Q&A

Aging in Asia: A Japanese Perspective An Interview With Isao Kamae, PhD, MD



Value & Outcomes Spotlight had the pleasure to sit down with Isao Kamae, PhD, MD, to discuss aging in the global population, with special emphasis on Japan. An active contributor to ISPOR for many years, Isao is a professor of health technology assessment (HTA) project, Graduate School of Public Policy, The University of Tokyo, Japan. He also serves as a research director, The Canon Institute for Global Studies, Tokyo and an advisory expert for WHO and OECD. He has previously worked as an associate professor at Shimane Medical University from 1993 to 1994 and Kyoto University Hospital from 1994 to 1997 and as a professor at Kobe University School of Medicine from 1997 to 2007 and Keio University from 2007 to 2012. His research interest is primarily in health economics and HTA. He has published 180 papers and completed work on 31 books. He serves as an editorial board member for *Value in Health Regional Issues* and *Journal of Medical Economics* and was the first Asia-origin member of the ISPOR Board of Directors from 2004 to 2006.

Value & Outcomes Spotlight: Global demographic statistics show an aging of the population in many countries, but this is particularly an issue for Asian countries like Japan, isn't it?

Kamae: Yes. The UN World Population Prospect: The 2015 Revision reports the proportion of the population over 65 years old to the whole population in the world was 7.7% in developed and 3.8% in developing countries in 1950. But these percentages grew to 17.6% and 6.4%, respectively, in 2015, and are projected to reach 27.4% and 16.8%, respectively, in 2060. So, this is indeed a global problem, particularly for developed countries.

But in Asia, the statistics are even more extreme. According to the Databook of International Labor Statistics from the Japan Institute for Labor Policy and Training 2017, the 3 regions with the largest proportion of elderly persons in 2015 were Japan at 26.3%, Hong Kong at 15.1% (9.6% in China), and South Korea at 13.1%. These are projected to rise to 36.3% in Japan, 35.1% in South Korea, and 34.5% in Hong Kong (27.6% in China) by 2050.

What are the consequences of the aging of the population? What do you see happening in Japan?

Three challenges we are seeing already and only expect to worsen: first, a shortage of labor power, as more of the population enters retirement; second, an increase of diseases that more commonly have adult onset, such as central nervous system disorders like Alzheimer's disease and certain cancers; and third, a growing financial burden of elderly healthcare.

Making matters worse, in Japan, the aging of the population has coincided with a declining birthrate. It implies that the ratio of elderly versus working-age population has been changing rapidly. The Japanese statistics report that the ratio of the population over 65 years versus those between ages 20 to 64 years was 1.0/5.1 in 1990 but will be 1.0/1.8 in 2025 and 1.0/1.2 in 2060. The trends of declining working-age population will force Japan to rely on more imported labor.

Japan faces the changes in disease structure; that is, increase of adult diseases accompanied by progression of aging, especially the increasing prevalence of dementia and growing need for community-based care. The number of dementia patients was 4.62 million (15% of the population over 65 years old) in 2012 and is projected to reach up to 7 million (20%) in 2025.

The elderly are a key cost driver of medical expenditures, which amount to JPY942,000 per capita for patients over 75 years old belonging to the national elderly health insurance. The estimate is about 6 times as large as that of the population under 75 years old having employees' health insurance, ie, JPY167,000 per capita. The higher expenditures for elderly patients can be attributed to generally poorer health status and their demand for innovative (and expensive) medical technologies.

Why is Japan concerned about the consequences caused by the aging of population, and how has Japan been finding solutions?

The aging of population seriously threatens the affordability and sustainability of universal health coverage (UHC) in Japan.

Japan has an urgent need for healthcare reforms to maintain the affordability and sustainability of UHC.

The reforms must be accomplished at both macro and micro levels of the current healthcare system. There are 3 major challenges for healthcare reforms at the macro level: first, shift from hospitalbased interventions to community-based preventive and primary care; second, priority setting in chronic diseases relevant to aging such as dementia, cancer and so on, rather than acute diseases; and third, capacity building for long-term insurance and facilities for elderly care.

What are some important developments in HTA in Japan, and how will such developments have an impact on the aging society?

After 3-year provisional implementation from 2016 to 2018, in April 2019, the Japanese Ministry of Health, Labor and Welfare institutionalized a new HTA policy as a micro-level reform, requiring cost-effectiveness analysis for selected drugs and medical devices. It is the first case in the world of performing an "ICER-based" price adjustment.

The new HTA policy will become a trigger to expand the concept and methods of value assessment in healthcare in aging society of Japan. The lessons Japan experiences will be useful globally for other countries, too.