### Approach to Research for Universal Health Coverage in Light of Population Ageing

#### Background

A well-functioning health system that attains Universal Health Coverage (UHC) is one that is resilient, continuously innovates and adapts to demographic change, but yet remains relevant to all age groups – young or old, fit or infirm. Longevity is an outcome of successful country development, and therefore, a health system needs to be fit for the population pyramid of a country in the present, as well as for the projected future. Maintaining functional ability and quality of life is a key health outcome as is delivering quality end-of-life care with dignity. These become the key targets for health systems. WKC's research agenda to accelerate UHC in light of population ageing is rooted in understanding the consequences of changing demographics on health systems.

### **RESEARCH OBJECTIVES**

- 1) To study how health systems can become resilient, adapt continuously and innovatively to face emerging challenges such as demographic change.
- 2) To provide evidence of innovations that support change in health systems to expand from solely dealing with prevention of mortality towards a comprehensive approach that includes functional ability, quality of life and a dignified end-of-life.

# Progress report 2016-17

After the last ACWKC meeting, the technical team began preparations to operationalise research on UHC. In the first quarter of 2017 a call for proposals was launched to capture "Lessons from Japan" relevant for UHC development globally with local academic partners. Six projects will be funded from Nov. 2017 to Dec 2018 (USD \$100,000 each), with one project researching the development of care skills among migrant workers to Japan's long term care industry and another working on secondary analysis of big data in Japan to improve health care provision for older populations. Finally, possessing resilient health systems in the face of disasters is a critical part of health systems development under UHC. WKC will support one project that researches specific strategies to maintain and recover survivor's health after disasters.

This call for proposals was then followed by the commissioning of a special journal issue with Oxford University Press to capture the innovations and human capital enhancements that would be needed (in light of population ageing) to address health systems and financing changes; health and social care workforce expansion; and the empowerment of older people to better manage their own healthy ageing (July 2017 – Dec 2018, USD \$55,000). Then, at the end of 2017, a rapid scoping review was commissioned from King's College, University of London to explore and cost end-of-life care service delivery models that were effective at delivering quality of life outcomes. This is an exemplar area, for the larger challenges that population ageing will bring to contemporary health systems in terms of delivering health outcomes that are meaningful for older populations (September 2017 – December 2017, USD \$44,000). A new research agenda will be developed in 2018 for this area (see next section).

Finally, in the 3<sup>rd</sup> quarter of 2017, a call for research was launched to identify UHC related research which would help ASEAN nations to develop their health systems, in light of the challenges of population ageing. Eighteen proposals have been short-listed for development into full proposals with the selection of the successful projects to be funded to take place in December 2017 (Up to a maximum of USD \$700,000 to Dec 2018).

### Directions for work 2018-19

WKC will recruit a health economist to strengthen the technical team in 2018. WKC recognises that there is a need for research on both supply- and demand-side aspects of services access by older populations, including financial barriers and the poor quality or lack of responsiveness of current health system configurations. Ensuring access to health and social care services of sufficient quality without triggering catastrophic expenditures by older people while ensuring system sustainability is a key policy objective that drives our program for research. Therefore, in 2018, we will undertake research to study the implications of population ageing on sustainable financing and financial protection for older adults. We will also research the emergence of the private sector as a key player in many health systems, and identify the role of the private health care sector in meeting service provision needs for older adults.

Another key policy objective that our research seeks to address, involves helping countries to design and implement appropriate integrated service delivery models, which effectively link primary care with hospital and post-hospital care (through home or community care, social care, palliative services, long-term care and public health programs). Therefore, in 2018, we seek to generate evidence on service delivery configurations that promote quality of life, particularly at the end stages of life, and the implications for investments in sustainable UHC and a shift towards person-oriented health systems, including creating the necessary health and social care workforces. We will also study how current health systems responses to NCDs and mental diseases may be strengthened.

In disaster prone countries such as Japan, we also need research that generates evidence to create resilient health systems that retain quality, relevance and effectiveness in the face of disaster. In 2018, we will continue a program of research, based in Japan, to examine the psycho-social impact of disaster on survivors and their health services needs.

Finally, all of this assembled knowledge must be usefully disseminated and translated so that policy makers can make best use of this information within their countries. WKC aims to create a knowledge hub that encourages both knowledge sharing and dissemination.

### Ageing: Metrics, Tools, and Learning from Japan

#### Background

Population ageing is a global demographic trend which has significant implications for the achievement and sustainability of universal health coverage (UHC). Research is needed to develop the metrics and tools which will enable policy makers to better integrate population ageing considerations into health systems development toward UHC. As a super-ageing society, Japan has experiences that can be shared with other countries to accelerate progress towards UHC.

### **Research objectives**

- To advance **metrics and tools** that enable policy makers to better integrate population ageing considerations into health systems to achieve UHC.
- To provide evidence of **inequities** in health outcomes and healthcare access among older people.
- To leverage the experiences of **Japan** in providing lessons for other countries in achieving and sustaining UHC.

# Progress report 2016-17

In 2016-17, we launched two new studies while bringing closure to the Age-friendly City indicator project. The **Kobe dementia study (2017-20, US\$ 600,000)** is a multi-year study done in collaboration with Kobe University and Kobe City aims to develop innovative approaches to early detection and prevention of dementia risk and community models for effective management of dementia. (See separate brief.) The study was launched in August 2017 with wide media coverage, indicating strong local interest. Discussions are already underway with other partners to possibly expand this project.

The Japan Gerontological Evaluation Study (JAGES) knowledge management project (2017-18, US\$ 90,000) led by the National Center for Geriatrics and Gerontology, Japan, will synthesize lessons learned from an ongoing 14-year JAGES initiative. This project will produce a guide that explains the JAGES research methodology; key findings with respect to effective and equitable interventions to promote healthy ageing; and approaches for researchers to engage and communicate their findings to government officials and policy makers. The publication is in the drafting stage and an external consultation is planned for December 2017. (See separate brief.)

The **Age-friendly City indicators project (2013-2017, US\$ 200,000)** is brought to an end in 2017. Initiated in 2013, the project published a core indicator guide in 2015. In the final stages, activities focused on dissemination and capacity building to promote future research on environmental factors that promote healthy ageing. This includes a webinar, numerous conference presentations and lectures, and publications (see Exhibit). A capacity building workshop for local governments in Japan is being planned for December 2017.

### Proposed research program for 2018-19

The proposed research program in the next biennium will focus this area of work around new objectives. The first objective is to **contribute to the advancement of tools, metrics and measurement that capture the diversity and nuances of older age, and the health-related outcomes that are particularly relevant in older age.** This area of work will focus on the identification and application of new metrics and approaches to reveal the diversity of needs among older people, and the gaps in service coverage and quality to address those needs. It will possibly

include developing a new project to address the needs for further research identified during the **Brainstorming for Measurement of UHC in Light of Population Ageing** (to take place immediately after the Advisory Committee Meeting). The completion of the **Japan Gerontological Evaluation Study Knowledge Management Project (2017-18)** and the dissemination of its outcomes also falls under this area of work.

The second objective is to analyze health equity among older people and the policy implications for health system strengthening and transformation to ensure UHC. This area of work will focus on analysing available data and policies to reveal inequities in health outcomes and healthcare access among older people. The evidence would then be used to develop policy options for health systems strengthening. Specifically, it will include the implementation of two new projects. The global comparative study of disability in older people and implications for health and social policy (2017-18, US\$ 150,000) will be a collaborative project between WHO and OECD. We will compare inequalities in disability prevalence in older age, between and within countries, using available population surveys. The study will produce new cross-country estimates of prevalence and trends in disability among older people, and policy options for better managing functional ability. The big data analysis on quality and content of healthcare for older people in Japan (2017-18, US\$ 100, 000) is based on a proposal submitted by researchers from the University of Occupation and Environmental Health, Japan. The project involves analyzing big data on medical care provision in Japan to assess the content and quality of medical care provided to older patients in outpatient, acute hospital and home care settings, as well as during disaster situations.

The third objective is to learn lessons from Japan on effective public health strategies with development and validation of innovative tools. This area of work supports research based in Japan to develop public health tools and approaches for the prevention and control of diseases that are associated with older age or with older-age cohorts. It includes the implementation of the on-going Kobe Dementia Study (2017-20). It also involves the start of a new project on improving early detection and treatment of hepatitis C in Japan (2018-19, US\$ 30,000). Based on a proposal submitted by the Wakayama Medical University, Japan, this study will evaluate current clinical practices for surveillance and treatment of hepatitis C virus infection in Wakayama Prefecture of Japan. It will offer policy recommendations for improving the early detection and treatment of hepatitis C virus infection in Japan, where there is a high rate of chronic infection among the baby boom generation. The lessons could be applied to other countries with a similar cohort-effect on the epidemiology of hepatitis C, such as in the U.S.

# Context

### Policy, Social and Technological Innovations

The Sustainable Development Goals (SDGs) have committed United Nations (UN) Member States to the progressive realization of Universal Health Coverage (UHC). To reach this ambitious goal, countries will need to innovate to accelerate progress. Health innovation at WHO is defined as:

an approach and a process through which existing or new health policies and systems, products and technologies, and services and delivery methods are developed to add new value to preventive, promotional, therapeutic and rehabilitative care with a special focus on the needs of vulnerable populations in the context of universal health coverage. Value addition can be in terms of improved efficiency, effectiveness, quality, safety and affordability.

### **Objective of work**

The objective is to research and scale up policy, social and technological innovations that accelerate Universal Health Coverage in light of population ageing.

# Progress report 2016-17

*Technology and Social Innovations for an Ageing Asia (Mar. 2016 – Nov. 2017 - National University of Singapore).* WKC supported the National University of Singapore in the development of a research project studying population ageing and related policy issues in Asia, and lessons and best practices for applicability elsewhere. The book is to be published by the end of 2017.

*Community-Based Social Innovations (Oct. 2014 – Nov. 2017 - \$610,000 – RAND Europe).* This research aims to provide evidence of the diverse models, functioning and range of health and social services that address the needs of older people in low- and middle-income countries. By the end of 2017, the project will produce a systematic review on CBSIs in middle- and high-income countries, and eleven case studies from Chile, China, Iran, Lebanon, Russia, Serbia, Sri Lanka, Thailand, Ukraine, Viet Nam, and Japan. In addition, a report from the expert consultation on 17<sup>th</sup>-18<sup>th</sup> October, 2017, identified research gaps related to scaling up.

*Health Technology Assessment (Sep. 2017 – Dec. 2017 - \$10,000 – Imperial College).* The project is a prioritization exercise, and specifically developing and applying evaluation criteria to assess technologies aimed to reduce functional decline.

Implementation research: Lessons from Japan (Nov. 2017 – Oct. 2018 - \$200,000). As part of WKC's collaborations with national academia, two research projects on technological innovations are underway. The University of Tokyo is implementing a project about "Learning from the experience of assistive products use among Older People," which investigates the use of assistive devices in supporting ageing-in-place. Wakayama Medical University is implementing a project on the "Development of new assistive technologies to enhance quality of life of older people," which aims to develop a tele-care system to improve/maintain ADLs for older people.

### Proposed directions for work 2018-19

The WHO Global Programme of Work for 2018-2021 sets forth the importance of innovations in building resilient health systems and supporting the progressive realization of UHC. Seizing this momentum to build a more coherent programme of work in this area, WKC will commission an external review to identify research strategies for the medium and long-term under the 10 year strategy. WKC will also create a knowledge hub for policy-makers and researchers that promote innovation to accelerate UHC in light of population ageing.