Global movement for inclusive societies for older persons

Innovations in community-based strategies

Alex Ross, Director
WHO Centre for Health Development
Kobe, Japan
Building societies for older ages

Building societies for all ages

Equity  Autonomy  Dignity
Inclusiveness =
- 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
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
Launch of ComSA@Whampoa
Singapore
11 April 2015

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

Trends in life expectancy at birth, 1900—2008

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

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

<table>
<thead>
<tr>
<th>1990</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low back pain</td>
<td>Low back pain</td>
</tr>
<tr>
<td>Alzheimer’s disease</td>
<td>Alzheimer’s disease</td>
</tr>
<tr>
<td>Falls</td>
<td>Falls</td>
</tr>
<tr>
<td>Other musculoskeletal</td>
<td>Other musculoskeletal</td>
</tr>
<tr>
<td>COPD</td>
<td>COPD</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Diabetes</td>
</tr>
<tr>
<td>Other hearing loss</td>
<td>Osteoarthritis</td>
</tr>
<tr>
<td>Major depressive disorder</td>
<td>Major depressive disorder</td>
</tr>
<tr>
<td>Ischemic heart disease</td>
<td>Ischemic heart disease</td>
</tr>
<tr>
<td>Osteoarthritis</td>
<td>Other hearing loss</td>
</tr>
<tr>
<td>Edentulism</td>
<td>Stroke</td>
</tr>
<tr>
<td>Neck pain</td>
<td>Neck pain</td>
</tr>
<tr>
<td>Stroke</td>
<td>Edentulism</td>
</tr>
<tr>
<td>Cataract</td>
<td>Chronic kidney disease</td>
</tr>
<tr>
<td>Anxiety disorders</td>
<td>Anxiety disorders</td>
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<tr>
<td>Chronic kidney disease</td>
<td>Chronic kidney disease</td>
</tr>
<tr>
<td>Rheumatoid arthritis</td>
<td>Benign prostatic hyperplasia</td>
</tr>
<tr>
<td>Benign prostatic hyperplasia</td>
<td>Atrial fibrillation</td>
</tr>
<tr>
<td>Atrial fibrillation</td>
<td>Rheumatoid arthritis</td>
</tr>
<tr>
<td>Other vision loss</td>
<td>Other vision loss</td>
</tr>
<tr>
<td>Cataract</td>
<td>Cataract</td>
</tr>
</tbody>
</table>
## Disabilties for population aged 70 or over, 2007-10 (% of total population)

<table>
<thead>
<tr>
<th>Country</th>
<th>Any disability (%)</th>
<th>Difficulty moving around (%)</th>
<th>Difficulty with self care (%)</th>
<th>Difficulty with cognition (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>85.4</td>
<td>40.4</td>
<td>19.7</td>
<td>68.0</td>
</tr>
<tr>
<td>Ghana</td>
<td>88.1</td>
<td>63.4</td>
<td>35.8</td>
<td>74.3</td>
</tr>
<tr>
<td>India</td>
<td>97.3</td>
<td>72.5</td>
<td>36.3</td>
<td>80.7</td>
</tr>
<tr>
<td>Mexico</td>
<td>79.7</td>
<td>54.3</td>
<td>31.3</td>
<td>54.6</td>
</tr>
<tr>
<td>Russia</td>
<td>98.1</td>
<td>85.6</td>
<td>56.4</td>
<td>74.7</td>
</tr>
<tr>
<td>South Africa</td>
<td>86.0</td>
<td>51.7</td>
<td>24.8</td>
<td>67.6</td>
</tr>
</tbody>
</table>

4 biggest causes of disability

- Dementia
- Arthritis
Living Longer and Healthier
Life-course Approach to Health

Early Life
Growth and development

Adult Life
Maintaining highest possible level of function

Older Age
Maintaining independence and preventing disability

Disability threshold

Rehabilitation and ensuring the quality of life
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

Risk reduction
- The risk of people developing dementia is minimised
  - First symptoms appear

Diagnosis
- Dementia is diagnosed quickly once someone becomes concerned about symptoms

Progression of dementia
- Early dementia: Living in the community and relying on informal care
  - Communities are safer for and more accepting of people with dementia
  - Those who wish to care for friends and relatives are supported
- Advanced dementia: Greater need for formal care services and specialised accommodation
  - People living with dementia live in safe and appropriate environments
  - People living with dementia can access safe and high quality social care services
- End of life: End of life care for people with dementia presents specific challenges
  - People living with dementia die with dignity in the place of their choosing

Care coordination and the role of technology
- Care is coordinated, proactive and delivered closer to home
- The potential of technology to support dementia care is realised

Launch of ComSA@Whampoa
Singapore
11 April 2015
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

**Investment**
- Health systems
- Long Term Care
- Lifelong learning
- Enabling Environments
- Social Security

**Benefits**
- Health
- Skills and knowledge
- Mobility and Connectivity
- Financial security
- Safety

**Return**
- Individual wellbeing
- Workforce Participation
- Consumption
- Entrepreneurship and investment
- Innovation
- Social/Cultural Contribution
- Social Cohesion

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

Source: Oliver et al, 2014
Annual Per Capita Healthcare Costs by Age

Source: Fischbeck, 2009
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

Source: Proposal of the Open Working Group on Sustainable Development Goals, July 2014
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
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
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.
Health promotion

80% of member states have policies, programmes of 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.
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.
WHO is committed to support Member States in addressing ageing and health


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

- Economic determinants
- Health and social services
- Behavioural determinants
- Social determinants
- Physical environment
- Personal determinants

Active Ageing

Gender

Culture
WHO: Environments of healthy ageing and related factors

**Factors included:** beliefs and values about ageing, policies and programs that may influence healthy ageing

**Factors included:** local services (health, social care, social security, transportation, life-long learning etc.); consumer goods, products and technologies; buildings; organizations and activities; labour market, natural environment such as climate etc.

**Factors included:** social connections and networks: family, friends, neighbours and their attitudes.

**Factors included:** amenities (lifts, stairs, lighting, heating, safety features, green spaces etc.); design of residence including accessibility, products for communication, household composition, material culture.
Age-friendly Cities
Create conditions for a flourishing older life

Global Age-friendly Cities: A Guide
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
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)

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


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すことができること

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

- Inconvenient for daily shopping
- Inconvenient for healthcare visits
- Inadequate transportation options for older adults

日本語版:
- 散歩に適した公園や道路がない
- 近隣道路が整備されていない
- 図書館や集会施設などの公共施設が不足
- 交通事故にあいそうで心配
- 集会施設、役所、商店など公共的建物が高齢者に使いにくい

平成22年 総数 (N=2,062)
平成17年 総数 (N=1,886)
平成13年 総数 (N=2,226)
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

<table>
<thead>
<tr>
<th>National Health Service</th>
<th>Care and support</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Provides primary, secondary and tertiary healthcare services</td>
<td>• Provides care in care homes, in day facilities and in people’s home</td>
</tr>
<tr>
<td>• Free at the point of need</td>
<td>• Means-tested and needs-tested at point of need</td>
</tr>
<tr>
<td>• Comprehensive, universal services</td>
<td>• Local councils set local criteria and commission care</td>
</tr>
<tr>
<td>• Fully funded through general taxation</td>
<td>• Far fewer national rules or guidelines</td>
</tr>
<tr>
<td>• Locally commissioned, but within a clear national system</td>
<td>• Huge geographical variation in types of services, funding and rules</td>
</tr>
<tr>
<td>• Fairly little local variation in services provided</td>
<td></td>
</tr>
</tbody>
</table>

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

Existing model of care

- Acute episodes
- Poor escalation management
- Low-level intermediate management
- Low levels of supported care
- Low-level self-care

Future model of care

- Acute episodes
- Best practice escalation management
- Nurse-care coordination
- Supported self-care
- Self-care

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.iog.u-tokyo.ac.jp/research/research_activity-e.html](http://www.iog.u-tokyo.ac.jp/research/research_activity-e.html)

From hospital to residence

Hospital

- Health information
- Distance medicine
- Patient studies

Community

- Transportation and mobility options for people with various needs
- Primary care system
- Pharmac
- Primary physician
- 24/7 system of home nursing and long-term care

Evaluation

- QOL of the elderly
- QOL of the elderly family
- Financial cost
New Type of Urban Structure

① Housing

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

- The elderly
  - Specialist staff providing daily-life support
  - Medical institutions and welfare services

- Child-rearing households, students, etc.

- Utilization of city-owned land
- Utilization of privately owned property, renovation

- Residents of the local community
- Exchanges between building residents and local society

- Exchange Salon
  - Coordinators available
New Type of Urban Structure

② Local Community

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

- Relocation of senior citizens
- Utilization of vacant houses
- Share houses
- Energetic community
- Community businesses
- Medical and nursing care services hub
- Apartments
- Fab lab
- Venue for exchange
- Community restaurants
- Inflow of younger generations
- Inter-generational balance
- Apartments
- Apartments
- Station
- Large-scale apartment building complexes
- Detached houses
- Mixed commercial-residential districts
- Key bus lines
- Demand-responsive transport
- Transportation Network
Integration of healthcare, welfare, and community programs ("Three-leaves and pot" model)

Medical care

Rehabilitation
Long-term care

Preventive services
Health promotion

Human security as bottom line

Welfare and community services as "soil=predisposing factor"

Housing and community environment as "pot=fundamentals"

People’s choice and active participation

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
- Medication Management
- Social Networks
- Apps and Gaming
- Provider and Caregiver Communications
- Personal Health Records
- Sensors
- mHealth
- Remote Patient Monitoring
- 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
KEY WHO REPORTS

http://www.who.int/en

and

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

Social environment
- Positive social attitude toward older people
- Engagement in volunteer activity
- Engagement in paid employment

Impact on Wellbeing
- Quality of life

Environment Outcomes
- Accessibility of public transportation vehicles
- Accessibility of public transportation stops
- Affordability of housing
- Engagement in socio-cultural activity
- Participation in local decision-making
- Availability of information
- Availability of health and social services
- Economic security

Engagement in paid employment
Positive social attitude toward older people
Neighbourhood walkability
Accessibility of public spaces and buildings
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 AGing and adult health (SAGE) collaborating countries
## SAGE Indicators

<table>
<thead>
<tr>
<th>Household measures</th>
<th>Individual measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Roster of all the individuals in the household</td>
<td>• Socio-demographics</td>
</tr>
<tr>
<td>• Household health intervention coverage</td>
<td>• Health state description</td>
</tr>
<tr>
<td>• Health insurance</td>
<td>• Health state valuation</td>
</tr>
<tr>
<td>• Health expenditure</td>
<td>• Risk factors</td>
</tr>
<tr>
<td>• Indicators of permanent income</td>
<td>• Mortality</td>
</tr>
<tr>
<td>• Health occupations</td>
<td>• Coverage of health interventions</td>
</tr>
<tr>
<td></td>
<td>• Health system responsiveness</td>
</tr>
<tr>
<td></td>
<td>• Health system goals and social capital</td>
</tr>
<tr>
<td></td>
<td>• Interviewer observations</td>
</tr>
</tbody>
</table>
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
Visualizing data for policy makers and health practitioners (Japan)
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
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

**Health outcomes**
- Infant mortality
- Diabetes
- Tuberculosis
- Road traffic injuries

**Physical environment & infrastructure**
- Access to safe water
- Access to improved sanitation

**Social and human development**
- Completion of primary education
- Skilled birth attendance
- Fully immunized children
- Prevalence of tobacco smoking

**Economics**
- Unemployment

**Governance**
- Government spending on health
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

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

<table>
<thead>
<tr>
<th>Health outcomes: Summary indicators</th>
<th>Health outcomes: Disease-specific indicators</th>
<th>Physical environment &amp; infrastructure</th>
<th>Social &amp; human development</th>
<th>Economics</th>
<th>Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td>All-cause mortality</td>
<td>Cause-specific mortality</td>
<td>Parks or roads suitable for walking</td>
<td>Proportion of medical checkup recipients (over the past year)</td>
<td>Average taxable income</td>
<td>Budget amount for projects to prevent the need for long-term care (per older individual)</td>
</tr>
<tr>
<td>Proportion of eligibility for long-term care</td>
<td>Rate of response to Basic checklist</td>
<td>Number of falls in a year</td>
<td>Proportion of people with smoking habits</td>
<td>Proportion of welfare benefits</td>
<td></td>
</tr>
<tr>
<td>Proportion of new certifications for long-term care requirement</td>
<td>Number of remaining teeth</td>
<td></td>
<td>Walking time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of people with a high QOL</td>
<td>BMI</td>
<td></td>
<td>Proportion of &quot;Tojikomori&quot; older individuals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self rated health</td>
<td>Depression</td>
<td></td>
<td>Proportion of participation in sports meets</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Proportion of volunteer participation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Number of projects for social exchange such as 'salons'</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Core indicators 2011

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

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

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)
Disparity in Subjective Health Status (65<) Between Municipalities - Japan

Proportion reporting "very good" or "somewhat good" health

Source: Japan Gerontological Evaluation Study (JAGES), 2010-11
Rate of falls from below 15% to over 45%

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

Hirai, AGES Project (2009, unpublished)
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

r=-0.66

Fall rate and rate of sports organization participation by school district
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Correlated to rate of sports organization participation

r=-0.66
% of Participation in hobby group & Depression

**JAGES HEART 2011**

(GDS-15:>=10)

N=31 municipalities (limited to 75+ y.o.)

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![Diagram showing data on % of Participation in hobby group & Depression](http://www.doctoral.co.jp/WebAtlas/WHK/Double_WHK/atlas.html)

Kobe

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% of Depression
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.
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.
CommsSA@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 Centre for Health Development (WHO Kobe Centre)**
  - [http://www.who.int/kobe_centre/en/](http://www.who.int/kobe_centre/en/)

- **WHO WPRO**
  - [http://www.wpro.who.int/topics/ageing/en/](http://www.wpro.who.int/topics/ageing/en/)

- **Social Determinants of Health**
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)