



Healthy Longevity

Global Grand Challenge

Background

Dramatic breakthroughs in medicine, public health, and social and economic development have resulted in unprecedented extensions of the human lifespan across the world over the past century. This triumph for humanity provides new opportunities as well as new challenges. Globally, we are facing a major demographic shift. Today, 8.5% of people worldwide (617 million) are aged 65 and over. By 2050, this percentage is projected to more than double, reaching 1.6 billion. The global population of the “oldest old”—people aged 80 and older—is expected to more than triple between 2015 and 2050, growing from 126 million to 447 million.

At the current pace, population aging is poised to impose a significant strain on economies, health systems, and social structures worldwide. *But it doesn't have to.* We can envision, just on the horizon, an explosion of potential new medicines, treatments, technologies, and preventive and social strategies that could help transform the way we age and ensure better health, function, and productivity during a period of extended longevity. Multidisciplinary solutions are urgently needed to maximize the number of years lived in good health and a state of well-being. Now is the time to support the next breakthroughs in healthy longevity, so that all of us can benefit from the tremendous opportunities it has to offer.

The Challenge

The National Academy of Medicine is launching the Healthy Longevity Global Grand Challenge—a worldwide movement to increase physical, mental, and social well-being for people as they age. The initiative will have two components: a prize competition to catalyze breakthrough innovations from any field, and an evidence-based report authored by an international commission. The combined objectives of the initiative are to:

- **Catalyze breakthrough ideas and research that will extend the health- and activity-span later in life**—support promising, cross-disciplinary ideas and research exploring potentially breakthrough solutions for healthy aging and longevity.
- **Achieve transformative and scalable innovation in healthy aging and longevity by translating evidence into action**—translate groundbreaking research and novel ideas to create transformative and scalable innovations that will advance healthy longevity in an equitable way around the world.
- **Provide a comprehensive assessment of the challenges and opportunities presented by global aging**—develop a global roadmap for healthy longevity that identifies the opportunities that exist across policy, practice, society, and the economy to improve health, productivity, and quality of life.
- **Build a broad ecosystem of support**—globally, engage new minds to enter the field and work together to achieve the promise of healthy aging and longevity, including scientists, engineers, innovators, entrepreneurs, health leaders, policy makers, and the public.



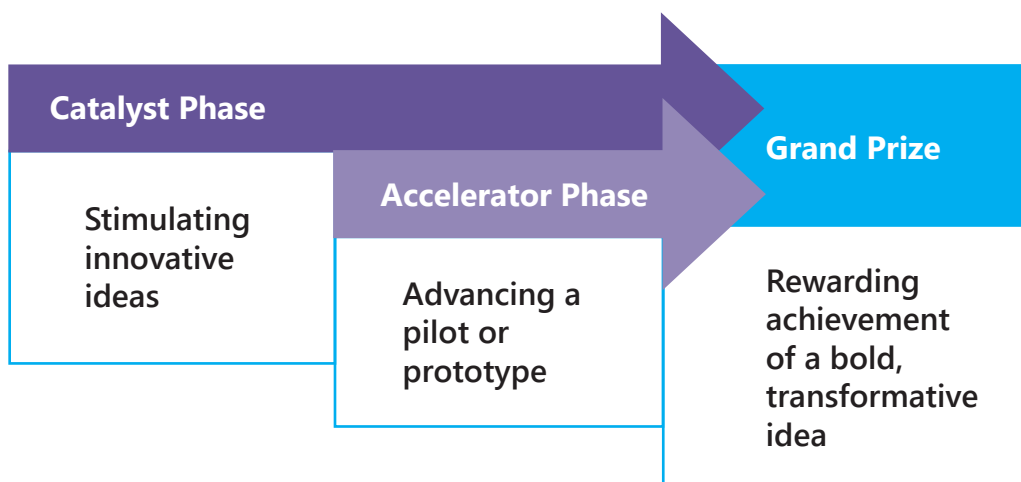
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Catalyzing Innovation Through a Global Prize Competition

The Healthy Longevity Global Grand Challenge prize competition seeks to inspire innovators from any field to catalyze breakthrough discoveries and technologies that will transform the field and stimulate new research and solutions. The competition will roll out over three distinct phases and employ a progressive model of awards and prizes:

- The **Catalyst Phase** will seed the movement by stimulating ideas that could increase healthspan through innovations in disease prevention, mobility, functionality, social connectedness, longevity, and more.
- The **Accelerator Phase** will sustain momentum by providing resources to advance a prototype or idea. Although Accelerator Awards are open to anyone, winners of Catalyst Awards will be well positioned for Accelerator funding.
- The **Grand Prize** will serve as the capstone of the competition by rewarding the achievement of a bold and transformative innovation that extends the human healthspan. Although the Grand Prize is open to anyone, winners of Accelerator Awards will be well positioned for the prize.



Developing a Global Roadmap for Healthy Longevity

Authored by an expert International Commission, the Global Roadmap for Healthy Longevity will comprehensively assess the challenges presented by global aging and demonstrate how these challenges can be translated into opportunities for societies globally through levers across policy, practice, and socioeconomic infrastructure. The report will be informed by three workstreams: 1) social, behavioral, and environmental enablers; 2) health care systems and public health; and 3) science and technology. Within each of these workstreams, particular consideration will also be given to policy and practice, health equity and disparities, technology solutions, financing, and monitoring metrics. The process will bring together thought leaders from science, medicine, health care systems, engineering, technology, and policy to identify the necessary priorities and directions for improving health, productivity, and quality of life during a period of extended longevity for populations worldwide.



About the National Academy of Medicine | Established in 1970 under the name Institute of Medicine (IOM), the NAM is an independent organization of eminent professionals from diverse fields including health and medicine; the natural, social, and behavioral sciences; and beyond. It serves alongside the National Academy of Sciences and the National Academy of Engineering as adviser to the nation and the international community. Through its domestic and global initiatives, the NAM works to address critical issues in health, medicine, and related policy and inspire positive action across sectors.