

 Mortality and Longevity

 Aging and Retirement

# 2020 Living to 100 Discussant Comments 4A: Mortality Patterns



## Discussant Comments Session 4A: Mortality Patterns

Erwin J. Tan, M. D.

*Demographic Perspectives on the Rise of Longevity* – James W. Vaupel, Ph.D., University of Southern Denmark; Francisco Villavicencio, Ph.D., Johns Hopkins University; Marie-Pier Bergeron Boucher, Ph.D., University of Southern Denmark

Dr. Bergeron Boucher presentation shows how longevity today is part of a larger life expectancy revolution. Starting in the industrial revolution - a seismic shift that transformed the world, people have been living longer. This trend has continued until the present, with different countries taking the lead as the top performer at different times. For the last three decades Japan has been the longevity leader, with life expectancy at birth for Japanese women in 2016 more than 87 years. The question is, how long will this remarkable trend continue?

Longevity by itself, is not enough – what we must strive for is “Healthy Longevity”. AARP is therefore a principal sponsor of the National Academy of Medicine’s (NAM) Global Roadmap for Health Longevity and our CEO, Jo Ann Jenkins is a vice chair of the oversight board. The roadmap will seek to recommend global priorities and actions to be addressed by 2030 to optimize the health, function, and well-being of all people into later life. To achieve this NAM will be seeking to address key enablers such as social determinants of health, behavioral health, built environments, business and workforce, economics, health care delivery and financing, biomedical science and technology, and health and finance policy, among others.

In an editorial, Jo Ann Jenkins and President of NAM Victor Dzau, recently sounded the call to action: “Achieving healthy longevity requires decisive, multisector action. In the past century, major breakthroughs have saved millions of lives that previously would have been lost to infectious diseases. However, not all of these gains have been shared equally.”<sup>1</sup>

Dr. Bergeron Boucher also notes that across history, increases in life expectancy have been accompanied by increases in lifespan equality: as people live longer, ages at death are becoming more similar, with this lockstep advance being a major achievement of modern civilization.<sup>2</sup> In the United States, we have experienced a decade of stagnation with only a slight increase in life expectancy in 2018 after three years of decline.<sup>3</sup> The lack of progress in life expectancy in the US has been partially due to a rise in inequity as a person’s zip code has become an important predictor of one’s life expectancy. In a 2016 JAMA study, researchers from the University of Washington found stark county level disparities in county-level mortality rates across a range of causes of death from 1980-2014.<sup>4</sup> The United

<sup>1</sup> Victor J Dzau, MD, Jo Ann C Jenkins, BS, Creating a Global Roadmap for Healthy Longevity, The Journals of Gerontology: Series A, Volume 74, Issue Supplement\_1, December 2019, Pages S4–S6, <https://doi.org/10.1093/gerona/glz226>

<sup>2</sup> Aburto, J.M., Villavicencio, F., Basellini, U., Kjægaard, S., and Vaupel J.W. (2020). Dynamics of life expectancy and lifespan equality. PNAS (accepted/in press).

<sup>3</sup> Xu JQ, Murphy SL, Kochanek KD, Arias E. Mortality in the United States, 2018. NCHS Data Brief, no 355. Hyattsville, MD: National Center for Health Statistics. 2020 <https://www.cdc.gov/nchs/data/databriefs/db355-h.pdf>

<sup>4</sup> Dwyer-Lindgren L, Bertozzi-Villa A, Stubbs RW, et al. US County-Level Trends in Mortality Rates for Major Causes of Death, 1980-2014. JAMA. 2016;316(22):2385–2401. doi:10.1001/jama.2016.13645

States will need to address the causes of lifespan inequity, such as racism, economic inequality and access to health and social services that are important components of social determinants of health.

AARP's mission is to empower people to choose how they live as they age, or as our CEO Jo Ann Jenkins likes to say, "50 is the new 50". As someone who is turning 50 in 2020, I appreciate the fact that we are living longer. There's nothing wrong with my age; what is sometimes a problem is how people think about people my age. We must now work to make sure that everyone has that opportunity to live a longer healthier life to make it to 50 and beyond, and as people live longer we must also make sure that society appreciates the desires and capabilities of people age 50, age 80 or age 100. To do so we must empower individuals, communities and societies around the world to both embrace the opportunities of aging to the fullest extent possible.

The work presented by Dr. Bergeron Boucher is part of a dialogue that started when we invited Dr. Jim Vaupel to speak at the AARP Great Debates on Living to 100 in the fall of 2017. We look forward to continuing this dialog with thought leaders in the fields of demography and actuary science.

## About The Society of Actuaries

With roots dating back to 1889, the [Society of Actuaries](#) (SOA) is the world's largest actuarial professional organizations with more than 31,000 members. Through research and education, the SOA's mission is to advance actuarial knowledge and to enhance the ability of actuaries to provide expert advice and relevant solutions for financial, business and societal challenges. The SOA's vision is for actuaries to be the leading professionals in the measurement and management of risk.

The SOA supports actuaries and advances knowledge through research and education. As part of its work, the SOA seeks to inform public policy development and public understanding through research. The SOA aspires to be a trusted source of objective, data-driven research and analysis with an actuarial perspective for its members, industry, policymakers and the public. This distinct perspective comes from the SOA as an association of actuaries, who have a rigorous formal education and direct experience as practitioners as they perform applied research. The SOA also welcomes the opportunity to partner with other organizations in our work where appropriate.

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**Relevance:** The SOA provides timely research on public policy issues. Our research advances actuarial knowledge while providing critical insights on key policy issues, and thereby provides value to stakeholders and decision makers.

**Quantification:** The SOA leverages the diverse skill sets of actuaries to provide research and findings that are driven by the best available data and methods. Actuaries use detailed modeling to analyze financial risk and provide distinct insight and quantification. Further, actuarial standards require transparency and the disclosure of the assumptions and analytic approach underlying the work.

Society of Actuaries  
475 N. Martingale Road, Suite 600  
Schaumburg, Illinois 60173  
[www.SOA.org](http://www.SOA.org)