A Global Agenda for a New Map of Life

White Paper prepared for the Bellagio Global Longevity Agenda Meeting, sponsored by The Rockefeller Foundation and Prudential Assurance Company Singapore

Michele Barry, Professor of Medicine, Stanford University
Laura L. Carstensen, Professor of Psychology, Stanford University
Andrew Scott, Professor of Economics, London Business School
John Eu-Li Wong, Professor in Medical Sciences, National University of Singapore

August 2019
In the 20th century life expectancies nearly doubled in developed nations, and a process began that is irrevocably changing the fundamental underpinnings of life as we know it. As recently as 1950 the distributions of age in the populations of countries around the world resembled pyramids, with many young people at the bottom winnowed to tiny peaks at the tops representing the relatively few individuals who survived all the way to old age. In a matter of decades, medical advances, agricultural technologies, improved sanitation, and public health programs, greatly extended average life expectancies. Over the same period of time, fertility rates fell dramatically and, in combination with longer lives, citizenries in more resourced countries shifted from mostly young to majority old.

These changes are unprecedented. In Japan, the median age in 1950 was 22 and average life expectancy was 60 years. Today, the median age in Japan is 47 and life expectancy is 84 years. It isn’t just that more people are living into old age, but what is considered old age is also increasing with the number of centenarians now the fastest growing demographic group.

In lower resourced countries, fertility rates are similarly declining while life expectancies are increasing. In Ghana, a low-and middle income country (LMIC), median age in 1950 was 17 and average life expectancy was 41 years. Today, the median age and life expectancy in Ghana have risen to 21 and 63 years respectively. The proportion of Ghana’s population over 65 years is also rising -- from 2.4% in 1950 to 3.1% in 2020, while the under-five population is dropping from 18.7% in 1950 to 13.4% in 2020.

Never in human history have societies included more old people than youth. Yesterday’s population pyramids are being reshaped into rectangles. Indeed, in some parts of the world they are assuming the shape of inverted pyramids. As a result of these shifts it is now estimated that globally there are more people aged over 65 than under 5.
A Global Challenge

To date, societal aging has been confined largely to the developed world. The poorest countries in the world remain young with population pyramids that have changed little from mid-20th century. The median age in Niger is 15. Childhood deaths remain exceedingly high and average life expectancy is 62 years. By mid-century, however, all countries around the globe are expected to begin the transformation into aging societies. These latecomers to population aging are likely to age even faster than developed nations aged. For example, in Malawi, the population over 60 is expected to increase from 4.1% of the total population in 2020 (784,300 people) to 7.3% of the total population in 2050 (2,784,400 people) – tripling the number of people over 60 between now and 2050. Even now developing regions account for the majority (68%) of the world’s population who are over 60.

It is often said that the developed world got rich before it got old whereas less developed regions will grow old before they grow rich. The challenge of dealing with an ageing society and longer lives is a global one.

Demographic Unsustainability

We are grossly unprepared for this near doubling of life expectancies. Though longer lives are – and should be - counted among the greatest achievements in human history, the speed at which they unfold poses serious challenges to societal infrastructures, social norms, and individuals’ life plans. Societal aging is sending shock waves through governments that built policies and infrastructures based on starkly different assumptions about the ratio of old to young citizens.

The social norms that guide us and the societal infrastructures that support us -through life, work, financial security, education, health care, and even politics and definitions of the family - evolved around lives half as long. As a consequence, these norms and infrastructures appear to be unsustainable for two demographic reasons. The first is a weight of numbers problem. With so many people now living into older ages this is creating economic and fiscal problems for countries. Fundamental policies around the length of working careers, education and health policies need to be revised as a result. The second is a length of life challenge - with individuals living for longer our existing life course structures are proving unsustainable. For instance, as life expectancies approach 90 years, retirement in the 60s will not sustain individuals or pensions for the length of remaining life expectancy.
Costs of An Ageing Society

Political and economic pundits are predicting declines in productivity and strains on health care delivery and cost. Alarms are sounding that with fewer offspring, the needs of older people will be left unmet. Others foresee intergenerational conflicts as generations fight for limited societal resources. Some anticipate that children will be left with miniscule resources as they are consumed instead by the elderly. Young countries today struggle with more immediate challenges; they often view longevity as a concern confined to the west. Yet young countries have a unique opportunity to learn from the mistakes and successes of aging societies. To the extent that they put policies and programs in place today they can position themselves well for their futures. Policies enacted today can influence how the current young become the future old.

A New Map of Life

Whilst the costs of an ageing society are frequently raised far less attention is paid to a positive ageing agenda even though both the UN and the WHO have pointed to the need for new social norms and behaviours that enable individuals to live longer and healthier lives. The opportunities longer lives present are enormous. More years of life mean that we have more time to realize our goals, spend time with loved ones, and chase our dreams. Rather than view older individuals as dependents consuming resources, adults could serve as resources for children.

Healthier longer lives are also an enticing prospect for the economy. Longer and healthier lives also mean a longer time over which people can remain productive and so support greater, not less, economic growth. In Singapore, labour force participation rates among elderly workers is rising; for instance, in 2018, 23.8% of the labour force was over 55, up from 14.6% in 2008. Singapore has created robust programming across the country to promote active, healthy ageing and intergenerational connectivity. For instance, the People’s Association Wellness Programme, first launched in 2008 and now reaching hundreds of thousands of elderly Singaporeans to this day, helps to build social support and promote healthy ageing through diverse programming in Community Clubs and Residents’ Committees island-wide. These programs include exercise and dance classes, dragon boating sessions, language learning classes, health screenings, and technology classes.
Humans are however creatures of culture, exquisitely designed to attend to norms and social cues. Responding to these opportunities will require new social norms and new behaviours at every stage of life. Already there are signs of change occurring. Young adults in aging societies are having fewer children and delaying when they have children. The same phenomena are now occurring in emerging markets. Individuals are also postponing the age at which they marry, when and how they work, and when and how much education they seek. In the U.S. young people are also postponing home ownership and saving for retirement. In Morocco, the average age of first marriage has risen from 19.1 for brides and 25.0 for grooms in 1971 to 26.3 and 31.2 in 2011 for brides and grooms respectively. Retirement as a stage of life is being transformed with more people remaining in work even after their 70s. It is unclear whether such delays reflect a tacit appreciation for longer lives or the economic circumstances they face, but in both instances the result is social experimentation and pioneering.

The Longevity Approach

The ageing society narrative tends to focus on the end of life, which is not only short-sighted but problematic on a number of counts. Failing to address the full life course ignores the strong continuities and recursive properties that play out across the life course. Birth weight predicts heart disease in old age. Education predicts functional health and risk for dementia as well as likelihood of seeking education later in life. Working longer is associated with better health and cognitive functioning, especially among those with relatively little education. A longevity perspective recognizes that development is a recursive process with many interconnected stages and requires a broad range of interventions and measures covering education, work, finances, health, community, environment and relationships. We must not only care for the elderly but prepare children for century long lives.
Reasons for Optimism

Arguably, the best news is that the potentials of science and technology at this point in history are breathtaking and only beginning to seep into public consciousness. Individuals are ageing better, are living for longer and are healthier for longer. Progress in biological research points to the real possibility that aging itself can be slowed. Technological advancements – ranging from improved vaccinology, 24-hour monitoring of health to automated transportation and agri food technologies – promise to make life safer, easier, and more connected globally. Visions of social innovations, new stages of life, new ways of living and working could dramatically improve the quality of life. If successful such developments will help reduce substantially the costs of an ageing society and will make the need for a new map of life all the more important.

The Longevity Agenda

We begin this initiative on the premise that longevity demands a new map of life. We need to build a culture that supports a healthy, productive life that could extend 100 years in the future. The longevity agenda seeks to make as many people as possible live as long as possible in as healthy and as fulfilled way as possible. This will involve rethinking policy, institutions and social norms to rearrange the life course to maximise the chances of achieving this objective. The best chance we have of ensuring that this gift of time is realized is to carefully and realistically assess the needs and potentials associated with aging and to begin to systematically to address them.

Longevity Principles

We can solve many of the problems associated with aging as we know it. We need to change the way we live our lives. The key principles of a longevity agenda are:

1. Ageing, health span and life span are all malleable and can be influenced positively and negatively by behaviours, policy, norms and the environment.
2. Increases in life span demand attention to the entire life course, not solely to old age. Policies need to be assessed for their impact at all ages as well as for their impact in terms of intergenerational justice.
3. Long, healthy, fulfilled lives should be a right for all regardless of gender and social status.
4. How we age is a recursive process which requires recognition of interconnections both across time and also across disciplines.
5. We recognize that both the challenges and the opportunities of longer lives are enormous. Neither overly pessimistic nor optimistic expectations are warranted at this point in history. Rather, problem solving is needed.
6. A global perspective is needed. This perspective needs to recognise that all countries are experiencing ageing but are at different stages of the process and face different cultural and institutional challenges. Despite these differences, there are also core common principles that need to be tackled.
7. The lead time involved in the longevity agenda are considerable, and if properly exploited, mean that policies can have a substantial future effect. This is a policy problem best tackled ahead of time.