

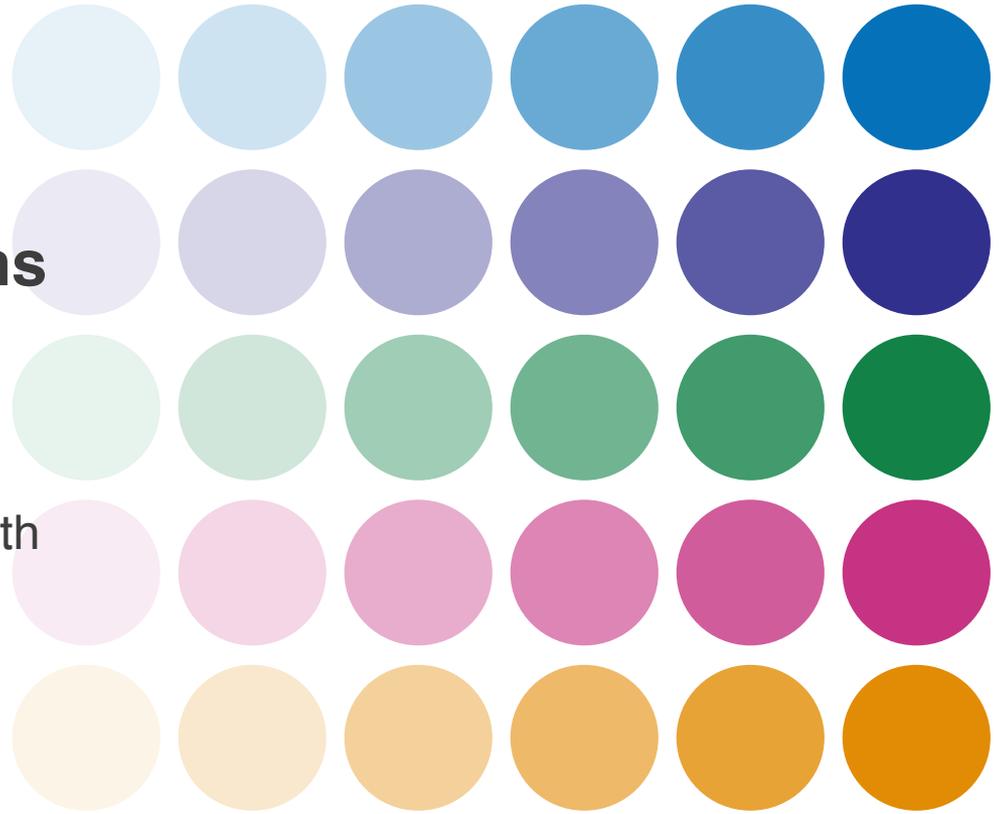


---

# Healthy Longevity: Japan's Future Innovations Working Group

Kenji Shibuya, MD, DrPH  
Director, Institute for Population Health  
King's College London

---





# Four tsunamis in health systems

1. Population ageing
2. Chronic diseases
3. Explosion of health technologies
4. Globalization

Source: Tedros Adhanom/Suwit Wibulpolprasert



# “The incredible shrinking country”

---



Source: The Economist. March 25, 2014

## “Japan: a mirror for our future”

“The success of Japan’s health system matters not only because of its importance to Japanese citizens, but also because Japan is a barometer of western health.”

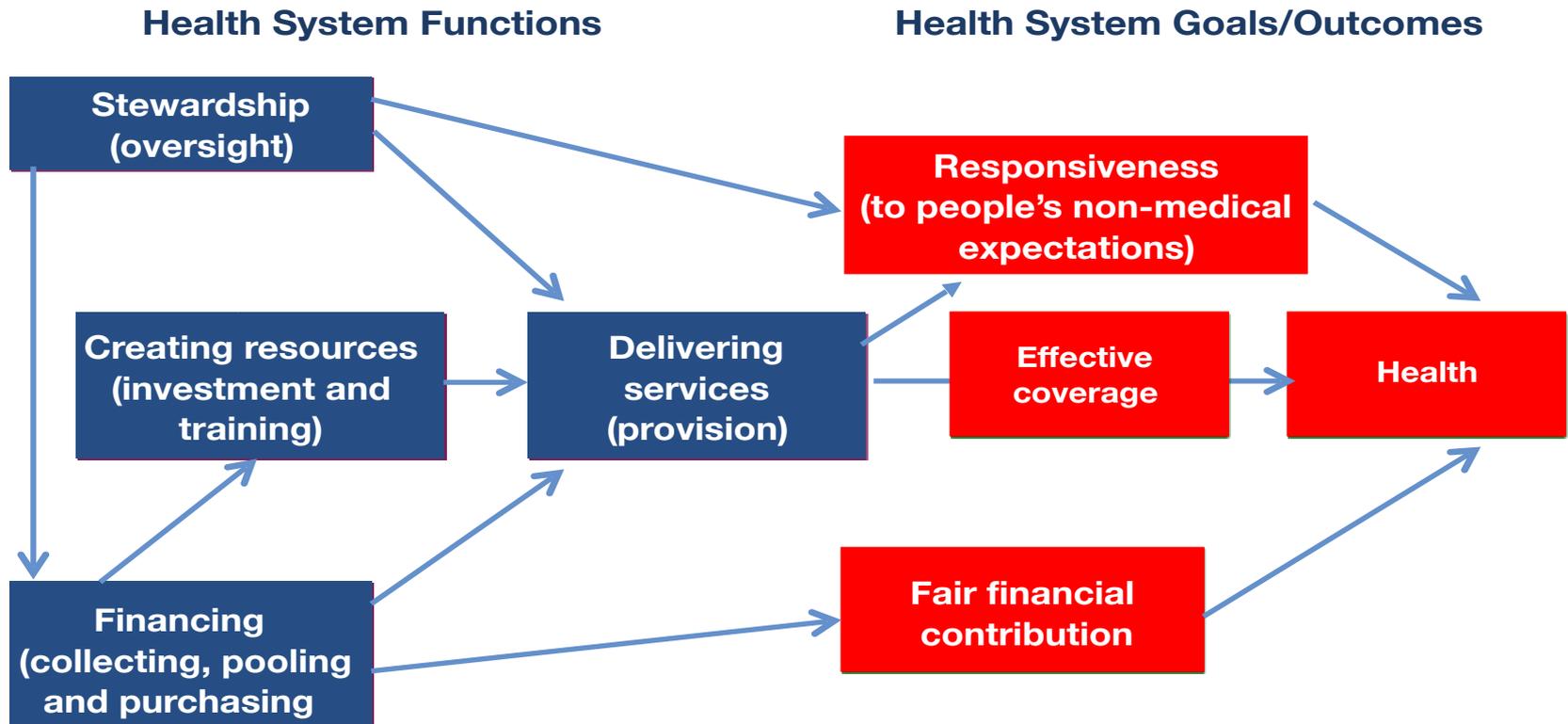
- Richard Horton



Source: The Lancet 2011



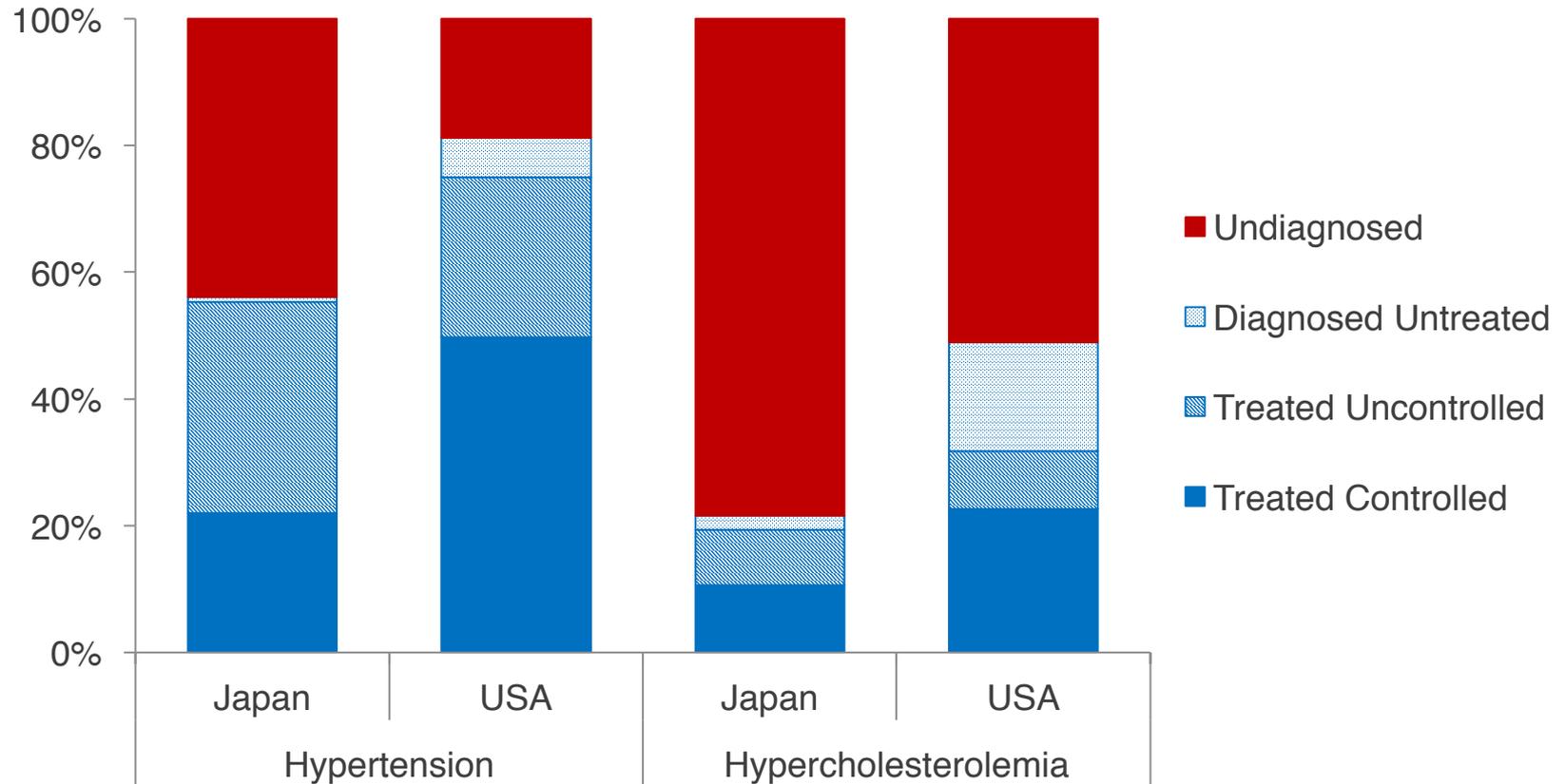
# WHO's Health System Performance Assessment



Source: WHO 2000



# Control of hypertension and hypercholesterolemia in Japan and the United States, 2007







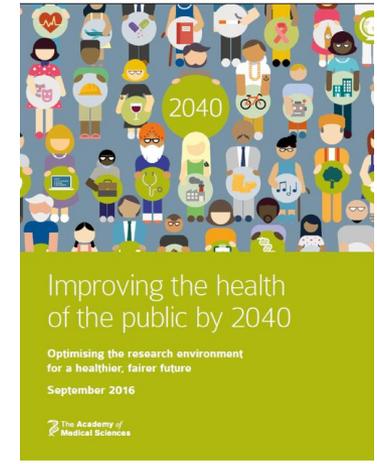
# Grand convergence in population health policy, research and practice

## Health Care 2035: Japan Vision

## Improving the Health of the Public by 2040



The current health care system must be rebuilt as a new "social system."  
A paradigm shift is needed from public health to health of the public.



### Five supporting ambitions

Environments	Empowerment	Values	Sustainability	Resilience
All elements of the UK environment support healthy living for everybody.	People are empowered to actively contribute to their own and other people's health.	All sectors of society value health and health equity, and they are indicators of societal success.	Improvements to UK health are gained in ways that are economically, environmentally and socially sustainable.	The UK has developed resilience to potential health crises and is a major contributor to global health security.





# Professor Kenji Shibuya to lead Institute for Population Health

15 April 2019

Professor Kenji Shibuya has been appointed to establish a new Institute for Population Health at King's College London.

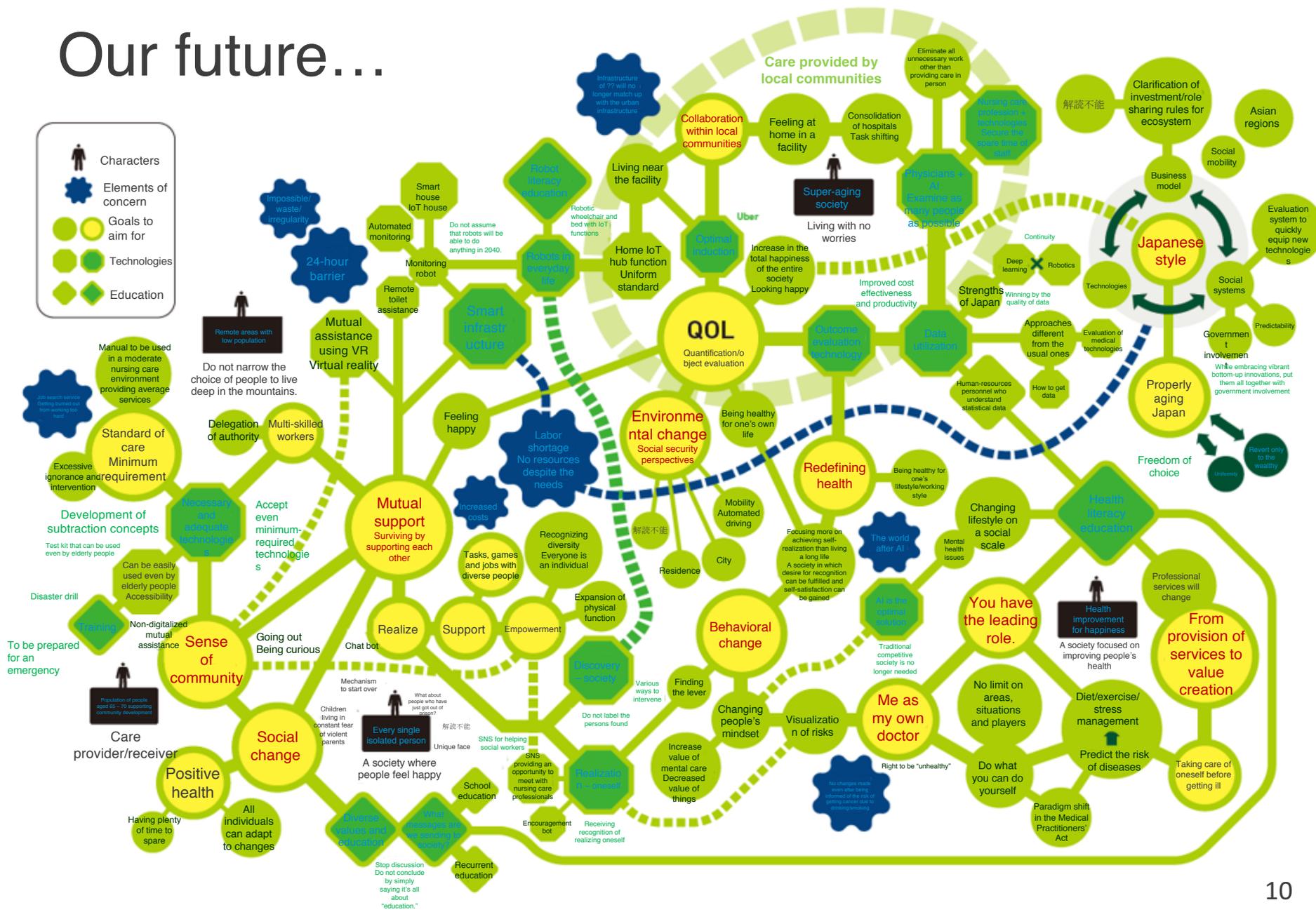
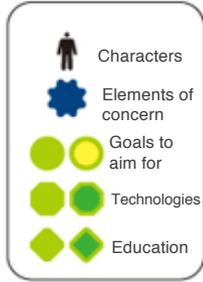
Population Health constitutes one of the major global challenges facing humankind and our ability to advance population health is similarly complicated. Key external factors like ageing, urbanisation, air quality, diet and socio-economic inequity all have significant impact on health, as well as individual characteristics like genetics and physiology. Improving health and ensuring a more equitable distribution of health and wellbeing within and between countries is at the core of research into population health. To understand these new challenges and opportunities requires research to move beyond traditional disciplinary boundaries.





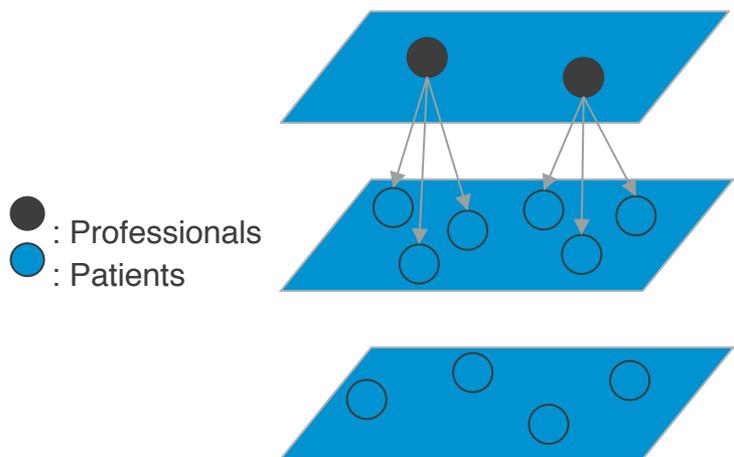
# Moonshot

# Our future...



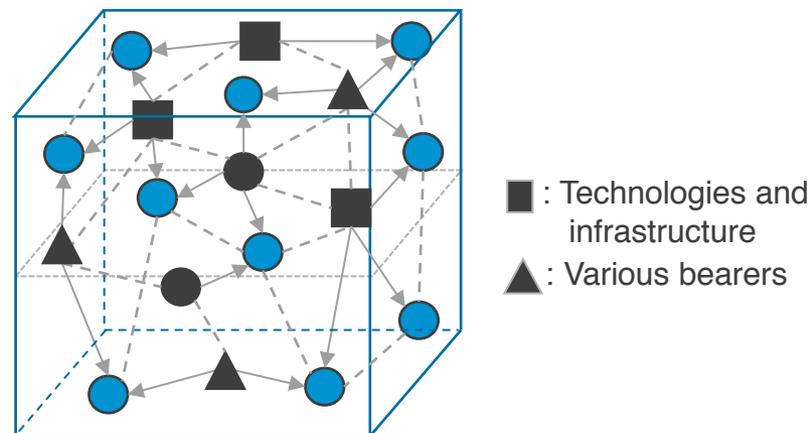
# Supporting well-being and lifestyle of each Individual

## Hierarchical and unidirectional model



Disparities due to differences in social determinants, incentives, and knowledge

## Network-based and interconnected model



Promoting inclusiveness and enhancing productivity and mutual support through technologies and community development

- Investing in pioneering R&D programs building upon a long-term vision
- Empowering individuals and harnessing inclusiveness/mutual support
- Developing social ecosystems



# Japan as the innovation hub for well-ageing



## Enabling Healthful Aging for All — The National Academy of Medicine Grand Challenge in Healthy Longevity

Victor J. Dzau, M.D., Sharon K. Inouye, M.D., M.P.H., John W. Rowe, M.D., Elizabeth Finkelman, M.P.P., and Tadataka Yamada, M.D.

During the past century, human life expectancy has nearly doubled globally, increasing by more years than it did in all previous millennia combined. Today, 617 million people are 65 years old or older; by 2050, the number will reach 1.6 billion — nearly 20% of the world's population — and the population of the “oldest old,” 80 or older, will more than triple, growing from 126 million to 447 million.<sup>1</sup> Major advances in public health, socioeconomic development, education, and health care have driven these dramatic gains. Yet this triumph presents challenges as well as opportunities.

health care, work and retirement, the built environment, and our economies, were not designed to support populations with this anticipated age distribution. As older adults leave the workforce and proportionally fewer younger people line up to replace them, economies will lose their equilibrium. Health care systems will struggle to fulfill increasing demands for treatment, hospitalization, and in-home caregiving. Communities will strain to meet needs for housing, social services, and transportation. As a result, older people's well-being may suffer.

Population aging affects both

most profound in Japan, Europe, and North America. By 2050, the United Nations estimates that older people will constitute more than one third of the population in Europe; approximately one quarter in North America, Latin America, the Caribbean, Asia, and Oceania; and 9% in Africa.

Aging is a major risk factor for multiple chronic diseases, including cancers and cardiovascular and neurodegenerative conditions such as Alzheimer's and Parkinson's diseases, all of which require extensive long-term care. Many countries are grappling with rising health care expenditures,<sup>1,2</sup>



# Moonshot and **Backcasting**



# Evolution



## Why are we here today?

1. What should we do NOW?
2. What's SPECIAL about health and life science?
3. Share, give and spread IDEAS