

Metrics and Measurement for Universal Health Coverage in the context of population ageing

Background

Universal Health Coverage (UHC) is among the Sustainable Development Goals (SDGs) for 2030. Striving towards UHC means that countries make efforts to offer every person the quality health services they need, while also ensuring that accessing these services does not result in financial hardship. Currently, the global standard of reference for measuring and monitoring UHC is a framework developed by the WHO and World Bank. While the global monitoring framework provides an important standard of reference, it is expected that the indicators for monitoring UHC will need to be adapted to local contexts to ensure their relevance in a rapidly changing environment. As a result of population ageing and changes in health needs, countries adapt UHC measurement and monitoring systems to be relevant to health systems challenges. Therefore, WKC seeks to study how countries are monitoring UHC and measuring how their health systems are responding the needs arising from population ageing.

WKC focuses on understanding the current state of measuring and monitoring UHC from the perspective of how health systems respond to an older person's right to health. This includes monitoring health service coverage, financial protection, equity and care quality. WKC also supports research to develop or improve tools for measurement and monitoring, as well as research focused on promoting knowledge translation from evidence to practice, for the advancement of UHC in the context of population ageing.

Key research areas

1. To analyse the current research landscape related to the measurement of essential health services, financial protection, quality and equity for older populations.
2. To document current country practices in measuring and monitoring UHC from the perspective of ensuring older persons' right to health.
3. To document effective approaches for research and knowledge translation to advance UHC in the context of population ageing.
4. To support the development of metrics and measurement tools that enable countries to monitor UHC in the context of population ageing.

Progress report 2018-19

Results from research completed in 2018-19

Knowledge translation for healthy ageing: lessons learned from the Japan Gerontological Evaluation Study (JAGES) (National Centre for Geriatrics and Gerontology, 2017-18) identified key factors that drive the bi-directional process of JAGES. On one hand, the project produced research; on the other hand, government officials received and considered how the knowledge contributed to decision-making for health and social welfare. This project produced a WKC monograph and policy brief. Funding for this project also supported the publication of several peer-reviewed Open Access journal articles by the JAGES research team, including a paper in the *Bulletin of the World Health Organization* on the lessons learned from Japan about the importance of community-based care for healthy ageing. The project has also been featured in WKC's communication activities. The lessons from JAGES highlighted in this project are now being applied to a new WKC project that applies lessons learned from JAGES to Malaysia and Myanmar (see research ongoing).

Research ongoing (2018-21) and expected results

Evidence for improving health care provision to ensure universal health coverage amid rapid population ageing in Japan (University of Occupational and Environmental Health, 2017-19) involves the analysis of large volumes of health insurance claims for acute care urban hospital care in Japan. It is anticipated that this evidence will contribute to global knowledge about equity in the care for older persons and provide concrete examples of program and clinical interventions to address equity. The study is expected to conclude by the end of 2019. It is anticipated that the study will result in peer-reviewed journal articles and a WKC final project brief.

Two projects are underway as part of the WKC series of research projects in ASEAN countries. **Adaptation and validation of tools for monitoring the health of older people in Myanmar and Malaysia (National University of Malaysia, 2018-20)** applies the methods, tools and lessons learned from JAGES to help fill the gap in knowledge about older people's health and its determinants in two countries where rapid ageing is expected. The study developed an adapted version of the JAGES survey instrument that was validated for use in Myanmar, Malaysia and other Malay-speaking countries. Data have been collected from 1,200 older people in Malaysia and Myanmar, respectively. Preliminary analysis shows a high prevalence of overweight and self-reported comorbidities among older people in the Malaysia sample, and poorer physical and cognitive health among older women compared to men in the Myanmar sample. The study is expected to produce peer-reviewed journal articles and a WKC research brief. **Measuring financial protection for older persons in Viet Nam (Viet Nam Health Strategy and Policy Institute, 2019-20)** is based on existing research that finds higher health spending in households with older persons. The study will measure the breakdown of health care spending among households with older persons to understand the composition of health expenditures. Household surveys are being conducted in six districts. In-depth interviews and focus group discussions with decision-makers will discuss existing policies for financial protection among older persons and inform about these policies can be improved to protect household with older persons from high health spending. The research will identify gaps in health financing policies and make recommendations to provide stronger financial protection among older persons in Viet Nam. The research team will produce a policy brief and technical report about the findings.

Two new literature reviews were initiated in 2019 as a preliminary investigation of available concepts, frameworks and indicators that could be applied by countries for monitoring UHC progress in the context of population ageing. A **Conceptual framework for monitoring life-course approach to Universal Health Coverage (Kobe University and Mahidol University, 2019)** adopts a life-course approach to healthy ageing and aims to identify key concepts to be measured and data availability in Indonesia and other low- and middle-income countries. **Monitoring universal health coverage in the context of ageing care models (Health Economics and Management Research Centre, Iran University of Medical Sciences, 2019, with cooperation from the WHO Iran Country Office)** focuses on the changes in care for older people, and the organization, funding and delivery of care across health and social sectors. The review captures how essential service coverage and financial protection are being measured for integrated and long-term care. The study will develop a UHC monitoring framework that considers the care model appropriate for an ageing population. Both projects are to be concluded in 2020 and will serve as the basis for further research.

In collaboration with WHO Headquarters and the Regional Offices of Europe, South East Asia and others, a call for new research has been announced. A **Scoping Review of Measurement of Equity in Service Coverage of Older People** will examine how equity in service coverage of older people is conceptualized and measured in research and in national and international reporting practices. This research is expected to produce a descriptive analysis of existing research and practices in the measurement of equity in service coverage for older people; and an identification of issues specific to older people that need to be considered for equity-focused monitoring of UHC. The research will produce a policy brief on monitoring equity in service coverage in a way that is inclusive of older people. It is also anticipated that this research will inform a background paper for the ongoing status report for the Decade of Healthy Ageing that is being done by the HQ UHC Division.

Proposed research program: 2020-21

Several ongoing projects will continue into 2020. This includes the research initiated in Myanmar and Malaysia, Iran, and Kobe University in Japan that also includes Indonesia. In addition, new research is planned for the next biennium.

In collaboration with WHO Headquarters Data and Analytics Department, WKC is planning a study to **describe trends and inequalities in the prevalence of disability (functional impairment) and service coverage in multiple countries** by analysing existing survey data on older people. The findings would be published in a peer-reviewed article and the data would be added to the WHO Global Health Observatory.

Building on the fruitful partnership with the WHO EURO Observatory on Health Systems and Policies and WPRO, we are **exploring innovative ways to overcome the limitations of available datasets to assess financial protection for chronic disease care and its association with broader policies**. In conjunction with this work, **unmet need and foregone care as an indicator of inadequate financial protection for healthcare for older people** may be incorporated given the recognition that foregone care is common among poor populations. These studies are expected to produce a paper to be jointly published as part of the Observatory's Economics of Healthy and Active Ageing series, a WKC policy brief, and peer-reviewed journal articles.

In relation to quality measurement, discussions are currently underway with the WHO Headquarters Service Delivery and Safety Department to collaborate on research about **measurement of quality of care for older people**. Recent work by WHO to create a global compendium of tools and indicators for measuring quality of care found a dearth of quality indicators for rehabilitative, long-term and palliative care, as well as for the health system performance domain of continuity of care – all of which are essential to ensuring quality of care especially for older people. Some options under consideration include a scoping review of indicators of continuity of care, an assessment of country-level indicators and measurement practices of continuity of care, and the creation of a knowledge hub on care quality for older people which would be hosted by the WHO Global Learning Laboratory for Quality UHC.

Publications

Book

Kondo, K., Rosenberg, M. & World Health Organization. (2018). *Advancing universal health coverage through knowledge translation for healthy ageing: lessons learnt from the Japan gerontological evaluation study*. World Health Organization. <https://apps.who.int/iris/handle/10665/279010>. License: CC BY-NC-SA 3.0 IGO

Journal articles

1. Saito J, Haseda M, Amemiya A, Takagi D, Kondo K, Kondo N: Community-based care for healthy ageing: lessons from Japan. *Bulletin of the World Health Organization* 2019;97:570-574.
2. Nagamine Y, Kondo N, Yokobayashi K, Ota A, Miyaguni Y, Sasaki Y, Tani Y, Kondo K. Socioeconomic disparity in the prevalence of objectively evaluated diabetes among older Japanese adults: JAGES cross-sectional data in 2010. *J Epidemiology* 2019; 29(8): 295–301.
3. Watanabe R, Kondo K, Saito T, et al. Change in municipality-level health-related social capital and depressive symptoms: ecological and 5-Year repeated cross-sectional study from the JAGES. *Int J Environ Res Public Health* 2019;16(11):2038. doi:10.3390/ijerph16112038
4. Saito M, Kondo N, Oshio T, Tabuchi T, Kondo K. Relative deprivation, poverty, and mortality in Japanese older adults: a six-year follow-up of the JAGES cohort survey. *Int. J. Environ. Res. Public Health* 2019;16(2):182. doi:10.3390/ijerph16020182

5. Tani Y, Suzuki N, Fujiwara T, Hanazato M, Kondo K. Neighborhood food environment and dementia incidence: the Japan Gerontological Evaluation Study cohort survey. *American Journal of Preventive Medicine* 2019;56(3):383-92.
6. Amemiya A, Kondo N, Saito J, Saito M, Takagi D, Haseda M, Tani Y, Kondo K. Socioeconomic status and improvement in functional ability among older adults in Japan: a longitudinal study. *BMC Public Health* 2019;19:209.
7. Tsuji T, Kondo K, Kondo N, Aida J, Takagi D. Development of a risk assessment scale predicting incident functional disability among older people: Japan Gerontological Evaluation Study. *Geriatrics & Gerontology International* 2018;18(10):1433-8. doi:10.1111/ggi.13503.
8. Kanamori S, Takamiya T, Inoue S, Kai Y, Tsuji T, Kondo K. Frequency and pattern of exercise and depression after two years in older Japanese adults: the JAGES longitudinal study. *Sci Rep.* 2018;8(1):11224. doi: 10.1038/s41598-018-29053-x.
9. Tani Y, Suzuki N, Fujiwara T. et al. Neighborhood food environment and mortality among older Japanese adults: results from the JAGES cohort study. *Int J Behav Nutr Phys Act* 2018;15:101. doi:10.1186/s12966-018-0732-y.
10. Tsuji T, Miyaguni Y, Kanamori S, Hanazato M, Kondo K. Community-level sports group participation and older individuals' depressive symptoms. *Med Sci Sports Exerc.* 2018;50(6):1199–1205.
11. Yagi A, Hayasaka S, Ojima T, Sasaki Y, Tsuji T, Miyaguni Y, Nagamine Y, Namiki T, Kondo K. Bathing frequency and onset of functional disability among Japanese older adults: a prospective 3-year cohort study from the JAGES. *J Epidemiol.* 2018. doi: 10.2188/jea.JE20180123
12. Zaitso M, Kawachi I, Ashida T, Kondo K, Kondo N. Participation in community group activities among older adults: Is diversity of group membership associated with better self-rated health? *J Epidemiology* 2018;28(11):452-457. doi: 10.2188/jea.JE20170152.
13. Aida J, Cable N, Zaninotto P, Tsuboya T, Tsakos G, Matsuyama Y, Ito K, Osaka K, Kondo K, Marmot MG, Watt RG. Social and behavioural determinants of the difference in survival among older adults in Japan and England. *Gerontology* 2018;64(3):266-277.
14. Haseda M, Kondo N, Ashida T, Tani Y, Takagi D, Kondo K. Community social capital, built environment, and income-based inequality in depressive symptoms among older people in Japan: an ecological study from the JAGES project. *J Epidemiol.* 2018;28(3):108-116. doi: 10.2188/jea.JE20160216.
15. Aida J, Hikichi H, Matsuyama Y, Sato Y, Tsuboya T, Tabuchi T, Koyama S, Subramanian SV, Kondo K, Osaka K, Kawachi I. Risk of mortality during and after the 2011 Great East Japan Earthquake and Tsunami among older coastal residents. *Scientific Reports* 2017;7(1):16591.

Policy brief

Promoting healthy ageing and universal health coverage through research. Kobe: World Health Organization Centre for Health Development; 2018.

https://extranet.who.int/kobe_centre/sites/default/files/pdf/201902_JAGES_policy_brief_en_0.pdf

Calls for proposals issued in 2018-19

Measuring and Monitoring Universal Health Coverage in the Context of Population Ageing. Request for proposals was advertised from 28 November 2018 to 6 January 2019. Selection was conducted in January 2019. Two proposals were selected and are currently in progress.

A Scoping Review of Measurement of Equity in Service Coverage of Older People. Request for proposals was announced on 11 October 2019 and submissions will be accepted until 24 November 2019.

Other activities

August 2019: Dr Megumi Rosenberg spoke at a symposium in Nagoya, Japan, to commemorate the 20th anniversary of the Japan Gerontological Evaluation Study (JAGES). She highlighted the WKC publication on the lessons learned from JAGES and introduced the new research which applies the methods and lessons of the JAGES study in Malaysia and Myanmar. An article about the event and the collaboration between JAGES and WHO was reported in eight regional newspapers across Japan.

September 2019: WKC was active on social media to celebrate Japan's "Respect for the Aged Day" on 16 September 2019, and took the opportunity to disseminate key messages from the recently completed JAGES project.