WELCOME

Report Release Webinar: Global Roadmap for Healthy Longevity

The webinar will begin momentarily

Please submit questions to Slido, located below the livestream. If issues occur, please email healthylongevity@nas.edu
Introduction

Victor J. Dzau
In 2050, ~18% of global population (1.6 B) will be 65+
In 2050, ~6% of global population will be under 5
Demographic Change Impacts

In all countries the rate of population aging stands to fundamentally impact how families, communities, societies, industries and economies function

- Family structure and relationships
- Social infrastructure
- Social insurance and retirement programs
- Housing, transportation, and public space
- Chronic conditions: patterns and prevalence
- Health care delivery and financing
- Workforce size and composition
Importance of Healthy Longevity

• Healthy longevity is about living healthier and more productive lives at all ages; achieving it requires a life course approach
• Health is “a state of complete physical, mental, and social well-being”
• Healthy longevity is characterized by learning and growth, diverse and intergenerational relationships, engagement in productive and rewarding activities, and work and societal roles with meaning and purpose
• Longevity dividend: “If longer lives in good health are combined with the structures needed to enable healthier older adults to be productively engaged in life, society and individuals of all ages will benefit.” (Commission Report)
Preparing Socially, Scientifically, and Financially for Longer Lifespans is a Global Imperative

Existing efforts include:

• WHO Decade of Healthy Ageing
• WHO Global Strategy and Action Plan on Ageing and Health
• African Union Policy Framework and Plan of Action on Ageing
• AARP Living, Learning and Earning Longer
• Aging Resources and Competitiveness Initiative

• Need for comprehensive effort assessing challenges and opportunities presented by global aging through levers across health, social and economic enablers, and policy and practice

• Need for science, technology and innovation to increase health span, transform the field & generate a longevity dividend
Launch Event
October 21, 2019
Grand Challenge

• Address challenges and identify opportunities of global population aging
• Catalyze change to promote healthy longevity
• Catalyze breakthrough ideas and research that will extend years in good health
• Generate transformative and scalable innovations worldwide
• Enable scientists, engineers, innovators, entrepreneurs, health leaders, policy makers, and the public to work together to achieve the promise of healthy longevity.
Commission Membership

- **Linda P. Fried** (co-chair), Mailman School of Public Health, Columbia University
- **John Eu-Li Wong** (co-chair), National University of Singapore
- **Isabella Aboderin**, University of Bristol
- **Ann Aerts**, Novartis Foundation
- **John Beard**, University of New South Wales
- **Lisa Berkman**, Harvard Center for Population and Development Studies
- **Laura L. Carstensen**, Stanford Center on Longevity
- **Michele J. Grimm**, Michigan State University
- **Paul H. Irving**, Milken Institute
- **Mehmood Khan**, Hevolution Foundation
- **Jeanette Vega Morales**, Ministry of Social Development and Family, Chile
- **Mosa Moshabela**, University of KwaZulu-Natal
- **Hiroki Nakatani**, Keio University
- **John Piggott**, University of New South Wales
- **Jennie Popay** (2019-2021) Lancaster University
- **John W. Rowe**, Mailman School of Public Health, Columbia University
- **Andrew J. Scott**, London Business School
- **Eric Verdin**, Buck Institute for Research on Aging
- **Yaohui Zhao**, Peking University
International Oversight Board

- **Victor Dzau (co-chair),** National Academy of Medicine
- **Jo Ann Jenkins (co-chair),** AARP
- **Keizo Takemi (co-chair),** House of Councillors, Japan
- **Nancy Brown,** American Heart Association
- **Dame Sally Davies,** Department of Health and Social Care, UK
- **Terry Fulmer,** John A. Hartford Foundation
- **William Hait,** Johnson & Johnson Innovation LLC
- **Roman Macaya Hayes,** Embassy of Costa Rica, U.S.
- **Rahul Mehta,** The Mehta Family Foundation
- **Chorh C. Tan,** Ministry of Health, Singapore
- **Mary A. Tsao,** Tsao Foundation
- **Edwin Walker,** Administration for Community Living, Department of Health and Human Services
- **Sir Andrew Witty (2019-2020)** Optum United Kingdom
Statement of Task

To strengthen communities and enrich the lives of older people the commission will:

• Explore and recommend approaches to enhancing structures, systems, and environments
• Identify and analyze potential approaches and reforms across the entire spectrum of institutions and systems
• Identify avenues for innovative age-related research
• Coordinate with other related global initiatives to achieve an integrated and synergistic effort
The Cost of Inaction

- More people living with poor health, suffering, and dependence
- GDP that is lower than it would be with better health and full inclusion of older people
- Increased fiscal burdens on government
- Increased financial burdens on individuals and families
- Lost opportunities for people of all ages
Vision for Healthy Longevity

Linda P. Fried
Vision 2050

• All people are enabled to have long lives with health and function
• Healthy older people have full opportunity to engage in meaningful and productive activities that meet their goals and bring their social capital to society, contribute to GDP and intergenerational well-being and cohesion.
• All-of-society benefits from the contributions of older adults who currently face barriers to full participation in society.
• When older people thrive all people thrive.
• Equity between and within countries is needed to achieve healthy longevity.
Evidence for Vision

- Health span can \( \approx \) life span
- All generations can benefit when barriers to older people’s full participation are eliminated
- There is proven return on investment (ROI) for:
  - Investments in social and physical infrastructure
  - Improving health at all ages
  - Enabling older people to work and volunteer in ways they value
- Workforce participation among older people is positively correlated with workforce participation among younger people; intergenerational teams more productive and innovative
Virtuous Cycle of Healthy Longevity

Healthy Longevity
- Individual & societal health & well-being
- Productive engagement

Equity

Social Compact
- Social Cohesion
- Resources to support enablers

Disrupters
- Ageism
- Disease
- Poverty
- Social determinants of health
- Pollution & climate
- Social & family conflict
- Inequity

Capital
- Human
- Financial
- Social

Enablers
- Work
- Social
- Physical Env.
- Health Systems
Principles for Healthy Longevity

1. People of all ages, particularly older adults, reach their full potential to live life with good health, functioning, meaning purpose, and dignity.

2. Societies enable the best health and functioning that individuals at all ages are capable of attaining.

3. Societies reduce disparities and enhance equity within and among countries to realize the well-being and contributions of all people, including those of older ages.

4. The human, financial, and social capital of older people is realized for the benefit of all of society.

5. Societies use data and meaningful metrics to track the achievement of outcomes and guide decision making.
Relevant Actors

- Governments (international, regional, national, local)
- Nongovernmental and multilateral organizations
- Local and community organizations
- Researchers
- Individuals, families, and communities

NATIONAL ACADEMY OF MEDICINE
Healthy Longevity Domains

- Social Infrastructure
- Physical Environment
- Health Systems
- Longevity Dividend (education, work, retirement)
Strategies

1. To shift multiple complex systems within societies to achieve healthy longevity
2. Select the initial starting points that could propel the vision and commitment to ongoing implementation
3. Identify key levers to create optimism, momentum, and early returns
4. Actions of first 5 years initiate all-of-society transformation for societies of long lives with health
Social Determinants of Health

Social Infrastructure

Key Targets

• Prosocial strengths of older people
• Ageism and age discrimination
• Social inclusion
• Financial security in retirement
• Digital literacy

Goals for 2050

4. Social cohesion augmented by intergenerational connections and the creation of opportunities for purposeful engagement by older people at the family, community, and societal levels
5. Social protections and financial security that mitigate the effects of financial vulnerability at older ages
Supporting Structures 2022-2050

- **Laws and policies** to eliminate age-based discrimination
- **Public information campaigns** promoting the value of older people and attacking stereotypes
- **Multigenerational advocacy** to fight age discrimination to accomplish shared goals
- **Multigenerational policy and action** to strengthen social cohesion and reduce loneliness
- **Pension and social protection systems** that include people outside the formal economy
- Programs promoting **individual savings and financial literacy**
- Access to **secure banking systems** and **investment opportunities**
4-1 Governments should develop evidence-based, multipronged strategies for reducing ageism against any age group.

4-2 By 2027, all governments should develop plans for ensuring basic financial security for older people.

4-3 To improve financial security in retirement, governments and employers should develop strategies for increasing financial literacy and mechanisms for promoting pension contributions, self-funded pensions, and lifelong savings.
Costs of Inaction

• Ageism costs billions annually (Officer, 2020)
• Loneliness is associated with depression, dementia, heart disease, and other conditions (Singer, 2018)
• In the US social isolation increases Medicare spending by an estimated USD6.7 billion (Flowers et al., 2017).

Social Infrastructure ROI

• Social protection schemes for older people reinforce social cohesion while reducing poverty and inequality (UN 2013)
• Social engagement is associated with better physical and mental health (Umbertson 2013)

Physical Environment

John Wong
Determinants of Health in Physical Environment

24 percent of death and disease can be linked to environmental hazards (WHO, 2022)

Physical Environment

Key Targets

- Housing
- Public spaces and infrastructure
- Safety
- Transportation
- Digital technologies
- Climate change & environmental hazards

Goal for 2050
6. Physical environments and infrastructure that support functioning and engagement for people at older ages
Physical Environment Supporting Structures – 2022 to 2050

- Inclusion of older people in co-design and user-centered design of the built environment
- Public spaces that promote social cohesion and intergenerational connection while also encouraging physical activity
- Age-friendly community and housing design protocols that enhance access to food, transportation, social services, and engagement
- Programs to mitigate the effects of environmental emergencies on older people
- Reduction of air pollution
5-1 Governments and the private sector should partner to design user-centered and cohesion-enabling intergenerational communities for healthy longevity. Initiatives should include

a. at the city level, developing and implementing mitigation strategies to reduce the negative effects of the physical environment (e.g., air pollution and climate events such as flooding and hurricanes/typhoons) on older adults;

b. at the neighborhood level, promoting and measuring the impact of innovation and policy solutions for healthy longevity, intergenerational connection, and cohesion;

c. at the home level, updating physical infrastructure to address affordability, insufficiencies, and inefficiencies in housing stock, as well as support autonomy and social connection;

d. making broadband accessible and reducing the digital divide (e.g., usability of and willingness to adopt technology) within the context of each community; and

e. designing public transportation options, including solutions that address first-/last-mile transportation needs, that can be provided to companies, foundations, and local governments for implementation.
Providing **housing and supports** reduces emergency department visits and hospital stays and can generate a return on investment of **USD1.57 in savings** for every **USD1 spent** (Tsega et al., 2017)

Investments in **broadband** impact the economy, with one study showing that doubling broadband speed can result in a **0.3 percent addition** to gross domestic product (**GDP**) growth and positive impacts on household incomes in middle- and high-income countries (Ericsson et al., 2013)

Physical Environment

Community gardens accessible to older adults create opportunities for nonstrenuous exercise and intergenerational social interaction. In Gambia, gardens were linked to job creation; empowerment of women and youth; and greater levels of food security, nutrition, and health (IFAD, 2019)

Health Systems

John Beard
Health Systems

Key Targets

- Chronic conditions
- Public health
- Health care delivery
- Long-term care
- Health care workforce
- Geroscience, technology, and big data innovation

Goals for 2050

7. Integrated public health, social service, person-centered health care, and long-term care systems designed to extend years of good health and support the diverse needs of older people

8. Quality long-term care systems to ensure that people receive the care they require in the setting they desire for a life of meaning and dignity
All Health Systems

• Integration across public health, health care, long-term care, and social services

Public Health

• Interventions at population and individual levels to reduce underlying risk factors for aging and chronic conditions
• Close collaboration with social services to address social determinants of health
• Data and analytics systems for surveillance, precision public health, and assessment of the efficacy of interventions
Health Care

• Integrated person-centered care, including care coordination
• Primary care systems that provide preventive screening, address risk factors for chronic conditions, and promote positive health behaviors
• Comprehensive and shared health records and a goal-based care plan
• Collaboration with social services to address social determinants of health
• Geriatrics workforce that can adequately care for older people globally
• Palliative and hospice care
Long-Term Care

- Policy and funding prioritizing care delivery in the setting the person chooses, to the extent possible; respects individual autonomy and maintains dignity; and attends to care quality and the risk of abuse, neglect, and exploitation.

- Care and social supports addressing all needs, including meaning and purpose.

- Supports for families and family caregivers when providing long-term care while making formal care available when needed.

- Technology to support caregivers and people needing care by providing monitoring that allows privacy.
Health Systems Recommendations – 2022-2027

6-1 To achieve the goal of the best possible health for older people, governments should over the next 5 years develop strategies for increasing investments in robust public health systems that can build and lead collective actions for promoting health at the population level and across the life course.

6-2 Shift health care systems to focus on healthy longevity.

6-3 Governments should work with health and long-term care systems and researchers to develop strategies for making available culturally sensitive, person-centered, and equitable long-term care. To the extent possible, strategies should honor people’s preferences about care settings, enabling them to age within their home or community where possible.
Health Systems ROI

• Systematic review of 52 studies evaluating ROI of public health interventions in high-income countries found that the return on investment was 14.3 to 1. The largest benefits were seen in studies of national public health initiatives, where the median return on investment was 27.2 to 1 (Masters et al., 2017).

• Similarly, the WHO Case for Investing in Public Health, reports on cost-effective public health interventions including tobacco and alcohol legislation, salt reduction, violence reduction walking and cycling promotion, green spaces, safe transportation and housing, and healthy employment (WHO, 2014).


Longevity Dividend

Linda Fried
Age 65+ Labor Force Participation Rates

Longevity Dividend

Key Targets

• Work and retirement
• Volunteering
• Lifelong education & retraining

Goals for 2050

1. Economic and social benefits generated by people living, working, volunteering, and engaging longer
2. Social Infrastructure, institutions, and business systems that enable safe and meaningful work and other community engagement at every stage of life
3. Education and training opportunities that promote participation in lifelong learning and growth
Longevity Dividend
Supporting Structures – 2022-2050

• Increased older-adult participation in the paid workforce and volunteer roles to maintain individual and societal economic equilibrium with population aging
• Incentives to recruit and retain older workers to increase workforce participation, emphasizing the worker’s preferences, strengths, and capabilities
• Policies and incentives to keep older people working and remove barriers to remaining in or rejoining the workforce (cont.)
Longevity Dividend
Supporting Structures – 2022-2050 (cont.)

- Formal programs to provide volunteers with meaning and purpose through opportunities to benefit communities and the next generation
- Development and adoption of a range of innovative and age-appropriate pedagogical approaches that work for people of all ages
- Expanded access to secondary education, vocational training, and higher education to train and upskill workers of all ages
Longevity Dividend
Recommendations – 2022-2027

3-1 Governments, in collaboration with the business sector, should design work environments and develop new policies that enable and encourage older adults to remain in the workforce longer.

3-2 Governments, employers, and educational institutions should prioritize investments in redesigning education systems to support lifelong learning and training. Governments should also invest in the science of learning and training for middle-aged and older adults. Specifically, employers, unions, and governments should support training pilots that allow mid- and older adults to retool for multiple careers and/or participate as volunteers across their life span through the development of incentives.
Older adults contribute 29 percent (Europe) and 40 percent (United States) of GDP per capita through market and nonmarket activities (Bloom et. al., 2020).

Longevity Dividend Background

• People in high-income countries will need to work more years to support longer lives, and healthy longevity will enable them to do so (Gratton and Scott, 2016)

• Delaying the onset of chronic conditions by one year is estimated to be worth $37 trillion in US alone (Scott, Ellison, and Sinclair, 2021)

• Age diversity improves team performance (Li et al., 2021)

• Labor force participation rates among older people are positively correlated with labor force participation rates of younger people (Böheim, 2019)


Work Barriers

• Workers in poor health are more likely than their healthier counterparts to transition out of work and into unemployment, disability pensions, and early retirement (Dingemans and Möhring, 2019)

• Age discrimination in employment is a barrier to older people who want to work remaining in the workforce (Neumark, 2017; Nhongo, 2006; Helleseter et al. 2020)

• Workers in informal and gig economies lack protection

References:

Volunteering

• Formal volunteering in later life supports healthy longevity, enhances an older person’s sense of meaning and purpose, and provides financial and social value to society (Carr et al., 2018)

• Studies have shown positive effects of volunteering on mortality risk (Harris and Thoresen, 2005), cognitive function (Guiney and Machado, 2018), depression (Li and Ferraro, 2005), physical function, positive affect, and happiness (Anderson et al., 2014)

Volunteering

• “Practices of contributing, giving, and passing on have an important role in the self-identification of older people as contributing citizens, as individuals with self-worth, significance, and meaning” means that volunteering meets “basic psychological needs of self-esteem, socialization, life satisfaction, and contribution to others” (Stephens et al., 2015, p. 24)

Report Release Webinar: Global Roadmap for Healthy Longevity Q&A Session

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Contact us at healthylongevity@nas.edu
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