

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 2019-20

Results from research completed in 2019-20 (4 projects)

Evidence for improving health care provision to ensure universal health coverage amid rapid population ageing in Japan (University of Occupational and Environmental Health, Japan, 2017-19) involved several studies relating to the use of large-scale health care databases to address the growing concerns of equity in access to health care associated with population ageing in Japan. One of the main studies was based on an analysis of the Diagnosis Procedure Combination (DPC) database, a health care insurance claims database. This study revealed that patients with dementia in Japan may be prioritized for hip surgery, a finding in contrast to the general trend that patients with psychiatric illness have less access to health care. The final project brief was published on the WKC website and a peer-reviewed research paper was published in *BMC Health Services Research*.

Measuring universal health coverage in relation to care for older people: a scoping review with specific consideration for the Iranian context (Health Economics and Management Research Centre, Iran University of Medical Sciences, with cooperation from the WHO Iran Country Office, 2019-20) focused on how essential service coverage and financial

protection are being measured for integrated and long-term care. The results of the literature review were discussed in two rounds of an expert panel review with Iranian researchers and government officials. The expert panel identified several metrics that are not feasible to measure at the national or municipal level either due to the limitations of existing health information systems and surveys or the absence of related programs and structures. The study concluded that one of the priorities for Iran may be to develop methods for assessing the nature of informal care received by older people from family caregivers. The final project brief along with the working paper was published on the WKC website. A manuscript based on this study is currently under review by the Eastern Mediterranean Health Journal.

Adaptation and validation of tools for monitoring the health of older people in Myanmar and Malaysia (National University of Malaysia, 2018-20) applied the methods, tools and lessons learned from the Japan Gerontological Evaluation Study (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 and Malaysia. Data were collected from 1,200 older people in Malaysia and Myanmar, respectively. Some of the results from Malaysia showed a high prevalence of self-reported comorbidities as well as indications of foregone care due to poor health and walking impairments among older people. In the Myanmar study, women were more likely to report poorer health and functioning compared to men, controlling for age and other factors. Five papers resulting from this study are currently under review by academic journals, and the final project brief was published on the WKC website.

Conceptual framework for monitoring life-course approach to Universal Health Coverage (Kobe University and Mahidol University, 2019-20) explored the concept of the life-course approach to healthy ageing and its application to policies and programmes. The review found that such applications with a focus on healthcare access or health outcomes in older age were limited. Instead, the life-course approach is often applied to justify early life course interventions, which may result in shifting resources away from health services for older people. The final project brief and working paper were published on the WKC website. A manuscript for publication in a peer-reviewed journal is currently under preparation.

Research ongoing (2019-21) and expected results (6 projects)

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 have been carried out in six districts as well as in-depth interviews and focus group discussions with decision-makers. 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 is expected to be completed by December 2020. This research will produce a policy brief and technical report and inform the WHO regional strategy on ageing.

Scoping review: equity in health needs and service coverage of older people (University of Sheffield, Liverpool University, Osaka University, 2020-21) will examine the conceptual literature on what should be measured to assess equity of service coverage, particularly for older people's health needs. The findings will be synthesized to create a new conceptual framework. The researchers will then consider how far the findings of the new conceptual framework might be integrated with existing, relevant policy frameworks. The research will produce a policy brief on monitoring equity in service coverage in the context of population ageing. This project is being carried out in partnership between research teams in the UK and Japan. The research team in Japan will carry out a scoping review of the Japanese language literature with the same topical focus and will compare the findings with those of the global literature review. The research findings of both teams will be published in journals. Building on this scoping review, planning is underway for a statistical study on the **analysis of equity in service coverage for health and social care among older people (tentative**

title) to be carried out in 2020-21 in collaboration with counterparts in WHO Headquarters and Regional Offices. This will involve testing a novel method for assessing unmet need among older people considering both demand and supply factors using available datasets from multiple countries. The results will be published as a journal article and are also expected to contribute to the global monitoring reports on UHC and WHO technical guidance for the assessment of barriers to accessing health services.

In 2020, WKC formed a new partnership with the Economic Analysis and Evaluation team (EAE) within the Health System Governance and Financing Department in Geneva HQ, to carry out a series of studies to produce new evidence for the 2021 Global Monitoring Reports on Financial Protection and UHC. **Systematic review: financial barriers to access health services and foregone care (University of Tokyo, 2020)** aims to synthesize existing global evidence and knowledge about financial barriers to access needed health services and foregone care in both the general population and specifically in the older population. This will lay the foundation for subsequent work to produce new quantitative evidence of the prevalence of foregone care due to financial barriers and possible mitigation policies. **Age- and gender-disaggregated analysis of household survey data on financial hardship due to health care utilization (tentative title)** (2020-2022) is also ongoing in the WHO regions of Africa, the Americas and South East Asia, and will be extended to other regions depending on data availability. This will be the first attempt by WHO to systematically disaggregate financial protection data by age. The results of this study will contribute to the 2021 Global Monitoring Report on Financial Protection and will also be published in peer-reviewed journals.

In relation to quality measurement, several discussions have been carried out with WHO colleagues and international experts to collaborate on research about measurement of quality of care for older people. Given the seminal work by OECD on long-term care quality, the increased attention to the quality of care in long-term care facilities during the COVID-19 pandemic, and the agreement with the EURO Observatory to produce a new book on long-term care, we are now considering focusing this work on the **measurement of quality of long-term care**. The research will likely involve a synthesis of existing literature on the topic as well as quantitative analysis of existing data to determine key measures of long-term care quality and their association with health systems and policy factors that may affect quality, such as service pricing mechanisms. The results of this research will contribute to WHO's Quality Toolkit for countries, the book on long-term care to be developed with the EURO observatory, and WHO European Region's broader workstream on long-term care.

Publications

Journal articles

1. Tomioka, S., Rosenberg, M., Fushimi, K. *et al.* An analysis of equity in treatment of hip fractures for older patients with dementia in acute care hospitals: observational study using nationwide hospital claims data in Japan. *BMC Health Serv Res* 20, 830 (2020). <https://doi.org/10.1186/s12913-020-05690-9>
2. Rosenberg M, Kondo K, Kondo N, Shimada H, Arai H. A primary care approach to frailty: Japan's latest trial in responding to the emerging needs of an ageing population. Under review by *BMJ Integrated Healthcare Journal*.
3. Hosseinijebeli SS, Rezapour A, Rosenberg M, Lakeh MM. Measuring universal health coverage to ensure continuing care for older people: a scoping review with specific implications for the Iranian context. Under review by the *Eastern Mediterranean Health Journal*.
4. Shah SA *et al.* Translation and reliability test of a Bahasa Malaysia version of the Japan Gerontological Evaluation Study (JAGES) questionnaire. Under review by the *Malaysian Journal of Medicine and Health Science*.
5. Win HH *et al.* Cohort profile: Healthy and active ageing in Myanmar (JAGES in Myanmar 2018) — A prospective population-based cohort study of the long-term-care risks and health status of older adults in Myanmar. Under review by *BMJ Open*.
6. Sasaki Y *et al.* Differences between Myanmar's rural and urban older populations in the factors affecting depressive symptoms. Under review by *Social Science & Medicine*.

7. Sasaki Y et al. Association between depressive symptoms and objective/subjective socioeconomic status among older people in Myanmar. Under review by *PLOS One*.
8. Sasaki Y et al. Association between happiness and objective/subjective socioeconomic status among older people in Myanmar. Under review by *BMJ Open*.
9. 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.
10. 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.
11. 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
12. 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
13. 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.
14. 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.

Final research briefs

Evidence for improving health care provision to ensure universal health coverage amid rapid population ageing in Japan. Kobe: World Health Organization Centre for Health Development; 2019.

https://extranet.who.int/kobe_centre/en/project-details/evidence-improving-health-care-provision-ensure-universal-health-coverage-amid-rapid

Measuring universal health coverage in relation to care for older people: a scoping review with specific consideration for the Iranian context. Kobe: World Health Organization Centre for Health Development; 2020.

https://extranet.who.int/kobe_centre/en/project-details/Monitoring_UHC_Iran

Adaptation and validation of tools for monitoring the health of older people in Myanmar and Malaysia. Kobe: World Health Organization Centre for Health Development; 2020.

https://extranet.who.int/kobe_centre/en/project-details/asean_malaysia_myanmar

Conceptual framework for monitoring life-course approach to Universal Health Coverage. Kobe: World Health Organization Centre for Health Development; 2020.

https://extranet.who.int/kobe_centre/en/project-details/UHC_monitoring_Asean

Calls for proposals issued in 2019-20

Scoping Review of the Japanese Literature on Measurement of Equity in Service Coverage of Older People. Request for proposals was announced on the WKC website on 26 March 2020 and closed on 10 April 2020. Selection was performed in April 2020.

Individual consultancy – Analysis of data from household surveys on financial catastrophe due to accessing healthcare. Request for proposals was sent by UHL/HGF/EEA to their consultant roster and advertised on the UN Global Marketplace website from 21 July to 11 August 2020.