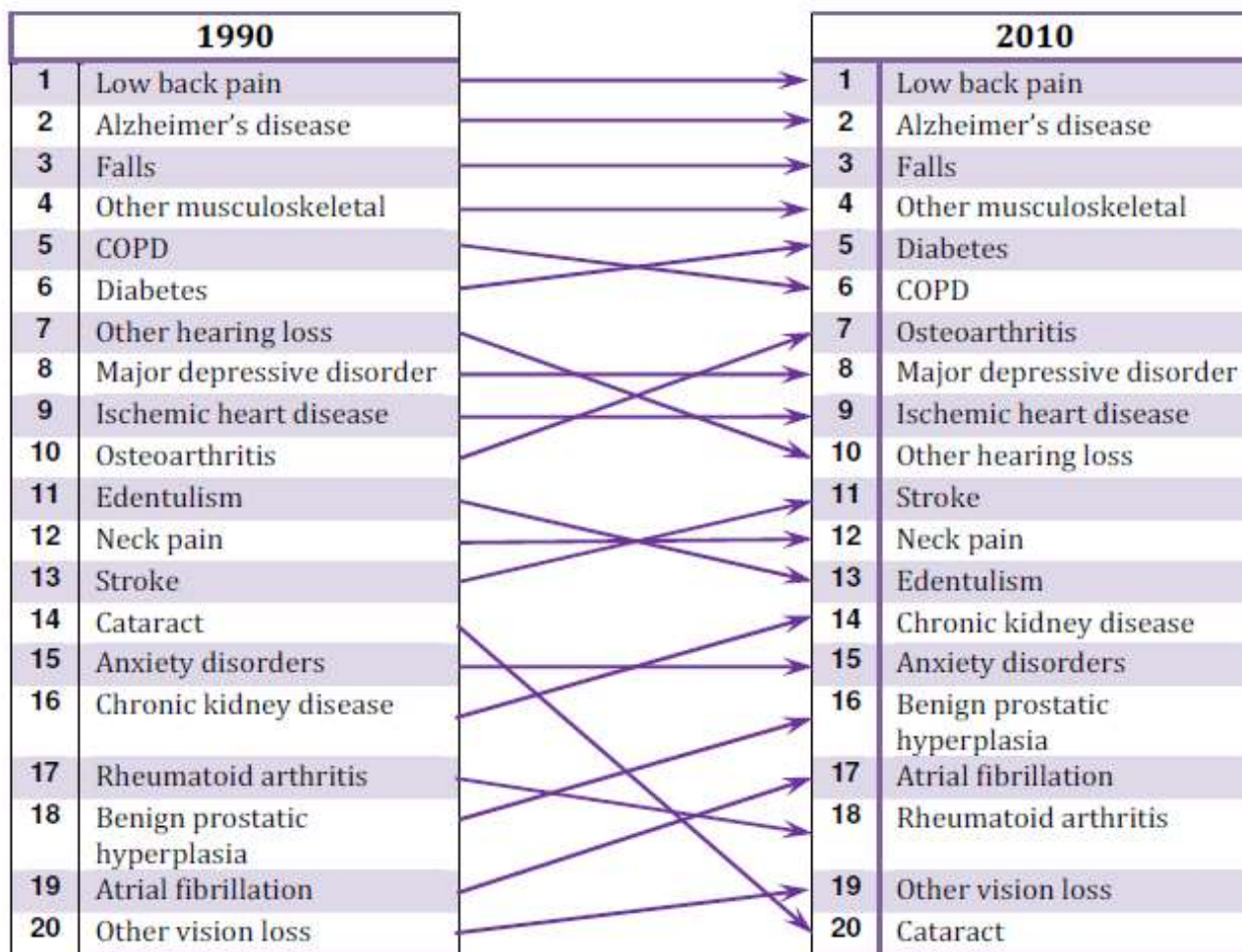
Global projections for selected causes
2004 to 2030



Updated from Mathers and Loncar, PLoS Medicine, 2006
Courtesy of Prof Takemi, Councilor, Japanese Diet

3

Global burden of disease (top 20 causes) in both sexes, aged 70+ years (years lived with disability), developed countries, 1990 and 2010



Disabilities for population aged 70 or over, 2007-10 (% of total population)

| | Any disability (%) | Difficulty moving around (%) | Difficulty with self care (%) | Difficulty with cognition (%) |
|--------------|--------------------|------------------------------|-------------------------------|-------------------------------|
| China | 85.4 | 40.4 | 19.7 | 68.0 |
| Ghana | 88.1 | 63.4 | 35.8 | 74.3 |
| India | 97.3 | 72.5 | 36.3 | 80.7 |
| Mexico | 79.7 | 54.3 | 31.3 | 54.6 |
| Russia | 98.1 | 85.6 | 56.4 | 74.7 |
| South Africa | 86.0 | 51.7 | 24.8 | 67.6 |

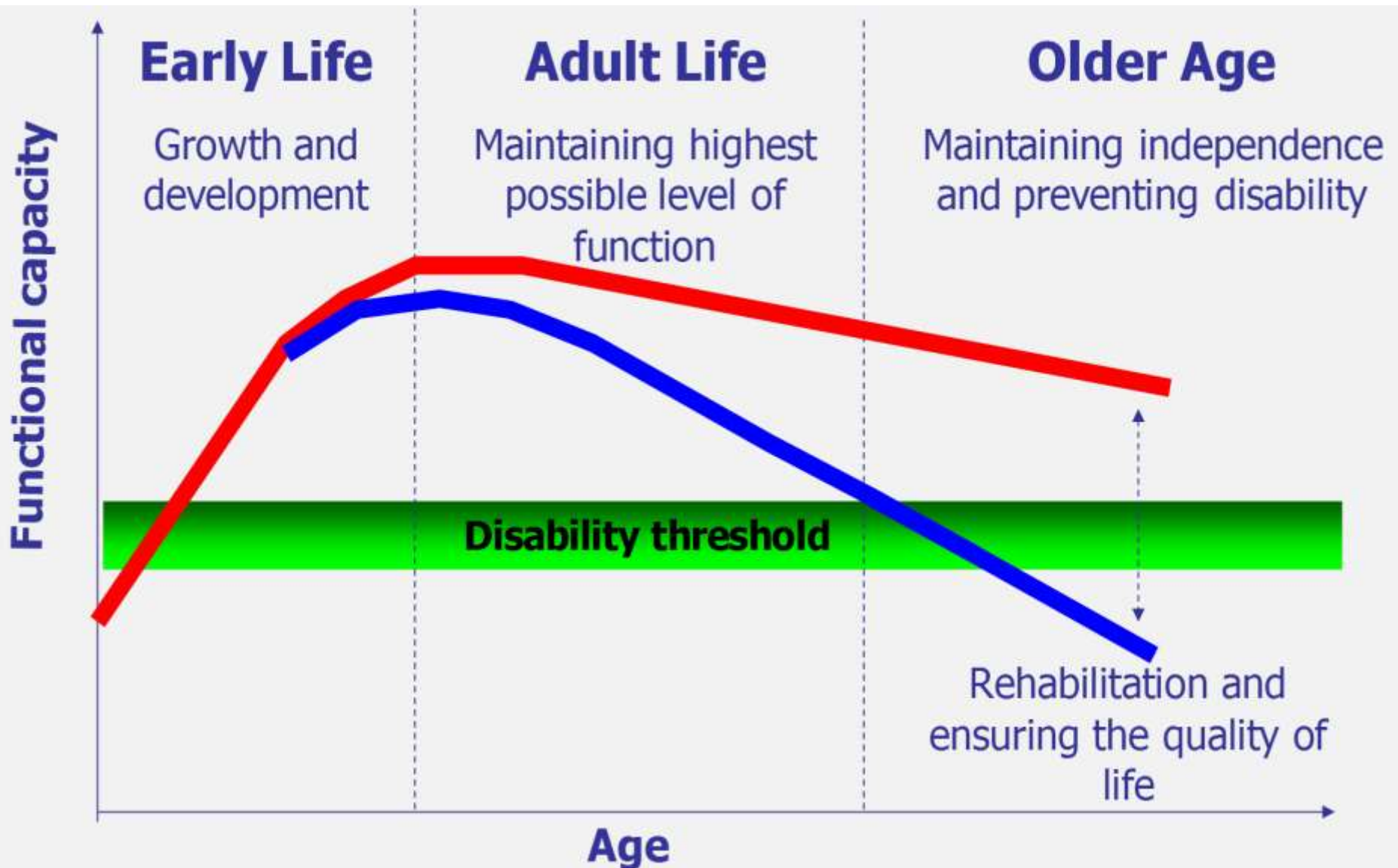
Source: He et al (2012).

4 biggest causes of disability



Living Longer and Healthier

Life-course Approach to Health



WHO Promotes a Life Course Approach to Healthy and Active Ageing

- Health promotion at all ages
- Early detection and quality care, from prevention to long-term and palliative care
- Physical and social environments that foster the health and participation of older people
- Reinventing ageing – changing social attitudes to encourage the participation of older people

What are our goals?

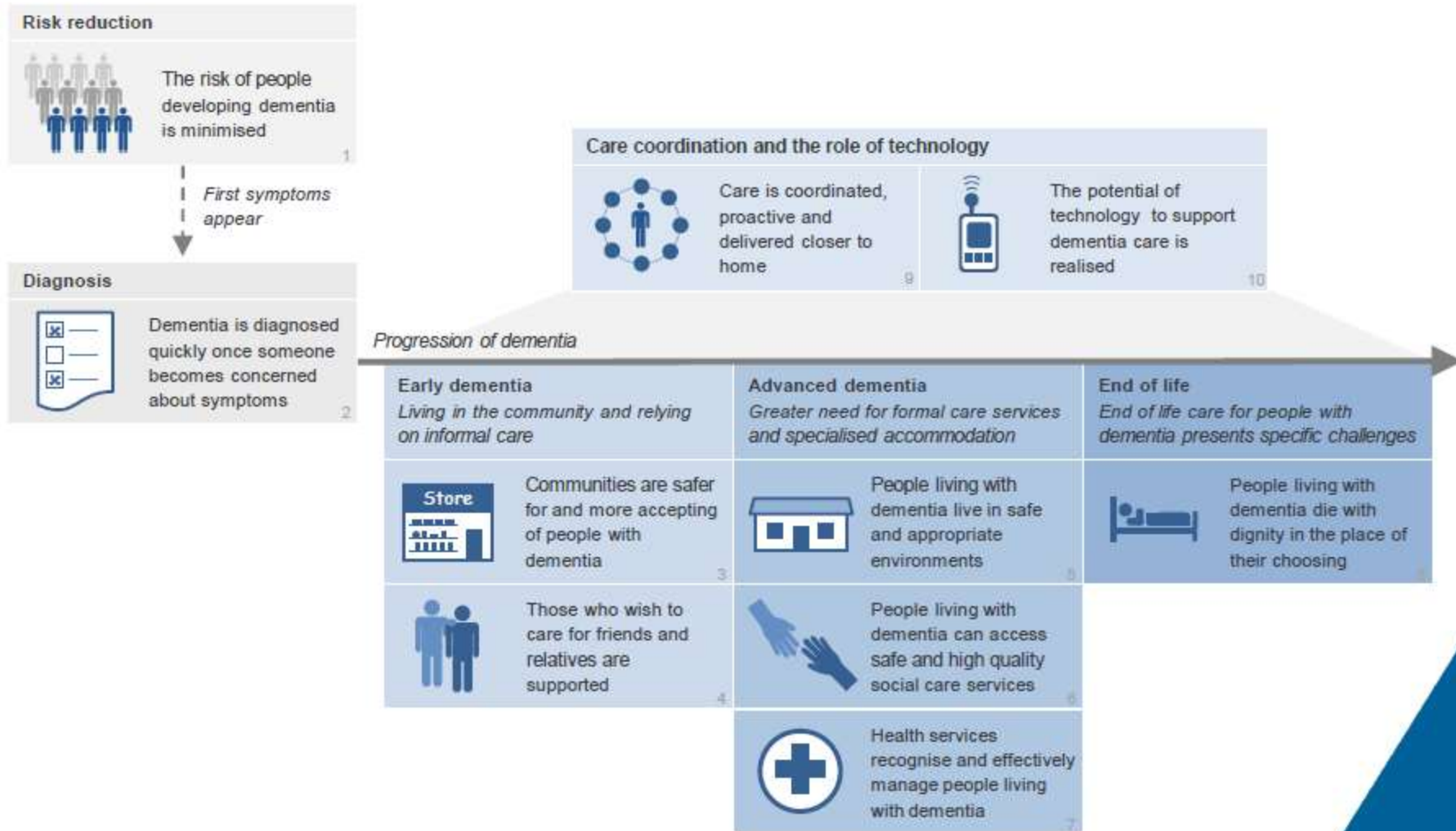
- Goals:
 - Remain at home
 - Increase quality of life, wellbeing, dignity, resiliency
 - Productive, autonomous
- Increase health promotion and prevention (esp. NCDs)
- Social inclusion & connectivity, mental health support
- Implementation of UHC: person-centred
- Focus on
 - inequities: Healthy Life and Life gap
 - Prevent/manage functional and cognitive decline - prevent further frailty
- Cost efficiency; sustainability; value for money

Emerging Priority Issues

- **Dementia**
- **UHC and ageing → sustainability?**
- **Self care, personal empowerment**
- **Health and social systems**
- **Community mobilization**
- **Transition to responding to functional and cognitive decline**
- **Role of technology as enabler**
- **Quality – access – caregivers – facilities**



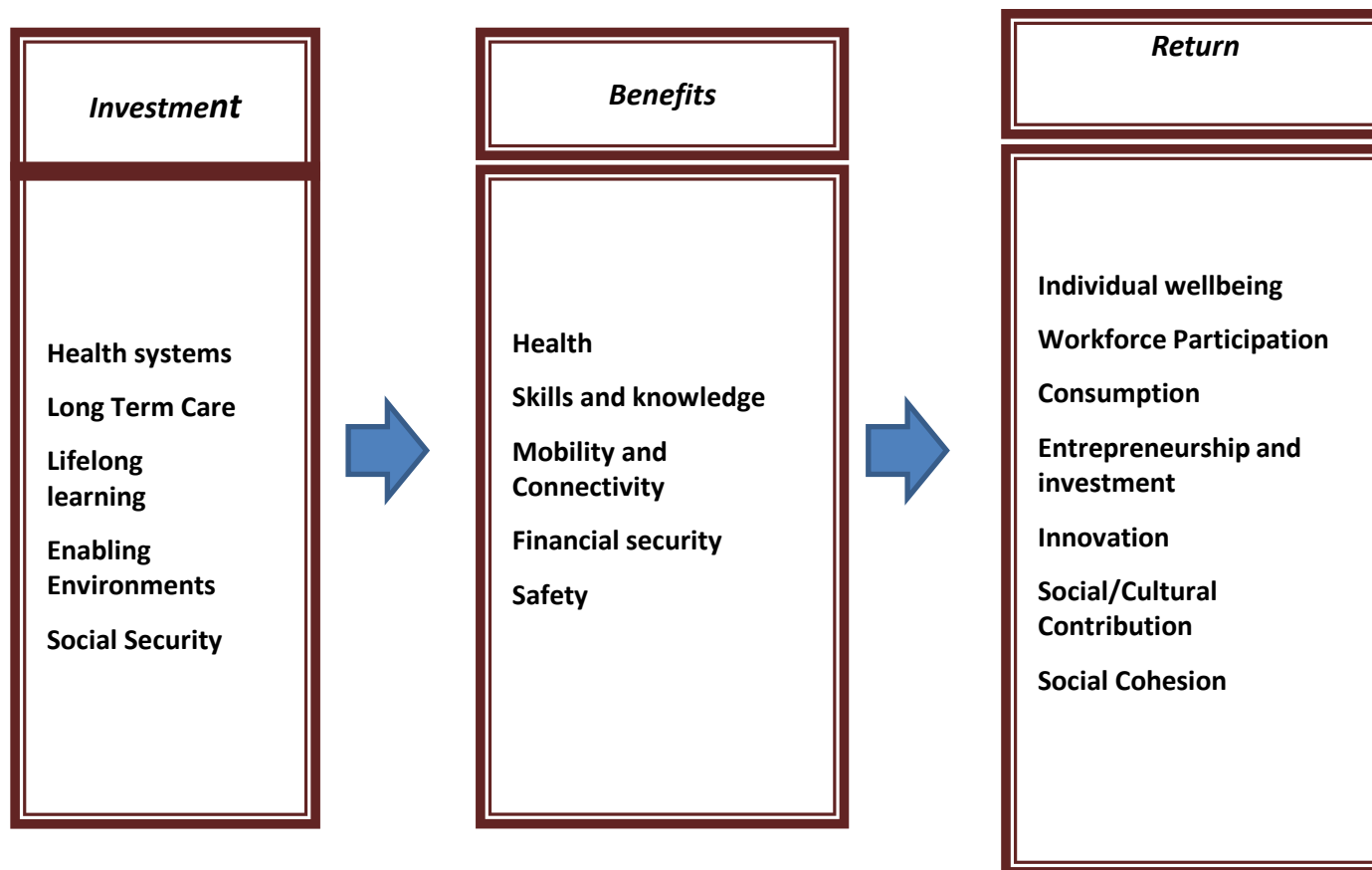
We have identified ten key objectives of dementia policy for countries to consider



Innovation: systems

- Models of **integrated health and social service delivery**
 - Greater linkage between ageing and disability communities
 - Palliative care, rehabilitation
- **Coordinated**, community based care and support
- Improved **referral patterns**; support for informal caregivers (incl. family caregivers)
- Empowering and inclusion of older persons; social inclusion & connectivity.
- Balance of **social and technological innovation**:
 - early diagnosis and care; treatment; managing multiple chronic conditions; enhancing mobility, revising the built environment
 - Blend social, technological, medical innovation: appropriate, affordable; safe and effective
 - Reduce institutionalization: which technologies and approaches?
- **Multiple domains**: diagnostics, medicines/vaccines, care systems, mHealth and ICT, redesigning housing; Address risk factors for LTC and decline into frailty: vision, hearing, eating and drinking, falls prevention, etc

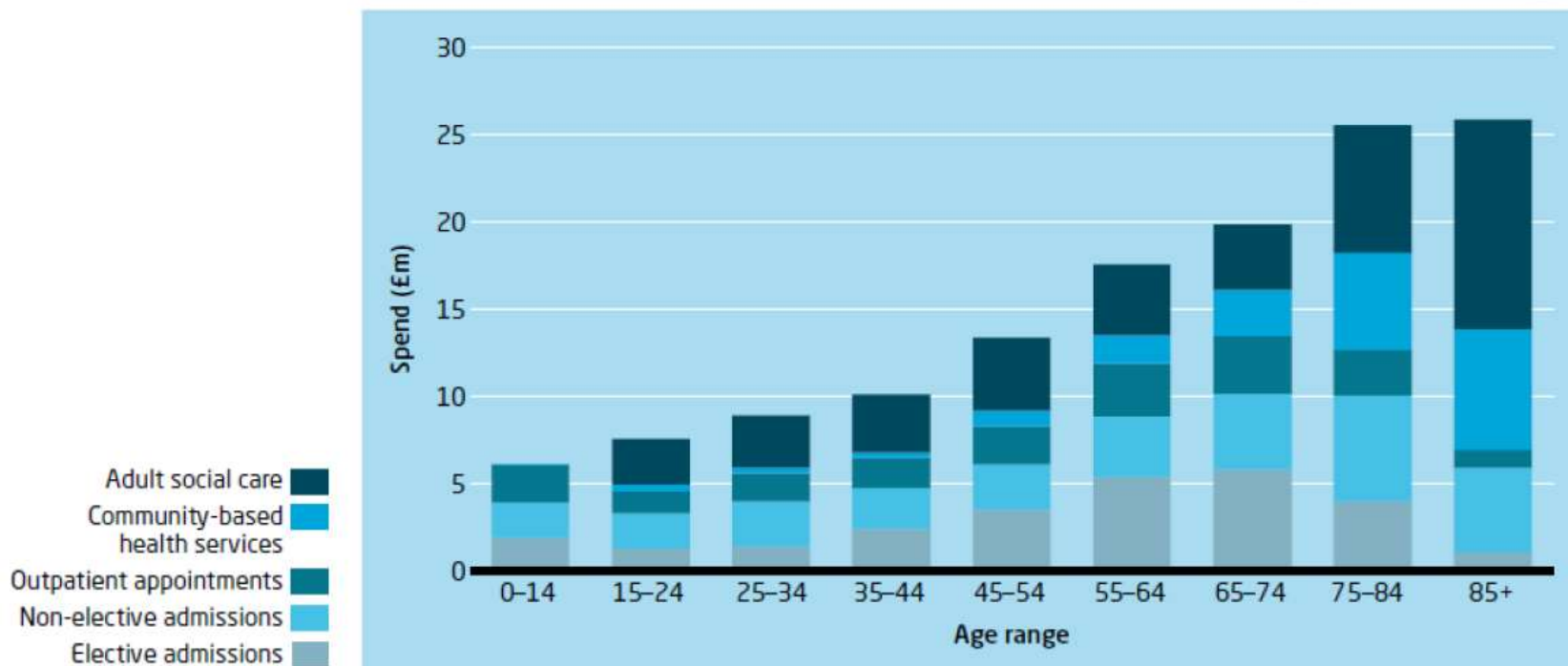
Investment and Return in Ageing Populations



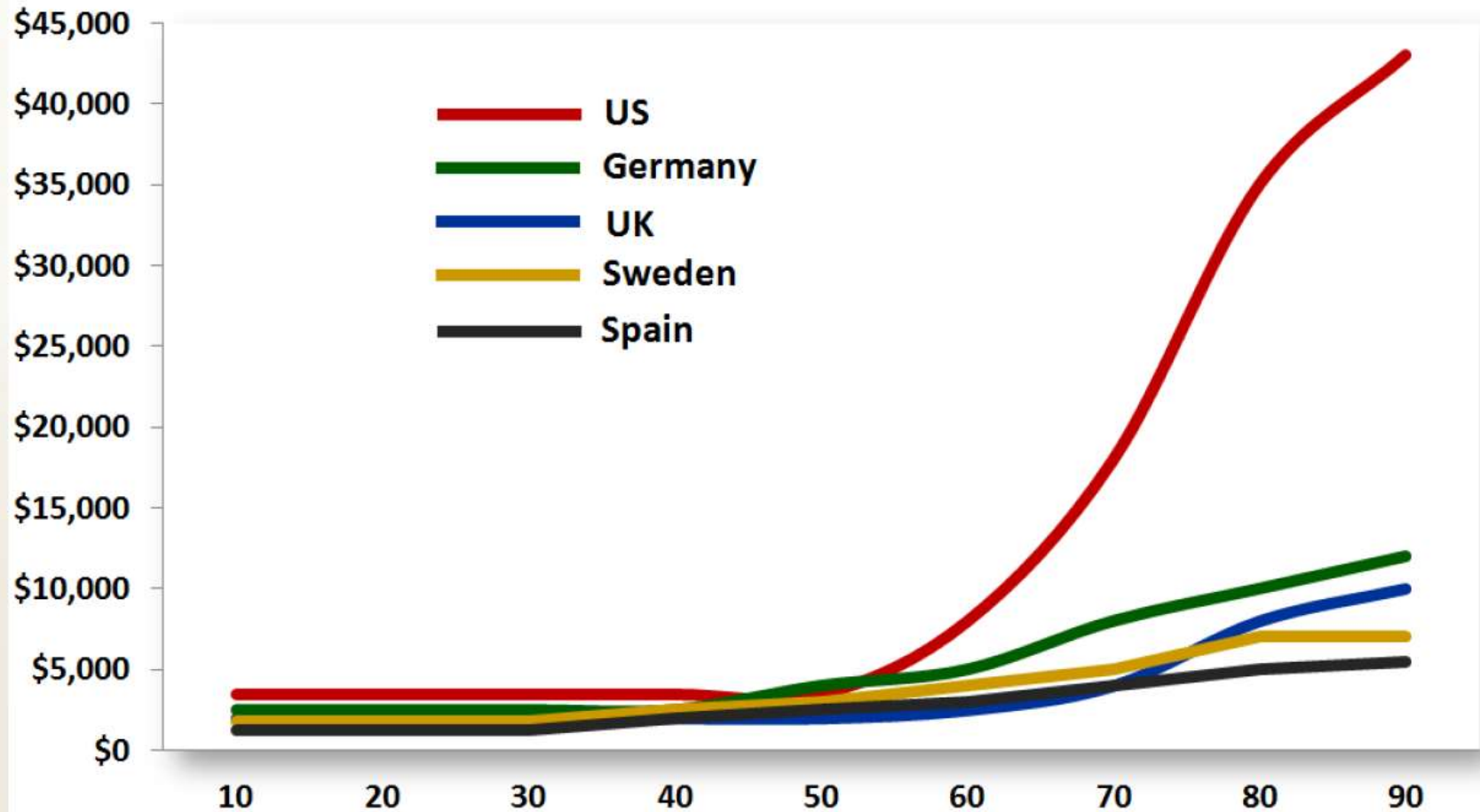
Source: WHO (adapted from work of the World Economic Forum's Global Agenda Council on Ageing 2013)

Future: Rising health and social costs

Annual cost by age and service area for Torbay (pop 145,000) 2010/11



Annual Per Capita Healthcare Costs by Age



Global Movements and Policy Frameworks

New Opportunities: Post-2015 Development Goals

Health

Universal Health Coverage

MDG+

NCD/risk factors

Inequality

Bottom 40%

Equal opportunity

Migration

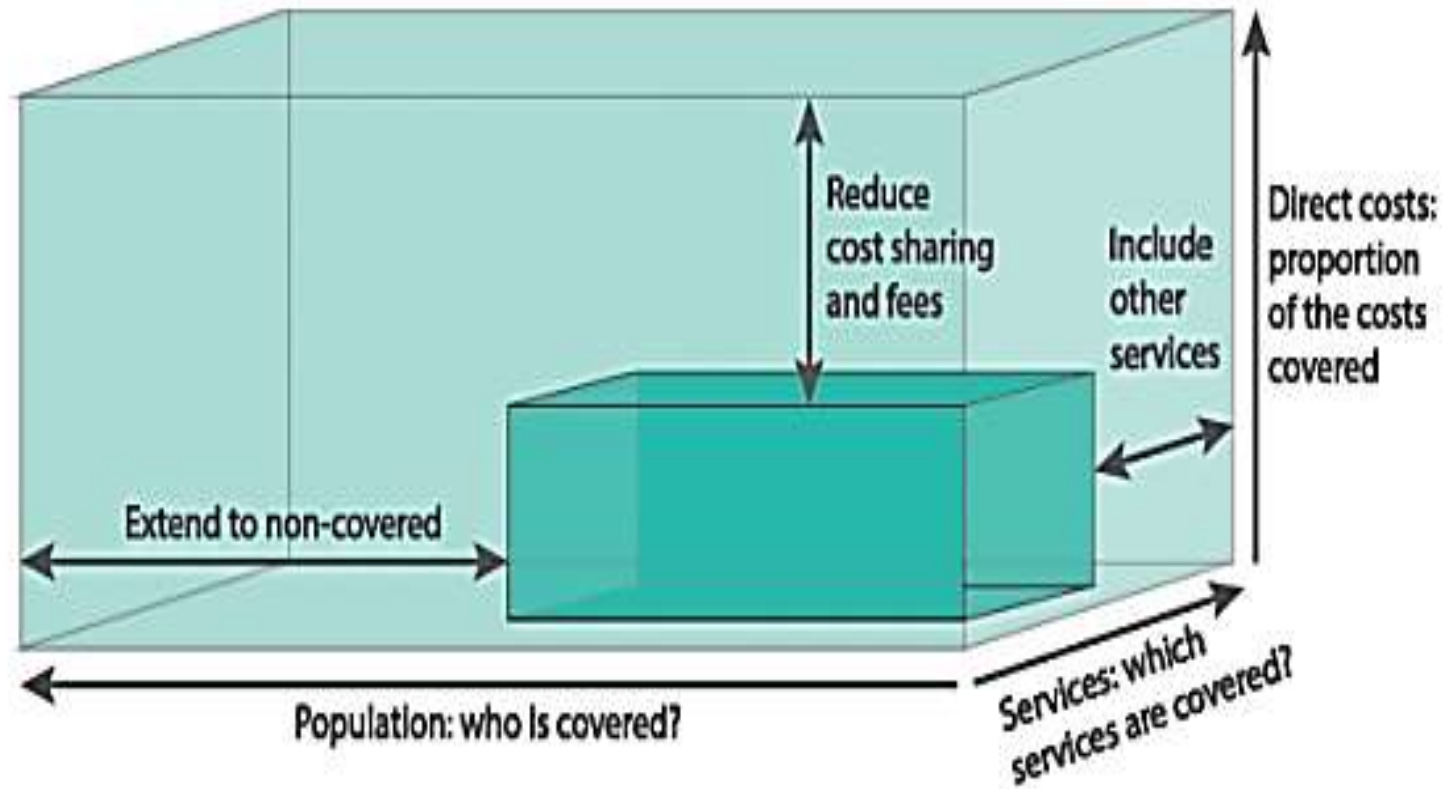
Cities

Environment

Sustainability

Settlements

UHC can improve health equity



Three pillars of the Madrid International Plan of Action

- Older persons and development
- Advancing health and well-being into old age
- Ensuring enabling and supportive environments

MIPA Policy Framework: UNESCAP Review*

21 countries have national policies on older persons

Australia, Bangladesh, Cambodia, China, Fiji, India, Indonesia, Japan, Lao People's Democratic Republic, Malaysia, Maldives, Mongolia, New Zealand, Nepal, Republic of Korea, the Philippines, Samoa, Sri Lanka, Thailand, Turkey and Viet Nam

12 countries have passed national laws

China, Democratic People's Republic of Korea, India, Indonesia, Japan, Mongolia, Nepal, the Philippines, Republic of Korea, Sri Lanka, Thailand and Viet Nam

8 countries have established special bodies on ageing within ministries

Indonesia, Kiribati, Palau, Papua New Guinea, Singapore, Sri Lanka, Thailand and Viet Nam

* Armenia, Australia, Azerbaijan, Bangladesh, Brunei Darussalam,, Cambodia, China, Democratic People's Republic of Korea Fiji Georgia India Indonesia Iran (Islamic Republic of), Japan, Kazakhstan Maldives Mongolia Myanmar Nepal Pakistan Philippines Republic of Korea Russian Federation Samoa Thailand Turkey Tuvalu Uzbekistan Viet Nam

Several countries acknowledge gender in their policies

- e.g. ...The Republic of Korea - Second Basic Plan on Low Fertility and Aging Society
- ...Indonesia - The National Plan of Action for Older Person Welfare
- ...Australia - National Male Health Policy

MIPA Framework: UNESCAP Review

1. Older persons and development

Participation

A majority of countries have action plans, programmes or committees dedicated to facilitate the older persons participation in decision-making (consultative bodies and/or involvement in national plans on ageing).

Employment

Though many countries have introduced actions to promote employment of older persons, 30% did not take any specific measures.

Social protection

Retirement protection is only available in a few member states.

Universal Health Coverage only available in very few countries (Australia, Japan, New Zealand, The Republic of Korea, Sri Lanka, Thailand) with efforts ongoing in China, The Philippines for example.

ESCAP - 2012

MIPA Framework: UNESCAP Review

2. Advancing health and wellbeing into old age

Health promotion

80% of member states have policies, programmes or plans to ensure provision of accessible and affordable health-care services – UHC or specific health care schemes.

Geriatric and gerontology training

Geriatric and gerontology training for health care providers receives substantial budget allocation from member states. Some countries provide life-long learning through vocational training (**Australia, Bangladesh, China, New Zealand**).

Self-care and support systems

Integrated care service delivery models supporting older persons living at home pioneered by **New Zealand (e.g Canterbury district)**; **Thailand** has established elderly clubs.

ESCAP - 2012

MIPA Framework: UNESCAP Review

3. Ensuring enabling and supportive environments

Ageing in place

Only a limited number of countries have identified policies or programmes to enable older persons remain in their homes. However, several members have programmes focusing on providing housing to the elderly.

Mobility and transport

Growing trend for provisions related to affordable and accessible transportation such as discounts, special fares, priority seating, etc. Often linked to persons with disabilities programmes/policies.

Accreditation programmes for caregivers

Only a few countries have an accreditation system, though most have standards in place for residential care services.

ESCAP - 2012

WHO is committed to support Member States in addressing ageing and health

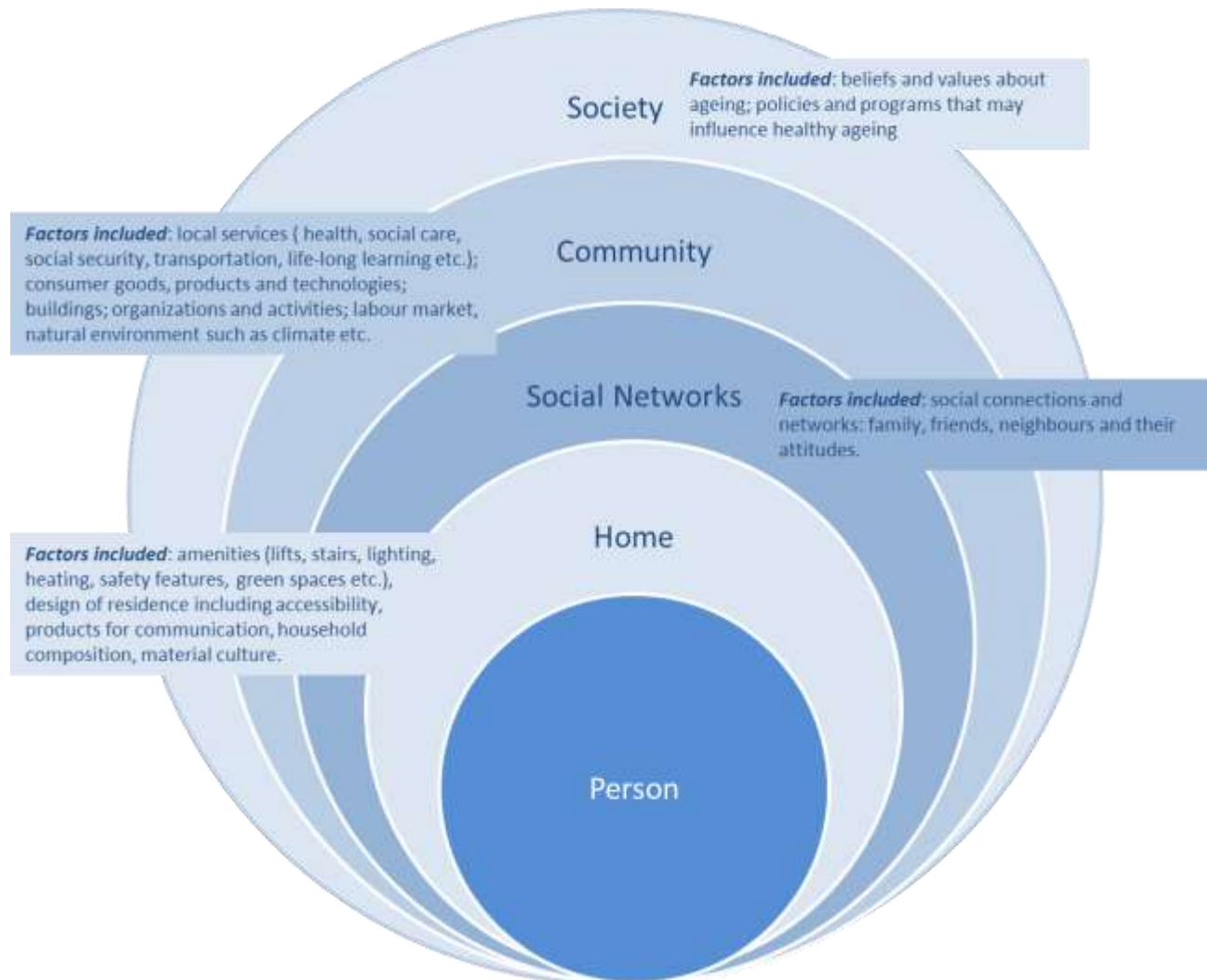
1. New WHO World Report on Ageing (2015)
2. WPRO Regional Framework for Action on Ageing and Health in the Western Pacific (2014-2019)
3. WHO Kobe Centre: UHC, Innovation and Ageing Populations
 - a. Urban environment
 - b. Measurement: Urban HEART and AFC indicators, J-AGES collaboration
 - c. Innovation: technology, social
4. Selected WHO initiatives
 - a. Age Friendly Cities
 - b. GATE Initiative
 - c. Dementia Ministerial
 - d. UHC – integrated person-centred health, HRH, etc

WHO Active Ageing Framework

Figure 8. The determinants of Active Ageing

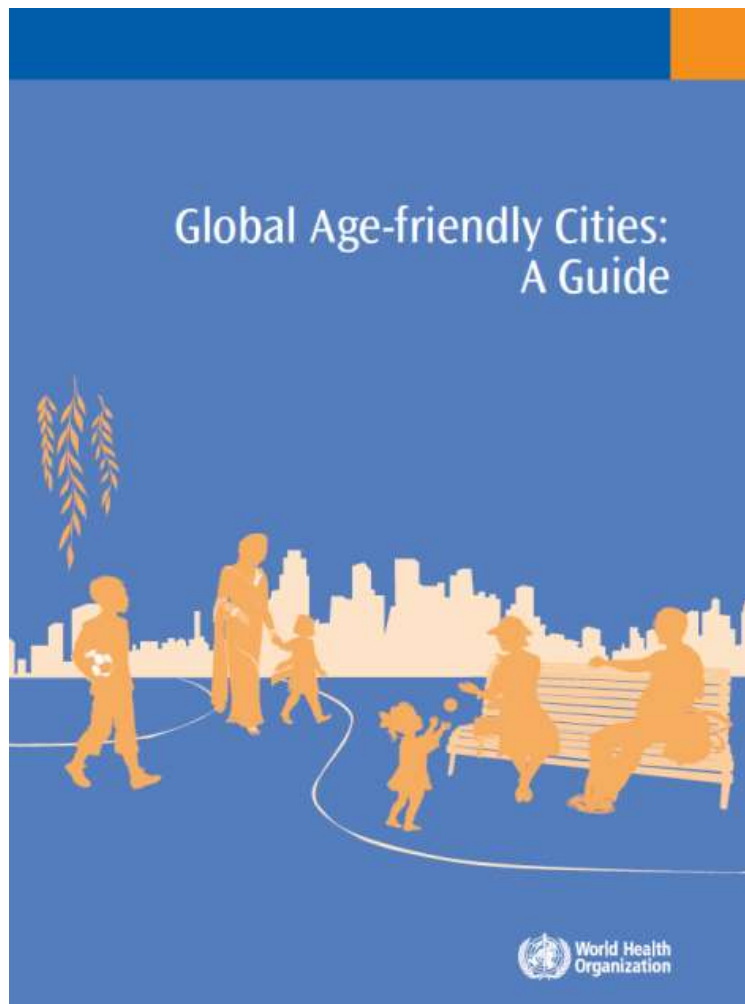


WHO: Environments of healthy ageing and related factors



Age-friendly Cities

Create conditions for a flourishing older life



Civic participation and employment

Respect and Social Inclusion

Social participation

Outdoor spaces and buildings

Housing

Communication and information

Transportation

Community and health services

Age-friendly Cities Initiatives in China

- **National law** on protecting the rights of the elderly added a new chapter on ***Age-friendly Environments***
- Develop **national accessibility standards** and criteria for public spaces and facilities
- Facilitate the creation of age-friendly infrastructure, facilities and services
- Piloting AFC and “**barrier-free cities**”

Source: China National Committee on Ageing, 2013

“Ageing in Place” in Singapore

- Focus on older people who cannot live with their family or who would like to live independently
- Home modifications and new homes with structural features such as lifts, non-slip bathrooms, corridor railing, wheelchair access
- Government maintains focus on traditional family roles and structures to increase fertility rates and support the growing elderly population (e.g. Maintenance of Parents Act)

Source: Wen WK. Futures of ageing in Singapore. *Journal of Futures Studies*, 2013, 17(3): 81-102.

WHO Western Pacific Regional Office



Regional Framework for Action on Ageing and Health in the Western Pacific (2014-2019)



Innovation:

Integrated, person-centred communities & systems

Key Innovation Needs

- Complex needs, great variation: individual, communities; inequities; functional/cognitive dependent
- Integrated health and social delivery systems: easier said than done
 - Focus on the individual and their needs
 - Comprehensive assessments
 - Coordinated care/support
 - Focus on bureaucratic cultures, financing, incentives
 - Human resources for health and social services
 - Informal care (family) support
 - Differentiated services, location, access, providers
- Measuring impact

Japan: Older adults' priorities concerning housing and living environment, 2005, 2010

Cabinet Office, Government of Japan. <http://www8.cao.go.jp/kourei/ishiki/h22/sougou/zentai/>

Accessible home features (handrails, barrier-free)

Access to public transportation and shopping

Access to healthcare and long-term care

部屋の広さや間取り、外観が自分の好みに合うこと

子どもや孫などの親族と一緒に住んだり、または近くに住めること

災害や犯罪から身を守るための設備・装置が備わっていること

豊かな自然に囲まれていたり、静かであること

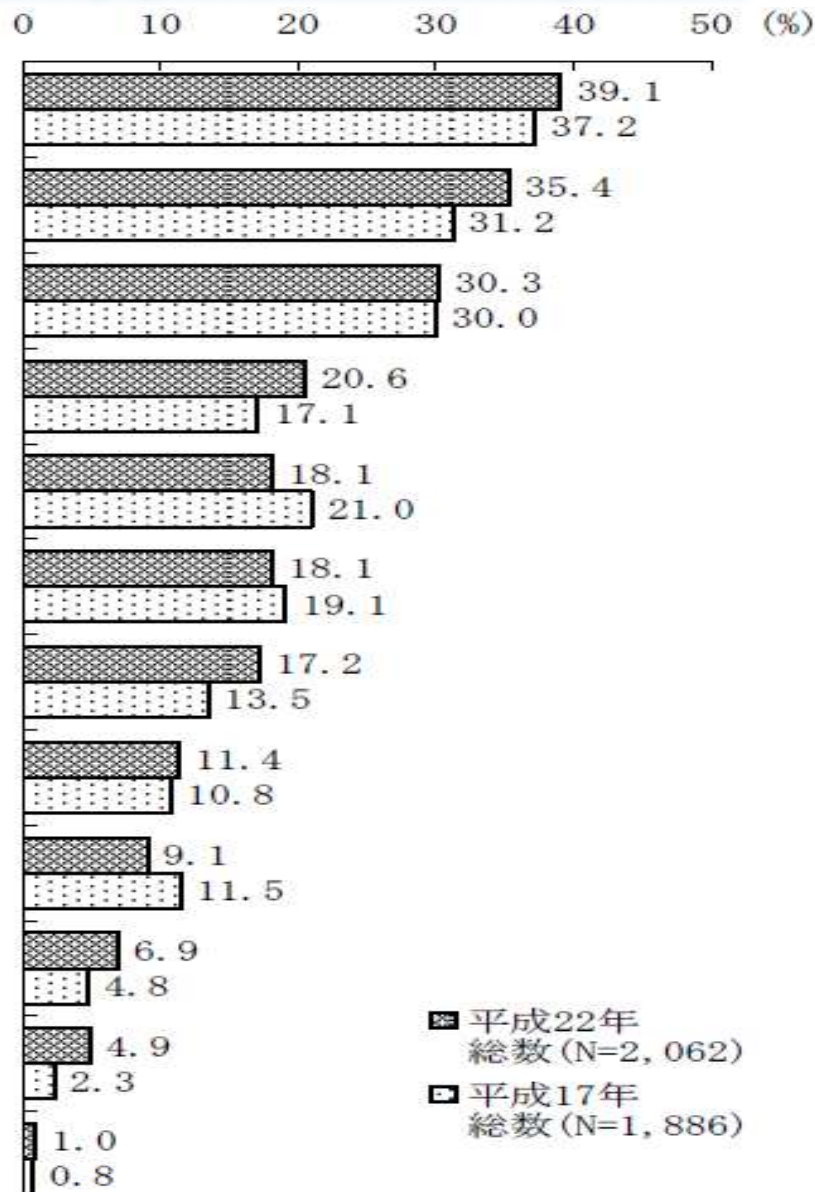
近隣の道路が安全で、歩きやすく整備されていること

親しい友人や知人が近くに住んでいること

趣味やレジャーを気軽に楽しめる場所であること

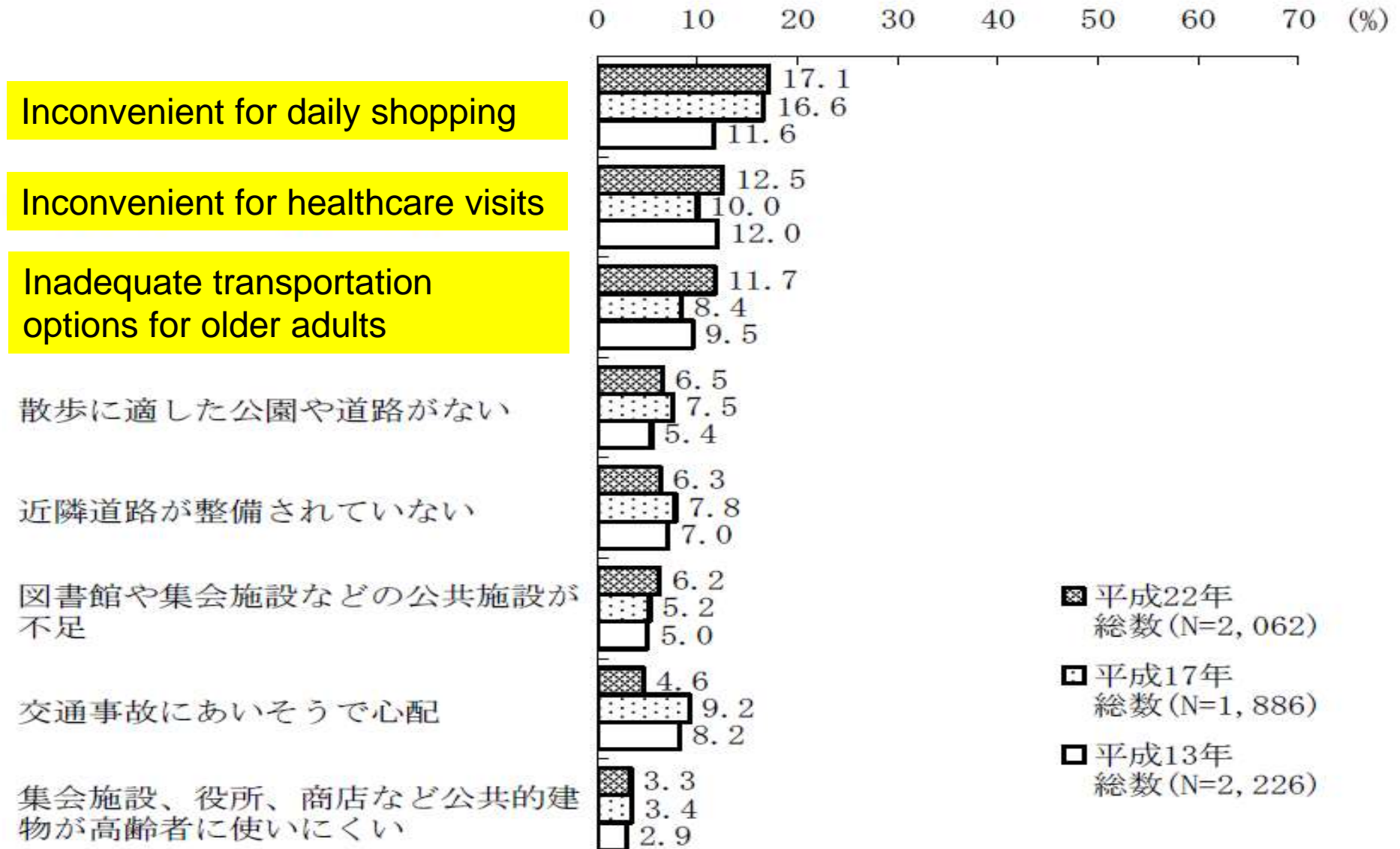
ペットと一緒に暮らせること

職場に近かったり、現在の職業に適した場所に面していること



Japan: Older adults' main problems with neighbourhood environment, 2001, 2005, 2010

Cabinet Office, Government of Japan. <http://www8.cao.go.jp/kourei/ishiki/h22/sougou/zentai>



Health Needs

- Under-nutrition
- NCDs: tobacco, hypertension, physical exercise, diet, alcohol over-use, poor social engagement
- Frailty, sarcopenia
- Cognitive impairment
- Sensory impairment
- Multiple morbidities
- Mental health, stress

Community interventions

- Information dissemination
- Physical exercise, nutrition programmes
- Comprehensive case management
- Inclusion of older persons in programmes
- Self-care
- Volunteers
- Changing attitudes, reduce stigma
- Learning programmes

Urban planning and environment

- Purposeful urban planning: older person “lens”
 - Spatial planning for integrated services, housing, transport, exercise, social connectivity
- Built environment: housing, transport modification
- Safety, walkability
- Sight/hearing/mobility impairments
- Equity and affordability
- Local government: intersectoral engagement
- Supporting social inclusion

Social Care

- ADL/IADL based + comprehensive needs assessment
- Respite care
- Informal caregivers
- New workforce needs: training
- Quality
- Reduce fragmentation
- Stigma, ageism
- Women and workforce

Integration

- Bureaucratic & professional cultures
 - Different funding streams, eligibility & entitlements
 - Different training, standards, culture, salaries
- Financing, incentives
- Differentiation of needs: social, health (acute, chronic, pain management), palliative care and rehabilitation, dementia
- Disability and ageing communities
- Silo mentality → coordination of services/care; referral
- Health and social worker training: cadres, training, incentives, payments for informal carers, etc
- Home based vs short stay vs long term care (residential)

Health vs social care in England

National Health Service

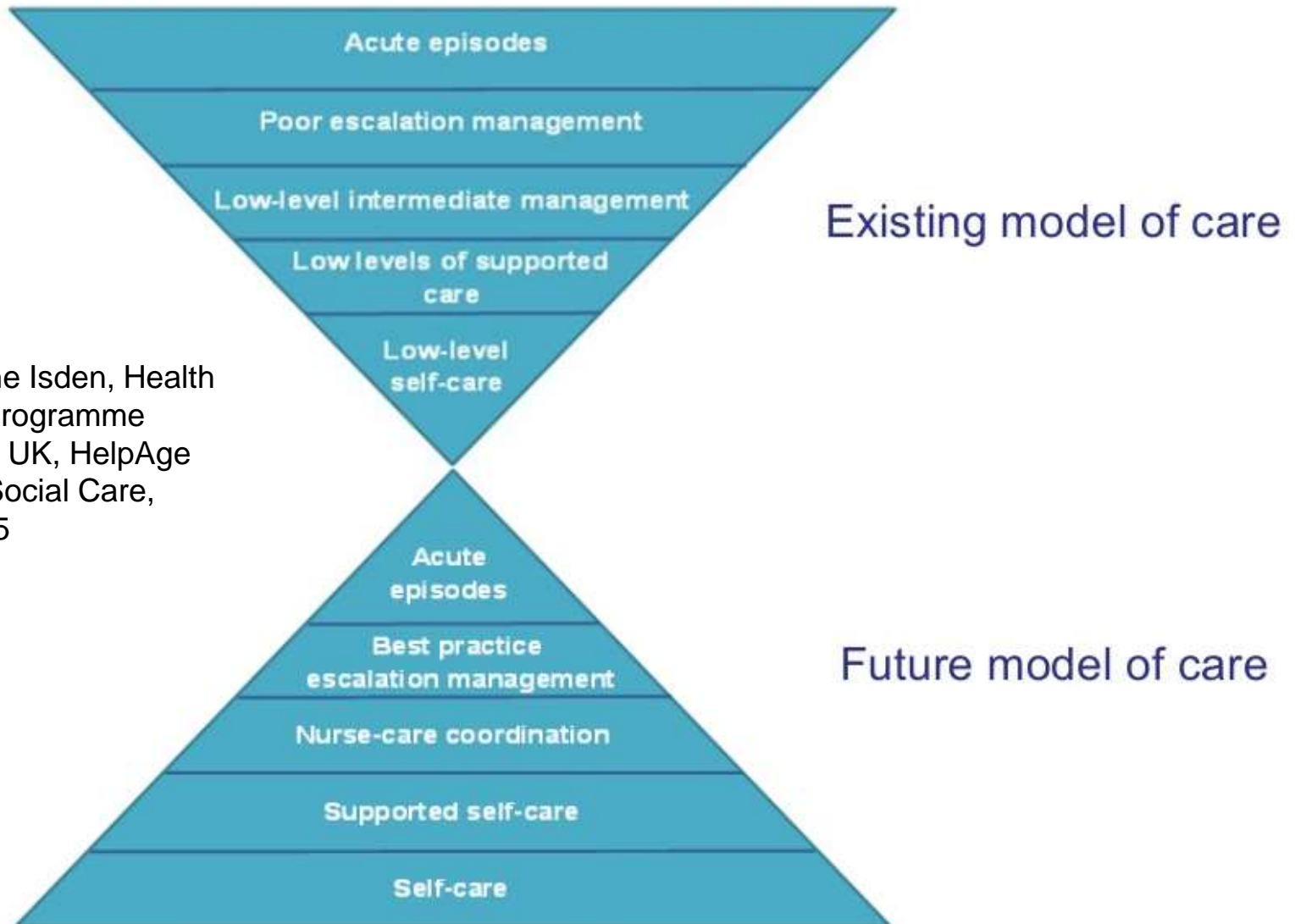
- Provides primary, secondary and tertiary healthcare services
- Free at the point of need
- Comprehensive, universal services
- Fully funded through general taxation
- Locally commissioned, but within a clear national system
- Fairly little local variation in services provided

Care and support

- Provides care in care homes, in day facilities and in people's home
- Means-tested and needs-tested at point of need
- Local councils set local criteria and commission care
- Far fewer national rules or guide lines
- Huge geographical variation in types of services, funding and rules

Source: Ruthe Isden, Health Influencing Programme Director, Age UK, HelpAge Meeting on Social Care, January 2015

Making the change....



Source: Ruthe Isden, Health Influencing Programme Director, Age UK, HelpAge Meeting on Social Care, January 2015

Policies

- Income security, pension: social protection
- Financing: social, health insurance + alignment
 - Equity protections
- Access to services (health and social)
- Integrated planning and strategies
- Inclusion of older persons
- Elder abuse
- Built environment (zoning laws, housing, transport...)
- Guidelines/standards: quality, NCDs,

Examples

- Thailand:

- a) Promote healthy individual and self care (physical and mental)
- b) voluntary social activities and income generation
- c) self care and family care at home + home visits
- d) family care at home, integrated health and social care; third party care (volunteers, CHW)
- e) home improvements

- Korea:

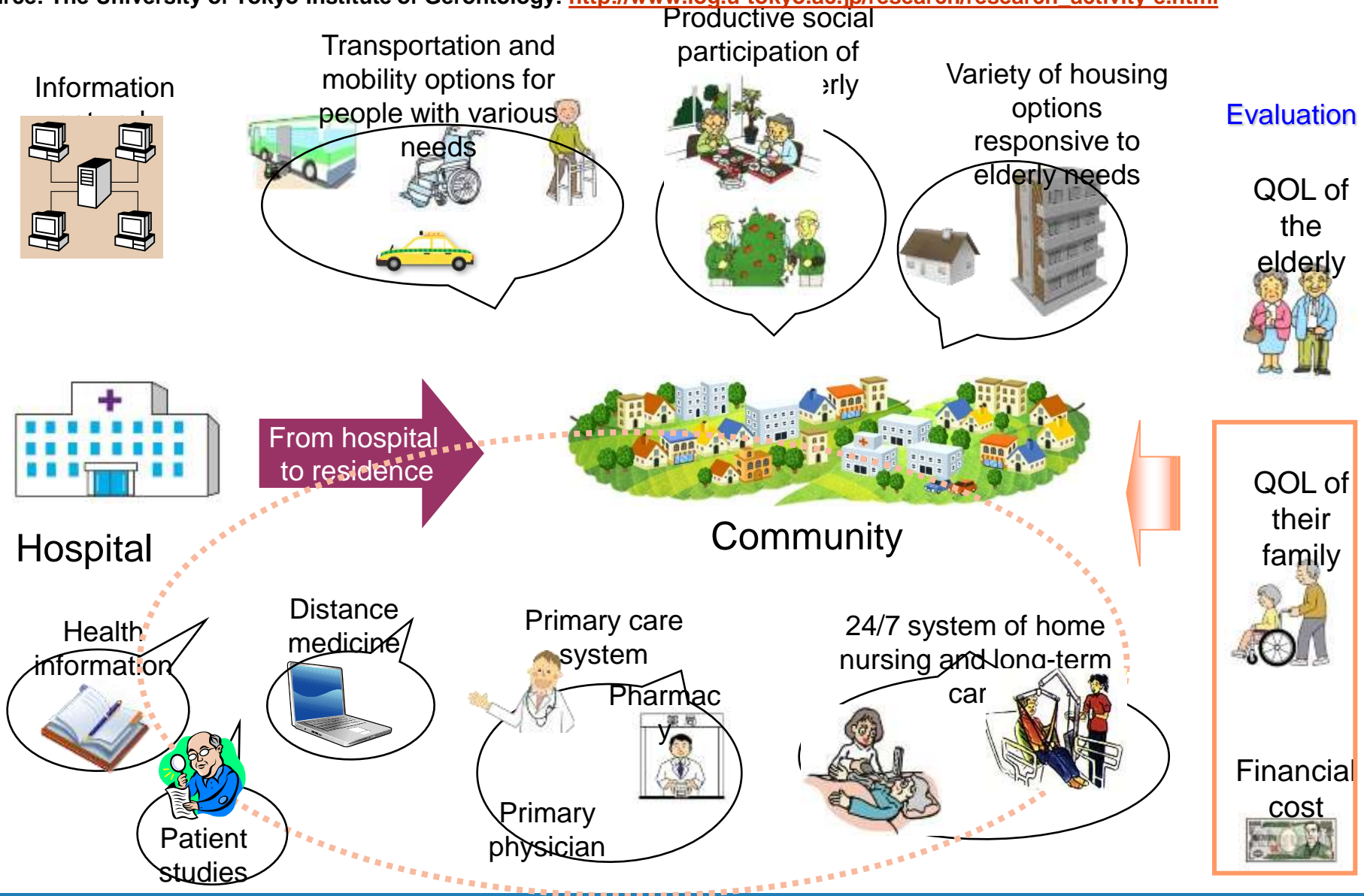
LTC insurance (eligibility criteria);

Integrated system of individual needs assessment + home care + domestic support + day care services + spatial planning

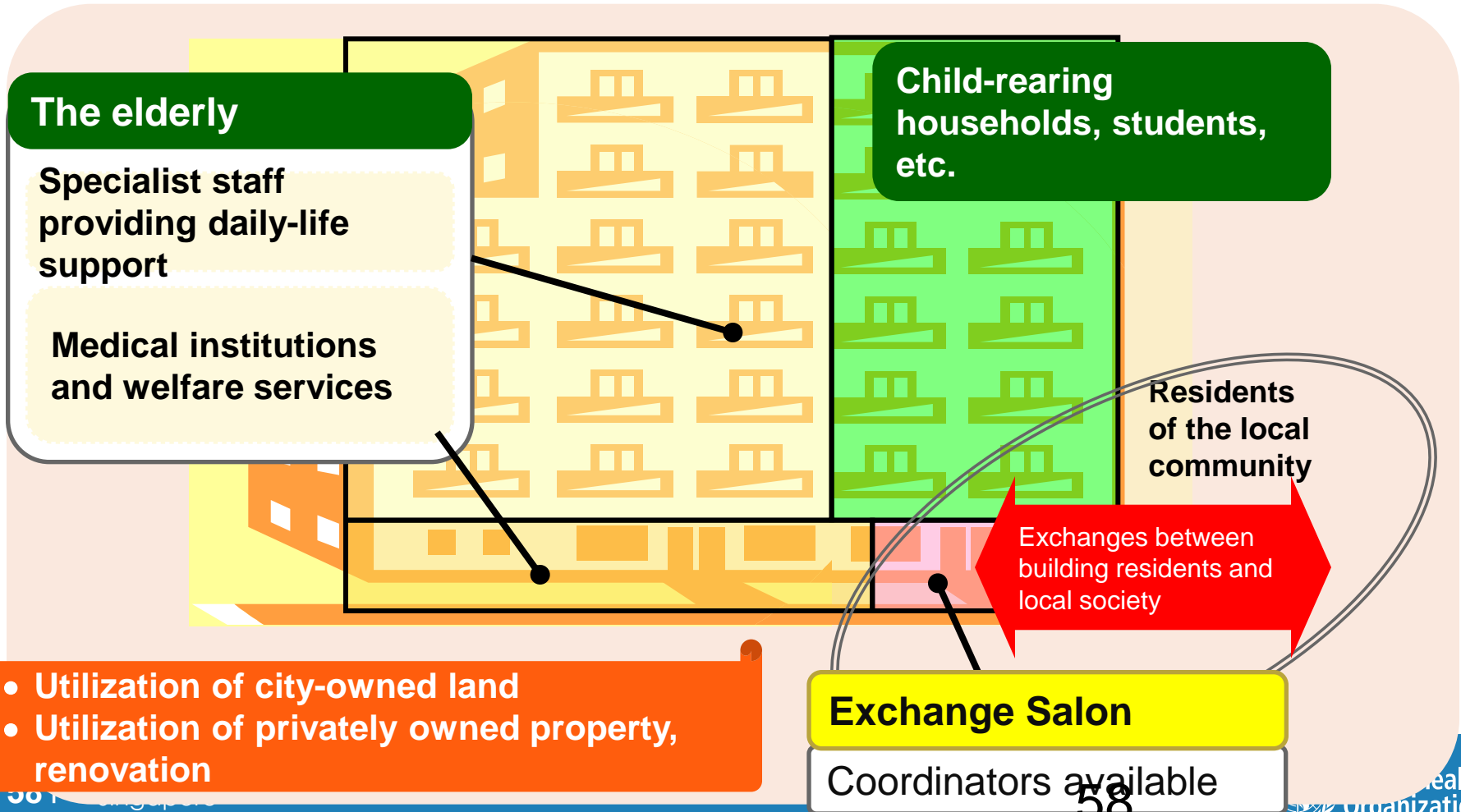
Example of research: for Aging in Place: A community-based social experiment (University of

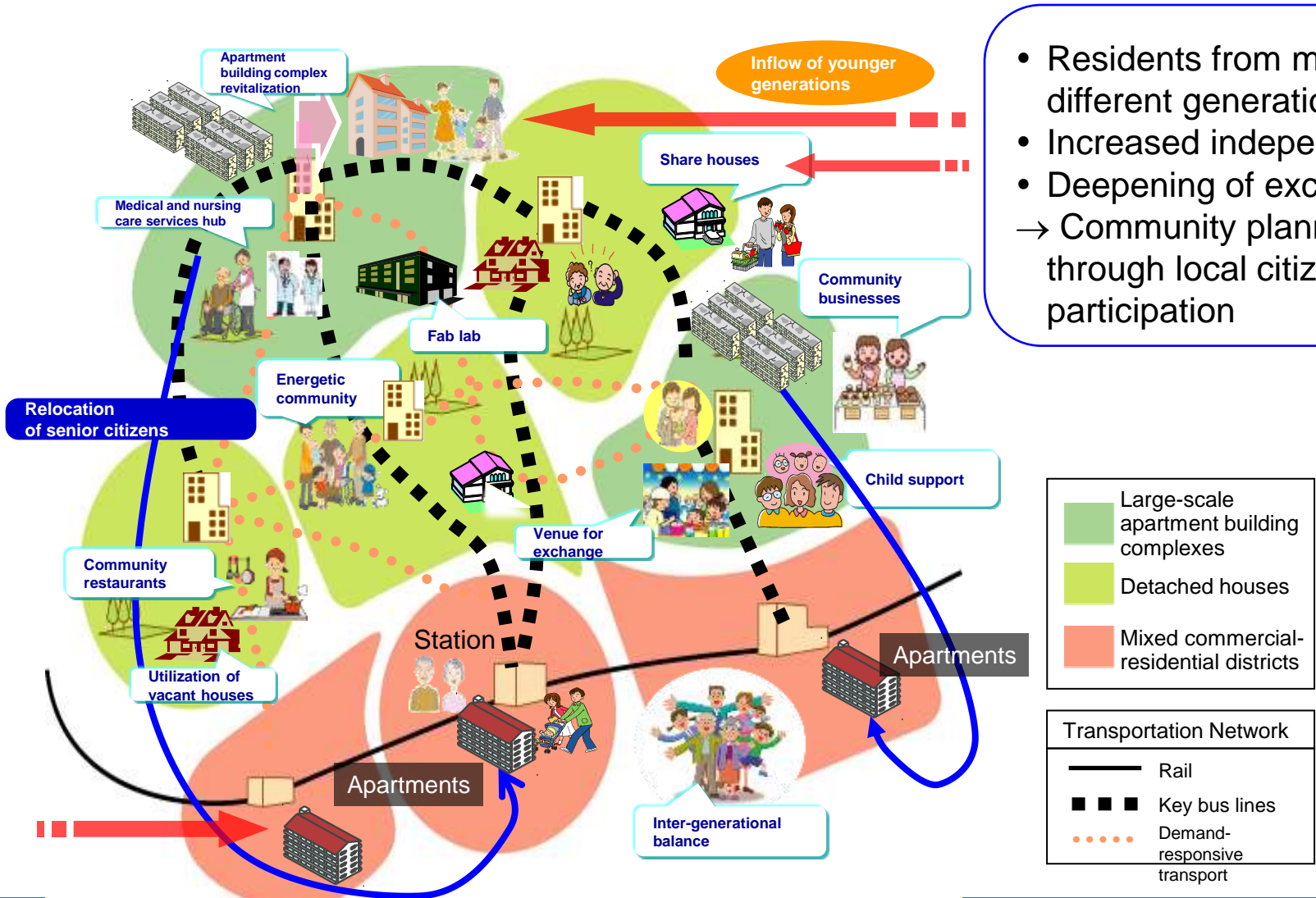
Tokyo Institute of Gerontology)

Source: The University of Tokyo Institute of Gerontology: http://www.ioq.u-tokyo.ac.jp/research/research_activity-e.html



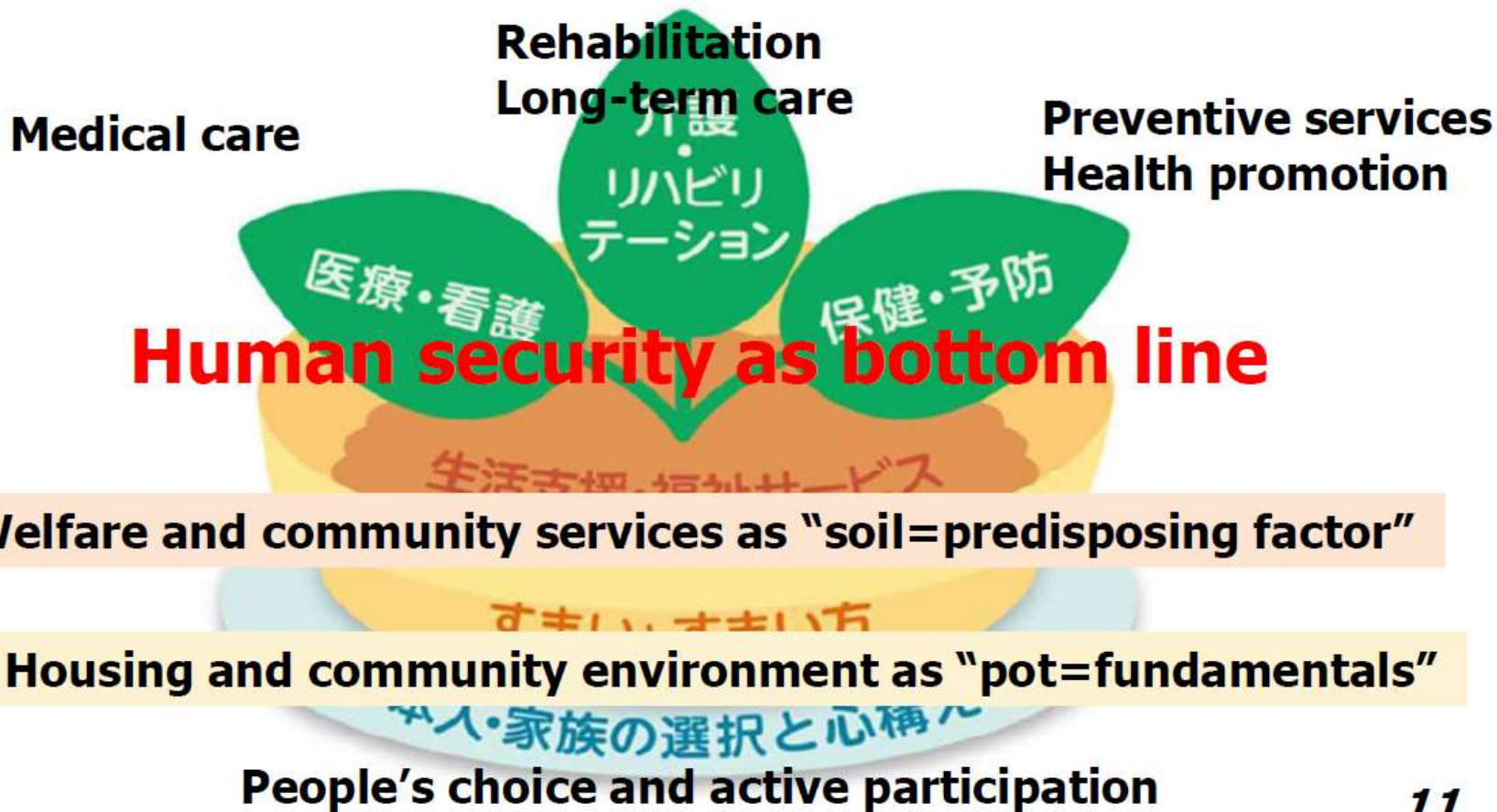
Deepening of independently initiated exchanges between numerous generations
 → Apartment complexes whose residents mutually support each others' lives





- Residents from many different generations
 - Increased independence
 - Deepening of exchanges
- Community planning through local citizen participation

Integration of healthcare, welfare, and community programs (“Three-leaves and pot” model)



Source: Prof Hideki Hashimoto, Department of Health and Social Behaviour, University of Tokyo, Presentation at PMAC2015 Side Event

Role of Older Persons' Associations

- Older Person's Association (OPA) Cambodia
 - 60 associations with 14,000 members (as of 2010)
 - Social/peer support, food security, livelihoods, healthcare, homecare for older people and formation of older people's associations
- PUSAKA Indonesia
 - 110 in Jakarta alone (50-60 people per Pusaka)
 - Focus on disadvantaged older people, the majority widows or other vulnerable women
 - Home-based care including meals, home visits, routine health check-ups, religious guidance, clothing, social/exercise activities, support accessing clinics/health centres

Assistive Health Technology (AHT) Knowledge & Science on Assistive Health Products (AHP)

Eyeglasses to supportive robots



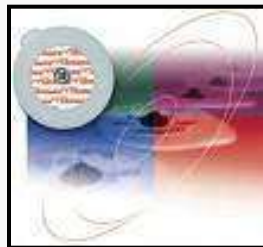
Ecosystem of Patient-Centered Technologies

Patient Education and Support



Remote Patient Monitoring

Medication Management



Social Networks

Apps and Gaming



Personal Health Records

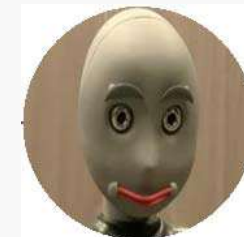
Provider and Caregiver Communications

Sensors



mHealth

Mood and Depression Scanners



Assistive Technologies

Emerging evidence base

1. Innovations in assistive and medical technologies –

Understanding needs, setting priorities

2. Social innovations –

Assessing the usefulness of new models of care for older populations

SURVEY OF NEEDS FOR ASSISTIVE AND MEDICAL DEVICES FOR OLDER PEOPLE IN SIX COUNTRIES OF THE WHO WESTERN PACIFIC REGION

China, Japan, Malaysia, the Philippines, the Republic of Korea and Viet Nam



Systematic review of needs for medical devices for ageing population

Commissioned to the Australian Safety and Efficacy Register of New Interventional Procedures - Surgical (ASERNSIP) by the World Health Organization (WHO)



Summary Report: Consultation on Advancing Technological Innovation for Older Persons in Asia

20-22 February 2015
World Health Organization
Geneva, Switzerland
WHO/UNESCO
Geneva, Japan



Systematic review commissioned by the World Health Organization
The Needs, Availability and Affordability of Assistive Devices for Older People in
8 Countries in the Asia Pacific Region:
Australia, China, Fiji, Japan, Malaysia, Republic of Korea and Vietnam.

"Higher disability prevalence at older ages, combined with an ageing population ... will require a comprehensive strategic approach and future policy actions that simultaneously address both equity and quality-related concerns" (UNISCAP 2012).

by
et.

Report WHO Global Forum on Innovations for Ageing Populations

10-12 December 2013 Kobe, Japan



KEY WHO REPORTS

<http://www.who.int/en>

and

<http://www.who.int/kobe-centre/en/>

SURVEY OF NEEDS FOR ASSISTIVE AND MEDICAL DEVICES FOR OLDER PEOPLE IN SIX COUNTRIES OF THE WHO WESTERN PACIFIC REGION

China, Japan, Malaysia, the Philippines, the Republic of Korea and Viet Nam



Commissioned by Melbourne Australia and the Royal Australian College of Surgeons by the World Health Organization (WHO)

Evaluate the health equity impact of policy and action:

Is it making a difference? Why or why not?



We need data

Photo Source: University of Ouagadougou, ISSP

AFC Core Indicators (Draft)

Equity Measures

Inequality between two reference groups

Population attributable risk

Age-Friendly Environment Outcomes

Physical environment

Neighbourhood walkability

Accessibility of public spaces and buildings

Accessibility of public transportation vehicles

Accessibility of public transportation stops

Affordability of housing

Social environment

Positive social attitude toward older people

Engagement in volunteer activity

Engagement in paid employment

Engagement in socio-cultural activity

Participation in local decision-making

Availability of information

Availability of health and social services

Economic security

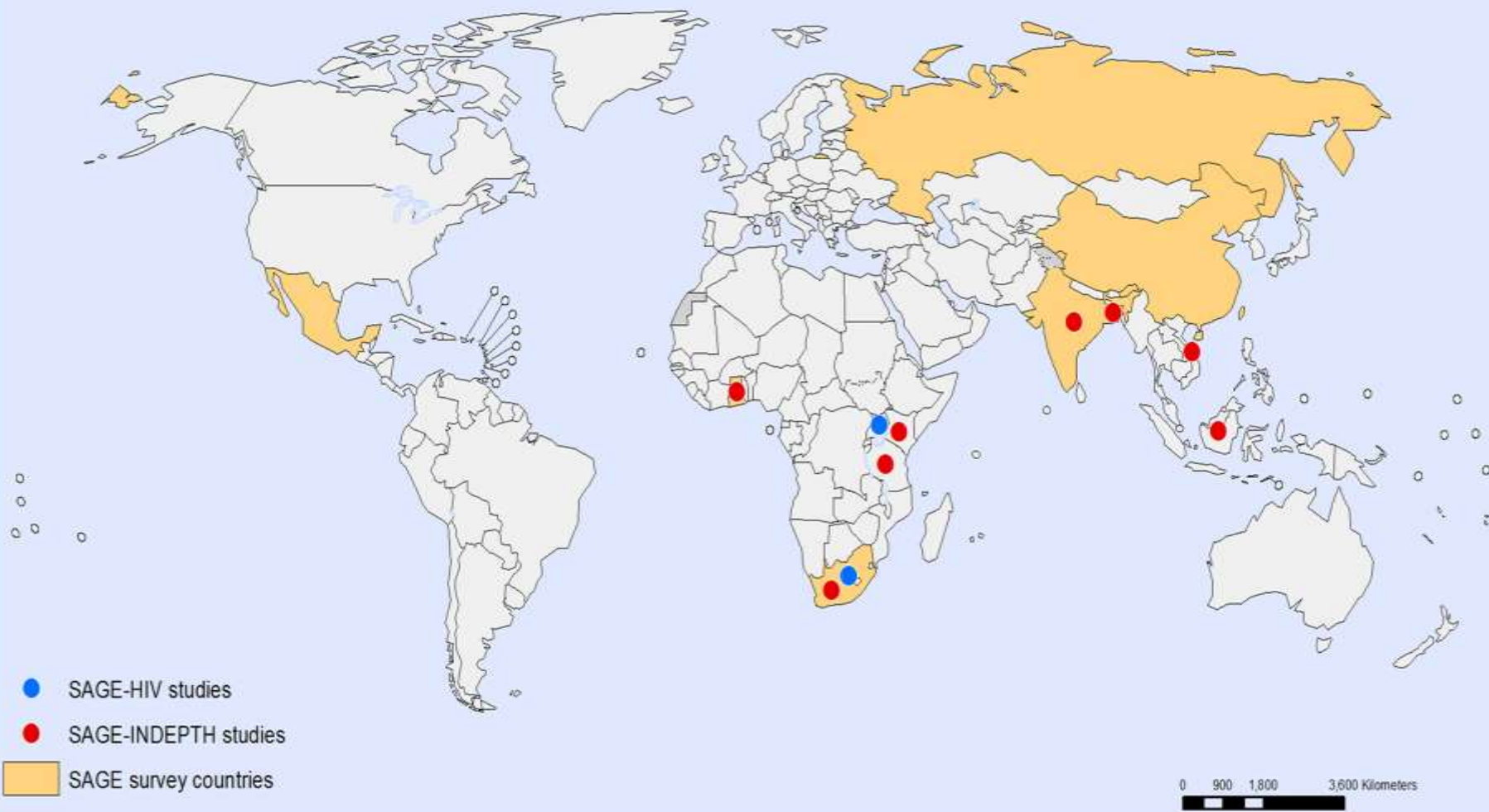
Impact on Wellbeing

Quality of life

Measures of social capital

- Community involvement and social networks
- Perceptions of other people and institutions
- Safety in local area
- Interest in politics and perceptions of government
- Family, community and government assistance into and out of the household
- Informal personal care provision/receipt

WHO Study on global AGEing and adult health (SAGE) collaborating countries



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization
Map Production: Public Health Information
and Geographic Information Systems (GIS)
World Health Organization



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SAGE Indicators

Household measures

- Roster of all the individuals in the household
- Household health intervention coverage
- Health insurance
- Health expenditure
- Indicators of permanent income
- Health occupations

Individual measures

- Socio-demographics
- Health state description
- Health state valuation
- Risk factors
- Mortality
- Coverage of health interventions
- Health system responsiveness
- Health system goals and social capital
- Interviewer observations

National surveys of health and ageing

- Korean Longitudinal Study on Ageing (KLoSA)
- China Health, Ageing & Retirement Longitudinal Study (CHARLS)
- Japanese Study of Ageing & Retirement (JSTAR)
- Longitudinal Ageing Study in India (LASI)
- Pilot Panel Survey and Study on Health, Aging, and Retirement in Thailand (HART)
- Indonesian Family Life Survey (IFLS)
- East Asian Social Survey (EASS) – China, Japan, Korea, Taiwan

URBAN HEART

User-friendly guide to identify and act on health inequities

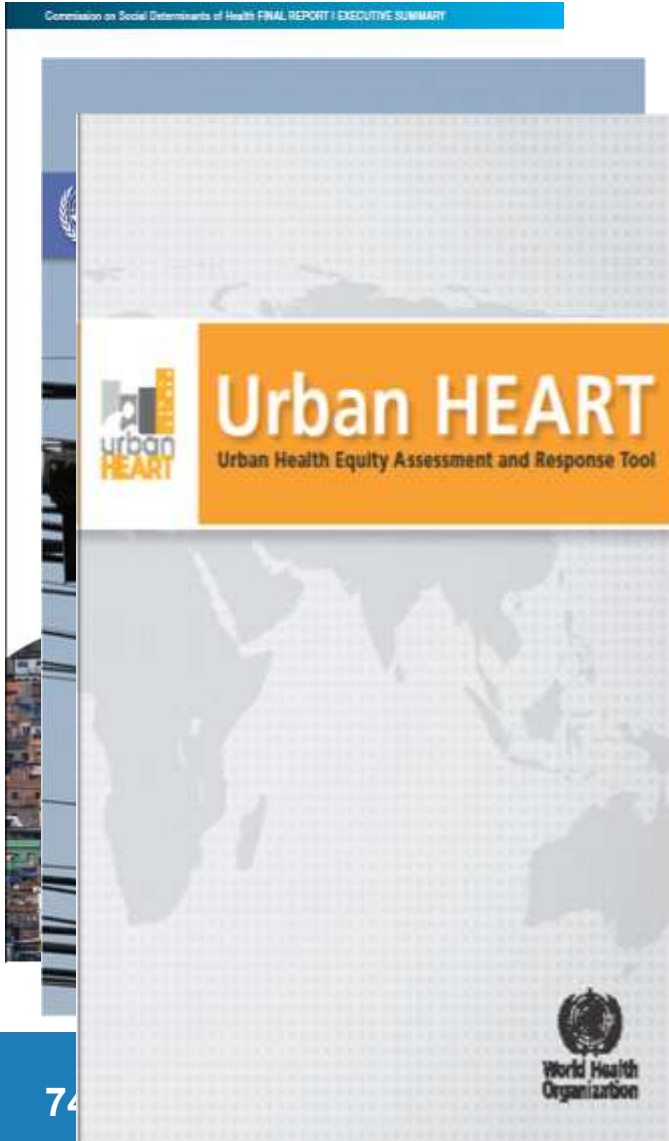
Assessment: an indicator guide

Response: guide to best practices

Target audiences

Local/national
authorities

Academia and
communities



URBAN HEART

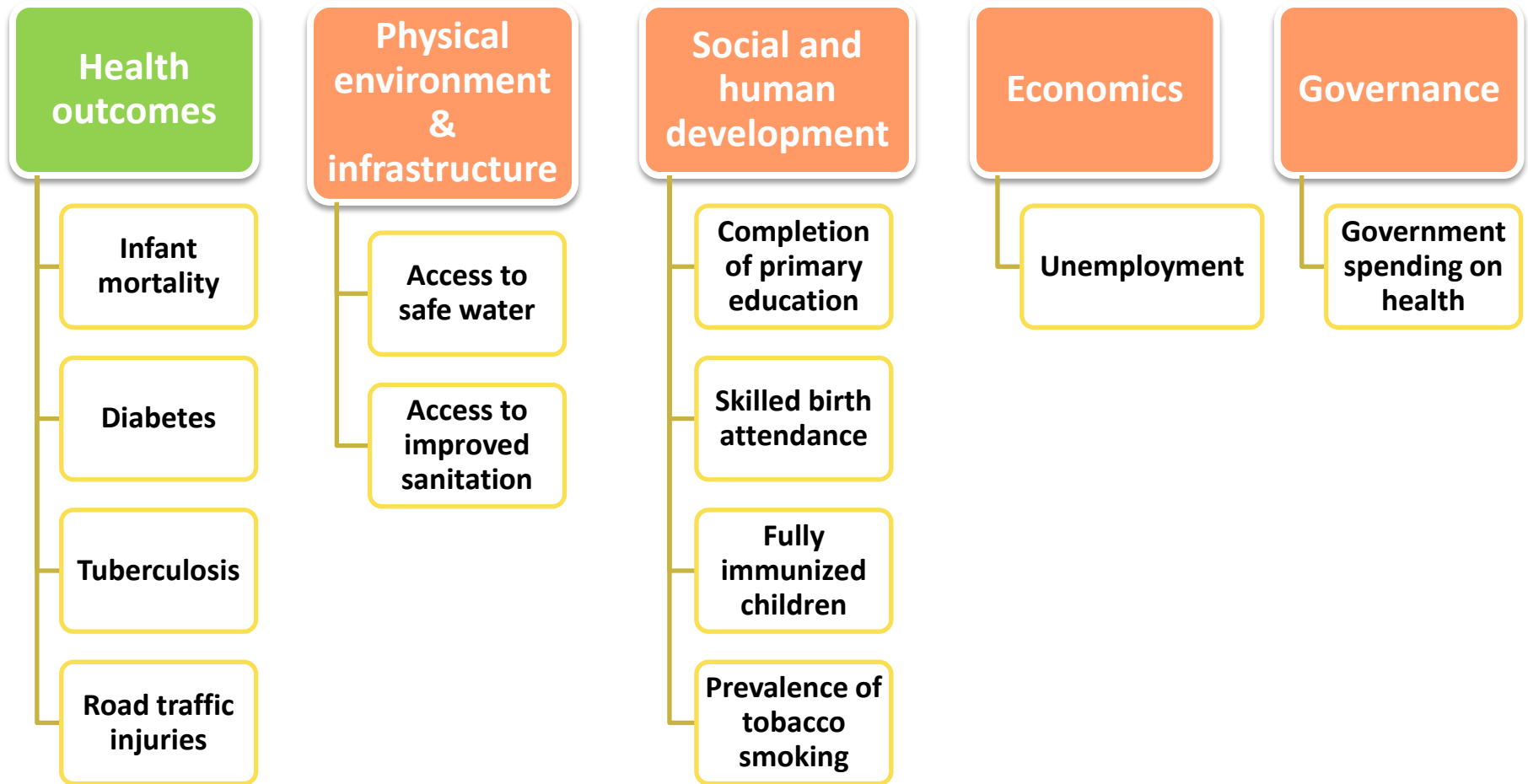
SOME CITY EXPERIENCES: TORONTO (CANADA)



| Neighbourhood | ID | Unemployment | Low Income | Social Assistance | High School Graduation | Marginalization | Post Secondary Completion | Municipal Voting V1 | Community Places for Meeting | Walk score | Healthier Food Stores | Green Space | Premature Mortality | Mental Health | Preventable Hospitalizations ACSCH V2 | Diabetes | R | Y |
|-------------------------------------|-----|----------------------|------------|-------------------|------------------------------|-----------------|---------------------------|---------------------|---------------------------------------|------------|-----------------------|-------------|---------------------|---------------|---------------------------------------|----------|----|----|
| Domains | | Economic Opportunity | | | Social and Human Development | | | Governance | Physical Environment & Infrastructure | | | | Population Health | | | | | |
| Reds | | 28 | 24 | 26 | 27 | 28 | 46 | 24 | 28 | 22 | 29 | 28 | 23 | 24 | 43 | 44 | | |
| Yellows | | 75 | 74 | 53 | 87 | 57 | 36 | 82 | 79 | 101 | 81 | 86 | 68 | 66 | 54 | 56 | | |
| Greens | | 37 | 42 | 61 | 26 | 55 | 58 | 34 | 33 | 17 | 30 | 26 | 49 | 42 | 43 | 40 | | |
| Toronto City | | 9.3 | | | N/A | 2.4 | 68.9 | 45.7 | 15 | 71 | 3.9 | 45.5 | 211.1 | 73.4 | 243.8 | 8.5 | | |
| High Income Range | | 5.0-17.1 | 5.0-17.1 | 0.0-29.0 | Low/Ave/Hi | 1.0-3.4 | 37.5-91.7 | 34.5-58.3 | 3.4-39.9 | 42-99 | 0.47-22.3 | 11.3-19.5 | 118.0-573.0 | 47.4-96.8 | 79.3-608.7 | 4.1-14.0 | | |
| Agincourt North | 129 | 11.3 | 25.8 | 6.4 | Hi | 2.6 | 57.2 | 39.1 | 5.6 | 66 | 3.55 | 27.6 | 139.2L | 61.1 | 163.3L | 9.5H | 4 | 7 |
| Agincourt South-West | 128 | 10.7 | 27.1 | 7.0 | Ave | 2.6 | 60.6 | 41.7 | 9.6 | 66 | 3.22 | 22.2 | 161.9L | 70.4 | 183.6L | 9.5H | 2 | 10 |
| Bridlewood | 20 | 7.4 | 10.1 | 4.3 | Ave | 2.0 | 63.5 | 47.9 | 7.5 | 70 | 0.62 | 30.6 | 256.9H | 80.0 | 294.0 | 8.5 | 3 | 7 |
| Annex | 95 | 7.3 | 19.1 | 3.9 | Ave | 1.8 | 65.0 | 49.8 | 25.7 | 94 | 7.62 | 21.5 | 234.1 | 73.3 | 235.7 | 5.5L | 1 | 6 |
| Banbury-Don Mills | 42 | 7.1 | 14.0 | 3.8 | Hi | 2.4 | 80.7 | 50.4 | 6.2 | 67 | 1.37 | 56.8 | 163.5L | 78.7 | 137.3L | 6.5L | 1 | 5 |
| Bathurst Manor | 34 | 7.8 | 17.5 | 6.6 | Ave | 2.6 | 72.9 | 44.8 | 13.2 | 61 | 1.56 | 91.6 | 148.3L | 78.7 | 173.7L | 8.5 | 0 | 9 |
| Bayview-Cummer | 37 | 9.3 | 26.7 | 3.5 | Ave | 2.2 | 82.2 | 39.7 | 20.1 | 99 | 12.98 | 23.5 | 294.2H | 85.4H | 163.7L | 5.1L | 2 | 4 |
| Bayview Village | 38 | 8.4 | 21.1 | 3.5 | Hi | 2.4 | 83.4 | 54.8 | 6.4 | 71 | 1.07 | 52.5 | 127.5L | 64.5 | 169.9L | 6.0L | 2 | 6 |
| Bayview Woods-Steeles | 49 | 10.4 | 23.0 | 4.9 | Hi | 2.6 | 81.7 | 42.2 | 5.0 | 57 | 0.79 | 84.1 | 158.7L | 84.3 | 161.1L | 7.1L | 3 | 4 |
| Bedford Park-Nortown | 39 | 6.3 | 11.2 | 2.1 | Ave | 1.6 | 80.1 | 47.0 | 10.4 | 73 | 5.32 | 17.5 | 119.1L | 87.0H | 99.5L | 5.6L | 1 | 5 |
| Beechborough-Greenbrook | 112 | 11.6 | 28.6 | 22.8 | Low | 3.4 | 41.6 | 39.6 | 19.1 | 62 | 3.38 | 39.2 | 306.7H | 65.7E | 324.5 | 12.5H | 10 | 5 |
| Bendale | 127 | 10.5 | 23.6 | 9.8 | Ave | 3.0 | 61.0 | 45.9 | 10.3 | 64 | 3.23 | 46.7 | 215.3 | 76.1 | 249.5 | 11.5H | 3 | 12 |
| Birdhill-Cityville | 122 | 10.6 | 14.5 | 8.2 | Ave | 1.8 | 65.8 | 53.1 | 10.6 | 71 | 1.76 | 35.4 | 317.6H | 78.4 | 345.8H | 8.2 | 2 | 9 |
| Black Creek | 24 | 13.6 | 33.5 | 29.1 | Low | 3.0 | 40.9 | 45.0 | 16.8 | 62 | 1.70 | 64.1 | 228.3 | 58.4L | 315.6H | 12.7H | 9 | 6 |
| Blake-Jones | 69 | 9.6 | 28.6 | 13.1 | Ave | 2.6 | 67.2 | 51.1 | 30.1 | 89 | 5.70 | 17.6 | 301.1H | 58.0E | 248.9 | 8.1 | 4 | 10 |
| Brimley-Hill-Belgravia | 108 | 7.8 | 20.6 | 10.0 | Ave | 2.8 | 65.1 | 44.6 | 13.5 | 81 | 6.03 | 15.8 | 205.0 | 65.2E | 236.1 | 9.0H | 1 | 13 |
| Bridle Path-Sunnybrook-York Mills | 41 | 5.8 | 8.0 | 0.4 | Hi | 1.4 | 89.1 | 43.1 | 4.5 | 58 | 0.90 | 59.8 | 147.1L | 88.9H | 153.7L | 4.5L | 3 | 2 |
| Broadview North | 57 | 10.9 | 22.0 | 11.3 | Low | 2.6 | 70.2 | 51.7 | 18.5 | 74 | 7.78 | 48.8 | 229.5 | 64.7E | 252.4 | 7.9L | 1 | 12 |
| Brookhaven-Amesbury | 30 | 9.7 | 26.2 | 19.2 | Ave | 2.8 | 59.3 | 42.4 | 15.2 | 62 | 4.22 | 38.2 | 225.4 | 82.9 | 299.1H | 11.5H | 4 | 10 |
| Cabbagetown-South St. James Town | 71 | 7.4 | 20.4 | 8.2 | Ave | 1.7 | 80.4 | 58.0 | 30.1 | 91 | 11.66 | 50.8 | 367.4H | 85.9H | 327.5H | 6.6L | 2 | 4 |
| Caledonia-Fairbank | 109 | 9.8 | 18.1 | 11.7 | Low | 2.4 | 44.3 | 37.6 | 15.6 | 69 | 4.61 | 36.0 | 222.9 | 67.3 | 214.0 | 10.6H | 4 | 11 |
| Case Loma | 96 | 6.0 | 11.0 | 1.8 | Ave | 2.0 | 87.1 | 53.5 | 16.4 | 80 | 2.48 | 31.0 | 179.7 | 90.0H | 196.9 | 4.6L | 0 | 6 |
| Centennial-Scarborough | 131 | 7.8 | 10.0 | 3.0 | Hi | 1.6 | 76.6 | 46.7 | 6.1 | 54 | 1.13 | 36.8 | 170.2L | 79.3 | 170.3L | 9.5H | 3 | 4 |
| Church-Yonge Corridor | 73 | 8.4 | 31.8 | 10.9 | Low | 1.8 | 82.1 | 47.8 | 26.8 | 98 | 12.38 | 22.3 | 352.0H | 81.7 | 281.7 | 6.5L | 4 | 4 |
| East-Brimley | 120 | 9.7 | 27.2 | 10.9 | Ave | 2.6 | 64.4 | 46.0 | 8.8 | 69 | 2.33 | 53.6 | 271.7H | 74.7 | 327.8H | 10.9H | 3 | 12 |
| Clanton Park | 33 | 7.5 | 17.5 | 5.0 | Hi | 2.2 | 78.0 | 42.0 | 13.6 | 63 | 3.89 | 27.1 | 176.8L | 81.0 | 196.4L | 8.7 | 0 | 9 |
| Cliffcrest | 123 | 9.1 | 16.7 | 8.5 | Ave | 2.2 | 63.6 | 50.7 | 3.7 | 54 | 0.92 | 44.6 | 253.2H | 81.1 | 245.2 | 9.5H | 3 | 10 |
| Corso Italia-Davenport | 92 | 10.0 | 16.3 | 9.4 | Low | 2.6 | 58.4 | 41.4 | 27.3 | 79 | 11.65 | 32.1 | 181.4 | 65.4 | 263.5 | 9.2H | 2 | 9 |
| Crescent Town | 61 | 16.2 | 35.5 | 16.9 | Low | 2.8 | 67.4 | 46.1 | 12.6 | 77 | 6.53 | 62.0 | 284.4H | 47.4EL | 324.8H | 10.9H | 8 | 6 |
| Danforth Village - Toronto | 66 | 6.5 | 14.2 | 6.6 | Ave | 2.4 | 71.8 | 50.7 | 23.7 | 86 | 7.46 | 13.3 | 258.2H | 64.6EL | 332.3H | 8.3 | 5 | 8 |
| Danforth East York | 59 | 7.0 | 16.7 | 6.3 | Ave | 2.0 | 69.1 | 55.8 | 18.5 | 77 | 6.75 | 18.5 | 225.7 | 58.1L | 272.9 | 8.5 | 2 | 8 |
| Don Valley Village | 47 | 11.1 | 25.4 | 8.0 | Ave | 2.4 | 77.5 | 41.0 | 14.9 | 79 | 1.36 | 37.8 | 146.1L | 71.9 | 156.1L | 7.6L | 2 | 10 |
| Dorset Park | 126 | 11.4 | 24.8 | 11.5 | Ave | 2.8 | 58.9 | 40.5 | 10.0 | 68 | 4.48 | 23.0 | 197.5 | 72.5 | 327.4H | 12.4H | 6 | 9 |
| Dovercourt-Wallace Emerson-Junction | 93 | 7.9 | 21.4 | 10.3 | Low | 2.4 | 60.8 | 44.8 | 34.6 | 88 | 10.06 | 19.1 | 225.2 | 62.1 | 276.8 | 9.5H | 4 | 9 |
| Downsview-Roding-CFB | 26 | 10.0 | 21.7 | 16.2 | Low | 3.0 | 50.1 | 41.7 | 12.2 | 59 | 2.21 | 64.5 | 225.6 | 67.4 | 230.8 | 10.8H | 6 | 8 |
| Dufferin Grove | 83 | 6.9 | 21.4 | 11.4 | Ave | 2.6 | 68.1 | 46.7 | 26.1 | 90 | 11.43 | 14.0 | 183.6 | 77.2 | 240.0 | 8.5 | 1 | 9 |

Toronto prioritized key health equity issues using Urban HEART across 140 neighbourhoods. Urban HEART is being used as a criteria to identify and monitor Neighbourhood Improvement Areas.

Urban HEART Core Indicators



URBAN HEART: Qualitative

SOME CITY EXPERIENCES: INDORE (INDIA)

| Slum → Sub-Indicator ↓ | Nandbagh | Ganesh Dham | Shivkantnagar | Avantika Nagar | Bajrangpura | Sugandhanagar | Jagannath Nagar | Pushp Nagar | New Prince Nagar | Prince Nagar | New Jagdesh nagar | Jagdesh Nagar |
|--|----------|-------------|---------------|----------------|-------------|---------------|-----------------|-------------|------------------|--------------|-------------------|---------------|
| 1. Presence of a functional community toilet and/or families have individual toilet in their home) | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| 2. Presence of a functional community water stand post and/or domestic water connections) | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| 3. Unpaved)/broken roads in lanes inside the slum | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| 4. Slum does not have cemented Naalis (drains) | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| 5. Regularity of Garbage lifting | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| 6. Disposal of solid waste through a soak pit/septic tank/ sewer line | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| 7. Households using wood/coal as cooking fuel | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| 8. Household Electricity Connection | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |

Urban HEART was used to map inter-slum and neighbourhood inequities. Community interventions were applied to address concerns of slum clusters.

STEP 5: PRIORITIZE HEALTH EQUITY GAPS AND GRADIENTS

| INDICATOR | DIST. A | DIST. B | DIST. C | DIST. D | BASELINE | BENCHMARK |
|-------------------|---------|---------|---------|---------|----------|-----------|
| TUBERCULOSIS | 234 | 123 | 45 | 74 | 100 | 50 |
| DIABETES | 75 | 36 | 100 | 83 | 75 | 50 |
| SAFE WATER | 67 | 75 | 95 | 77 | 70 | 90 |
| GREEN SPACES | 12 | 8 | 20 | 6 | 10 | 25 |
| IMMUNIZATION | 88 | 55 | 85 | 72 | 75 | 90 |
| OBESITY | 5 | 12 | 27 | 23 | 10 | 8 |
| UNEMPLOYMENT | 28 | 16 | 10 | 20 | 15 | 5 |
| POVERTY | 18 | 22 | 5 | 18 | 20 | 10 |
| PARTICIPATION | 74 | 86 | 62 | 90 | 60 | 80 |
| GOVT. EXPENDITURE | 2343 | 4525 | 25346 | 6777 | 3346 | 5000 |

J-AGES

Japan Gerontological Evaluation Study (J-AGES)

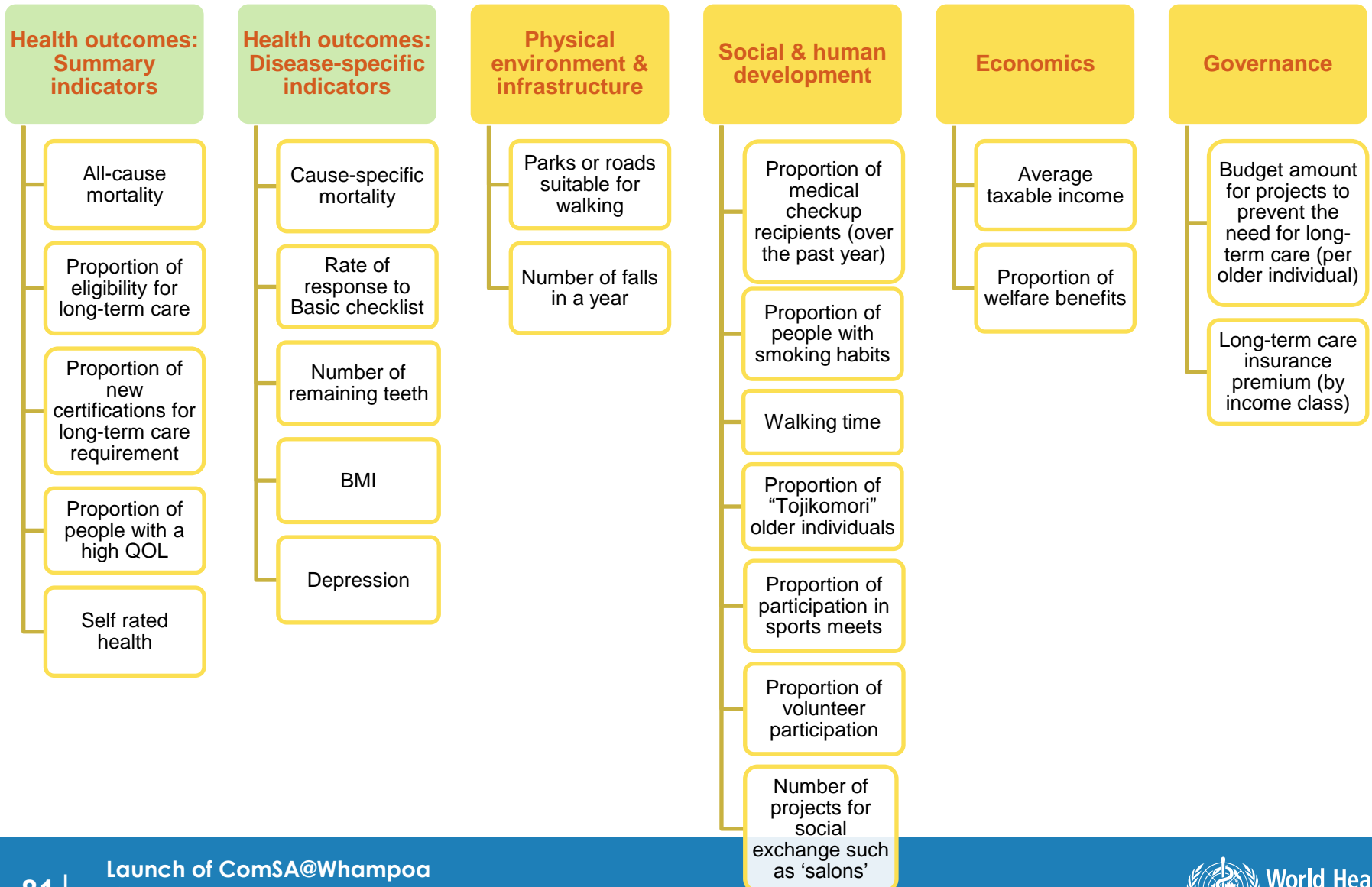
- Longitudinal study of the elderly population in Japan since 1999
- Based on a bio-psycho-social model of health
- To develop a benchmarking system to evaluate Japanese policies on healthy ageing
- Financed by Ministry of Health, Labor and Welfare



Survey Items

- **Health status** indicators: self-rated health, chronic conditions, health behavior, oral health, nutrition/diet, tobacco, alcohol, ADL/IADL, etc
- **Psychological** indicators: depression, subjective well-being, etc
- **Social** indicators: social support, social capital, social participation
- **Socioeconomic status** indicators: income, education, relative deprivation, pension, etc
- **Environmental** indicators: road safety, parks and recreation, accessibility, etc

JAGES HEART 2011 Core Indicators



Core indicators 2011

Summary indicators

1. All-cause mortality
2. Proportion of people eligible for long-term care
3. Proportion of new certifications for long-term care requirement
4. Proportion of people with a high QOL
5. Self rated health

Specific

6. Cause-specific mortality
7. Rate of response to Basic checklist
8. Number of remaining teeth
9. low BMI
10. Depression

Physical env.

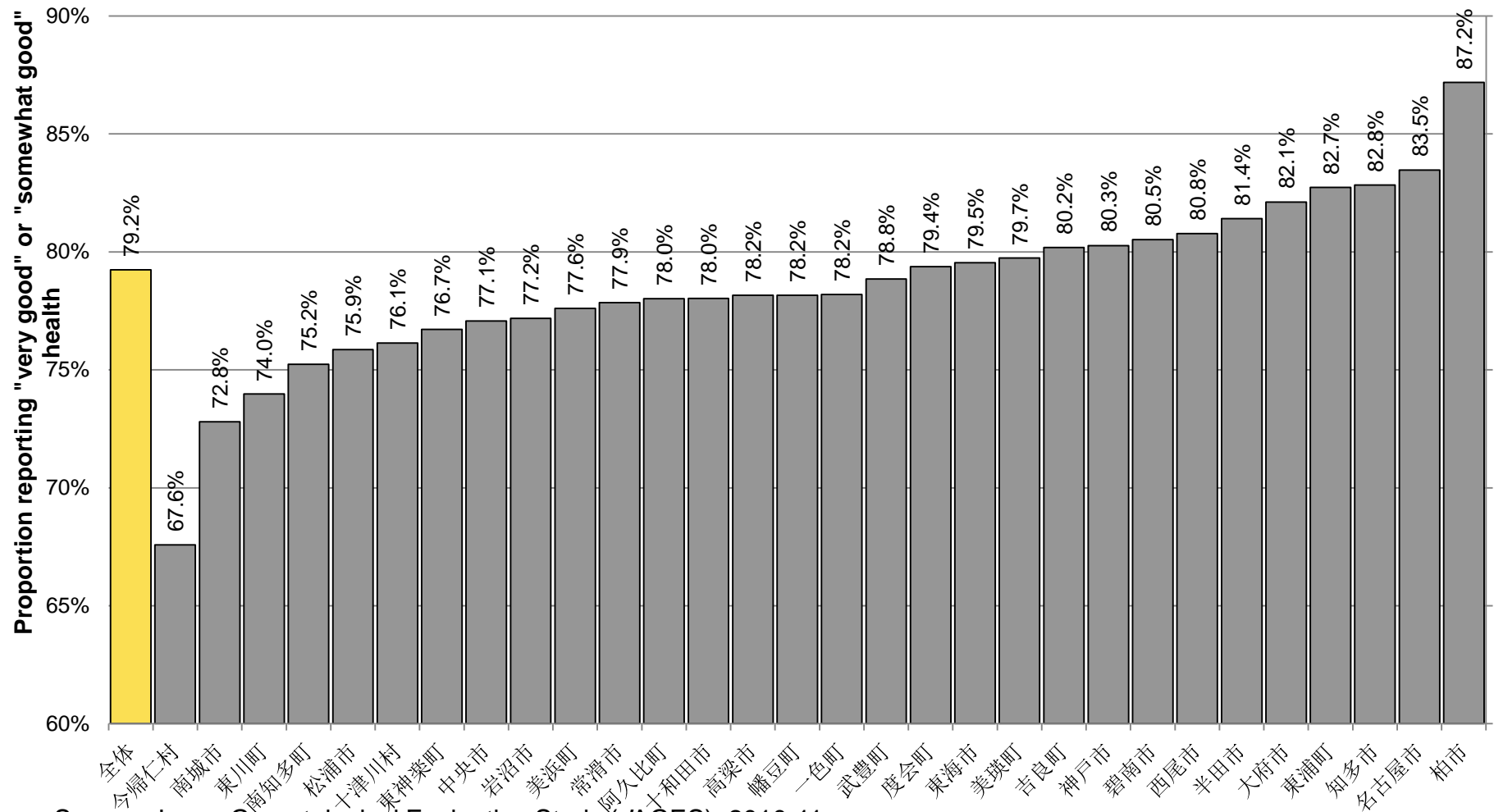
11. Parks or roads suitable for walking
12. Number of falls in a year
13. Proportion of having health checkup

14. Proportion of people with smoking habits
15. Walking time
16. Number of “shut-in” older individuals
17. Proportion of participation in sports clubs
18. Proportion of volunteer participation
19. Number of projects for social exchange such as ‘salons’ (community center programs)
20. Average taxable income
21. Proportion of welfare benefits
22. Budget amount for projects to prevent the need for long-term care (per older individual)
23. Long-term care insurance premium (by income class)

Governance Economics Human & Social development

Disparity in Subjective Health Status (65<)

Between Municipalities - Japan



Source: Japan Gerontological Evaluation Study (JAGES), 2010-11

Rate of falls from below 15% to over 45%

愛知県西尾広域連合



1:17,000

長崎県松浦市



1:200,000

沖縄県今帰仁村



1:19,000

奈良県十津川村



1:610,000

Percentage of people who fell down at least once in the past year (entire older population) 2010 survey

愛知県 知多半島



割合(%)

- 10%以上-15%以下
- 15%超-20%以下
- 20%超-25%以下
- 25%超-30%以下
- 30%超-35%以下
- 35%超-40%以下
- 40%超-45%以下
- 45%超
- データなし

1:200,000

大雪山広域連合



1:410,000

青森県十和田市



1:360,000

三重県度会町



1:250,000

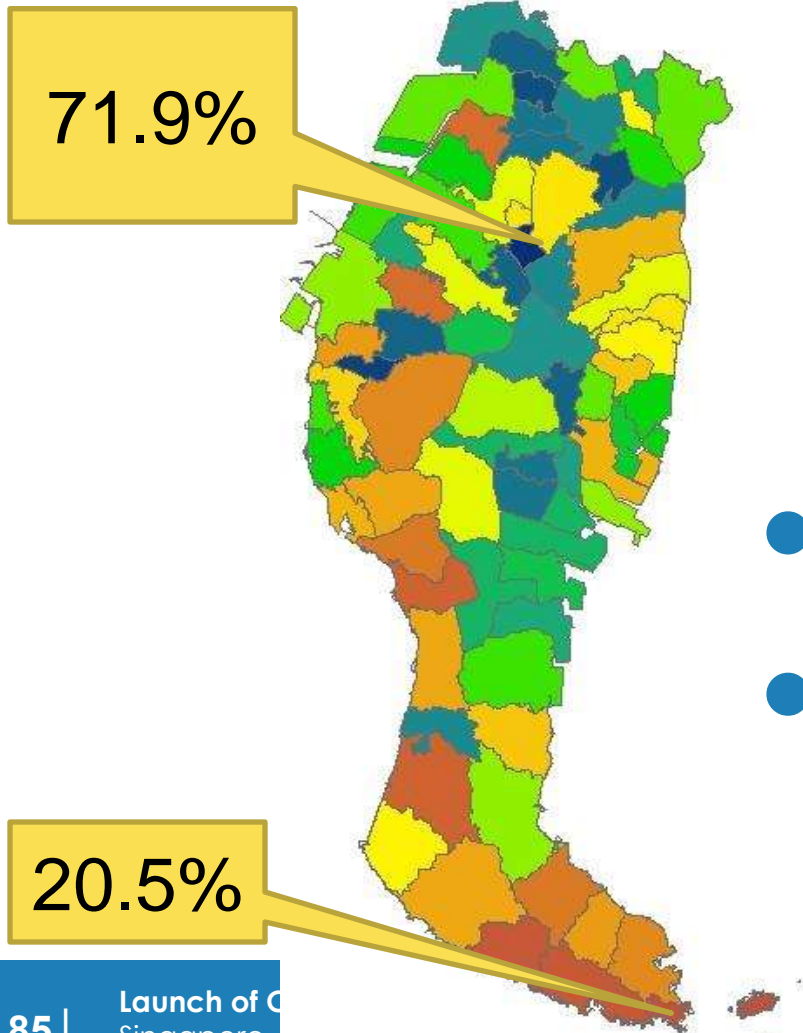
宮城県岩沼市



1:250,000

Proportion of people engaging in sports-related activities

Hirai, AGES Project
(2009, unpublished)



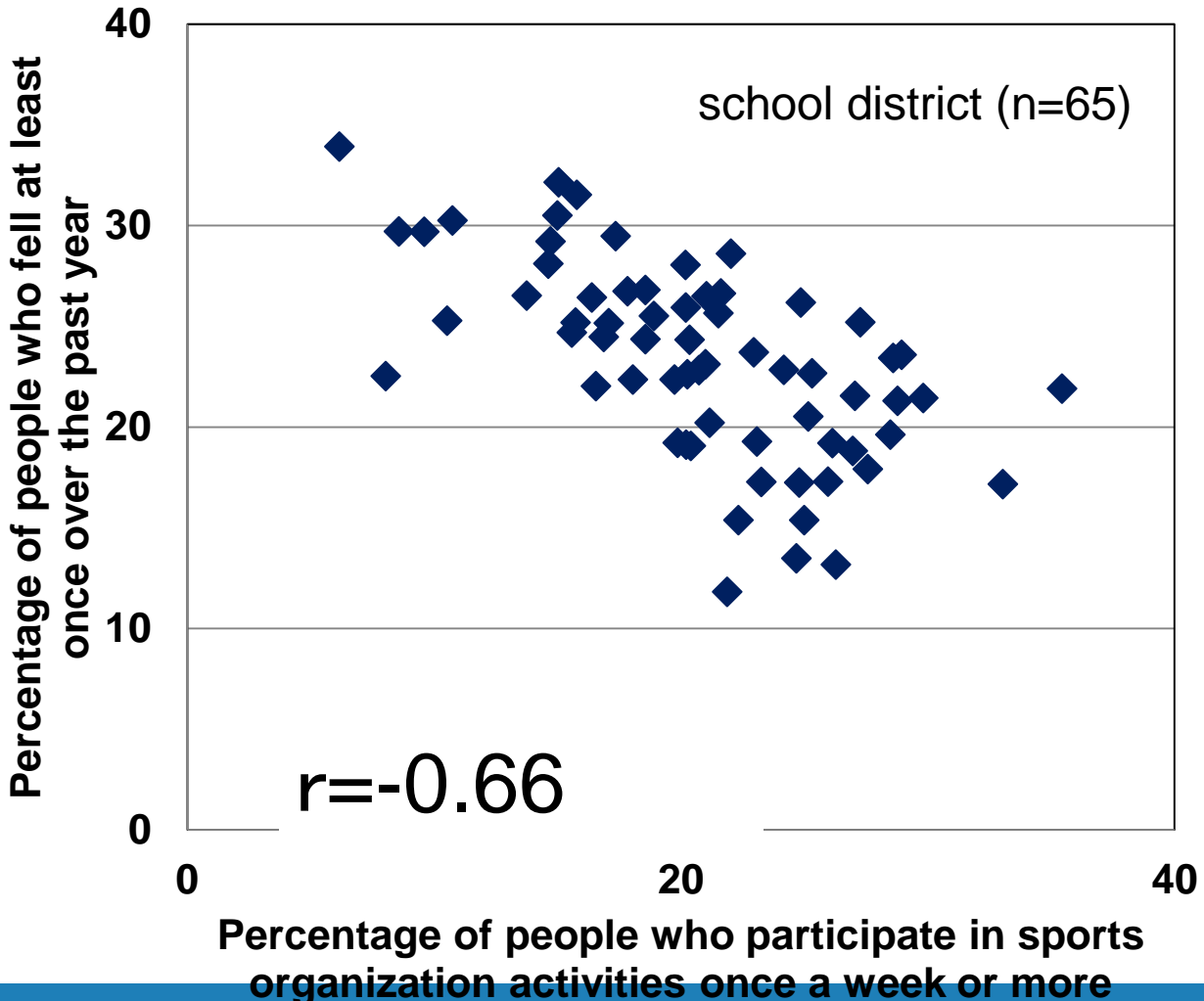
The percentage of all respondents (total n=15,515) who answered that they participate in sports activities (ground golf, gateball, walking, jogging, fitness, etc.)

- The difference 3.5 times
- After adjusting for age:

21.6-67.4%

Fall rate and rate of sports organization participation by school district

Only 65-74 year olds (n=16,713)



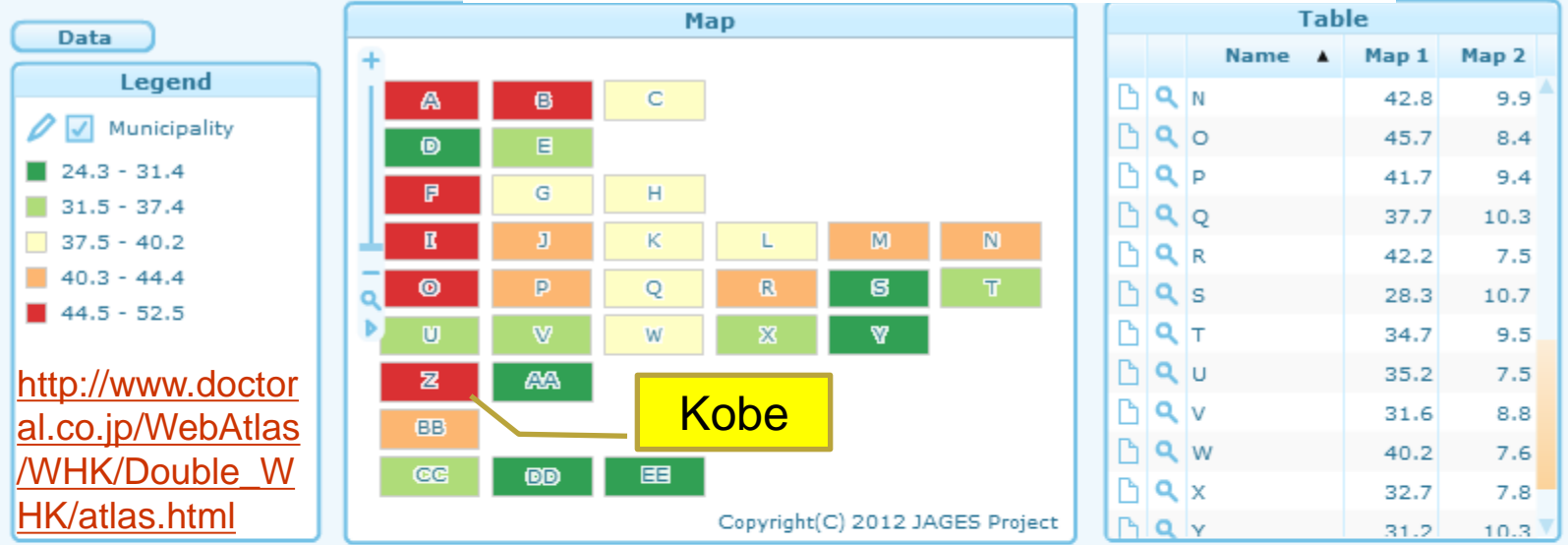
29072 people who responded to postal surveys (response rate: 62.4%) from among those who were not eligible to receive long-term care benefits from 6 insurers (9 municipalities)

Fall rate: 11.8-33.9%
Correlated to rate of sports organization participation

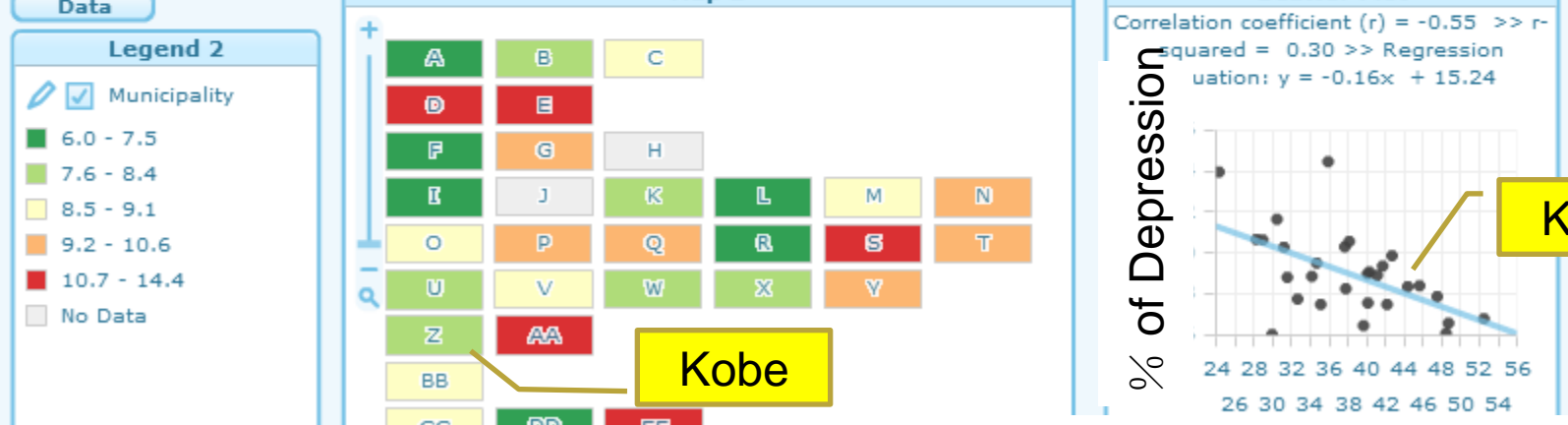
% of Participation in hobby group & Depression

JAGES HEART 2011 (GDS-15: >=10)

趣味グループ参加率 >> 後期高齢者 N=31 municipalities (limited to 75+ y.o.)



リスク指標 老人用うつスケール10~15点の者の割合 >> 後期高齢者 >> 2010

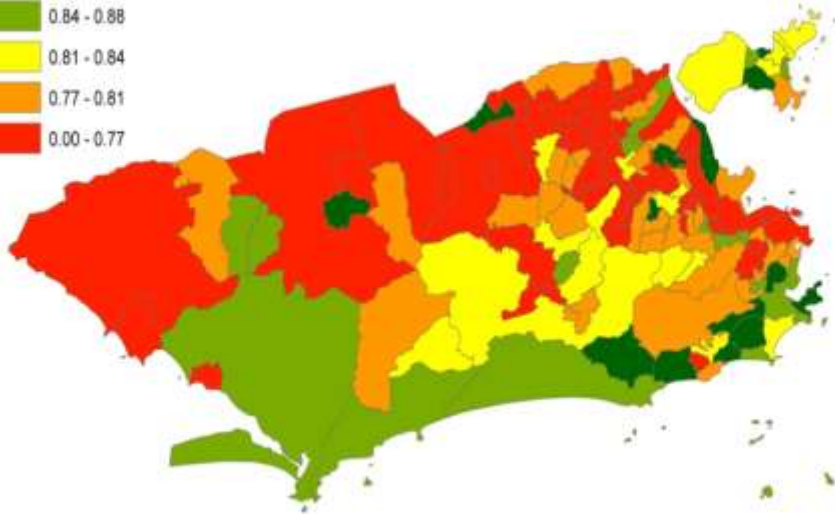
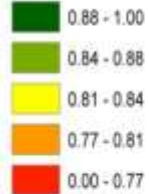


URBAN HEALTH INDEX

TRENDS IN MORTALITY: RIO DE JANEIRO

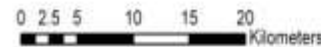
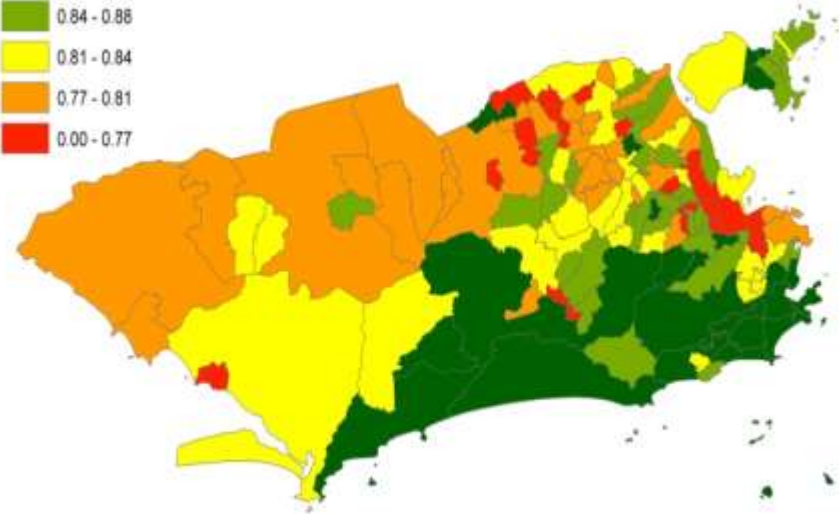
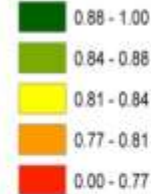
Legend

2002



Legend

2010



Neighbourhood analysis of Rio de Janeiro, Brazil
2002-2010

Urban Health Index of Mortality: *diabetes, ischaemic heart disease, breast/cervical cancer, HIV, TB, infant mortality, traffic accidents, homicides*

Moving forward will require:



- Political commitment
- Advocacy
- Strengthened partnerships

Conclusions

Key moment in history
to plan and be opportune to transform
systems for more inclusive, person-
centred approaches and services for
healthy and active ageing.

Conclusions

Social protection and social security systems still lack comprehensive coverage and fall short of providing adequate levels of support

Focus on inequities, their causes, and actions to redress

Self-care, older persons living with functional and cognitive impairments and with disabilities need to be addressed more significantly

Transforming systems and expanding innovation, with monitoring and evaluation, required.

Further exploration of new models of care/support, and role of technology enablers.

Conclusions

Focus more on the impact of ageing as significant gaps remain in the preparation for and adjustment to an ageing future; impact on sustainability of UHC programmes

Integrate health and social care;
Reduce complex, fragmented systems
Pay attention to collaboration and common cultures between services and professionals

Engage individuals in their care across the life course; focus on prevention and early intervention

Develop new financial incentives and social/health insurance models

Conclusions

Successful self-care and family care requires support – small amounts of practical and emotional support and access to information and advice are key

Proactive shaping of markets to ensure they deliver the variety and quality of services people need

Reduce stigma (especially for dementia) and change attitudes towards ageing

Monitor the impact of interventions

CommSA@Whampoa

- A bold experiment and effort to inform all of us
- We look forward to engaging with you, sharing and learning from you.

WHO Resources

● Ageing and Health

- WHO Ageing and Life Course <http://www.who.int/ageing/en/>
- Age-friendly World <http://agefriendlyworld.org/en/>

● WHO Centre for Health Development (WHO Kobe Centre)

- http://www.who.int/kobe_centre/en/

● WHO WPRO

- <http://www.wpro.who.int/topics/ageing/en/>

● Social Determinants of Health

- WHO Social Determinants of Health
http://www.who.int/social_determinants/en/
- Action: SDH <http://www.actionsdh.org/examples.aspx>



Webpage

www.who.int/kobe_centre

E-mail

wkc@who.int

Thank you!

Regional framework for action on ageing and health: Action pillars

1. Foster age-friendly environment through action across sectors
2. Promote healthy ageing across the life course and prevent functional decline and disease among older people
3. Reorient health systems to respond to the needs of older people
4. Strengthen the evidence-base on ageing and health



Proportion of population aged 60 and over, 2012 and 2050

(Darkest colour = 30% or more)

