Global Coalition on Aging

# Investing in Health Innovation for OECD Ageing Societies:

# Models for Healthier, Active, and Fiscally Sustainable 21st-Century Ageing

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On 27 October, 2021, as a partner of the OECD Forum, the **Global Coalition on Aging (GCOA)** brought together experts for a virtual dialogue on the topic: "Investing in Health Innovation for OECD Ageing Societies: Models for Healthier, Active, and Fiscally Sustainable 21st-Century Ageing." More than 20 cross-sector, cross-discipline global stakeholders discussed the health and economic imperatives for new solutions that enable healthy ageing, including representatives of the Japanese government, private companies, patient groups, and researchers.

The roundtable identified promising pathways for OECD countries to galvanize new innovations to predict, prevent, and address age-related health challenges, mitigate the costs of these challenges, and ensure fiscal sustainability in a world of more old than young. While the roundtable participants were clear on the importance of access and reimbursement for healthy ageing in OECD societies, it was emphasized that innovation for new and much needed solutions, including therapies, vaccines, digital technologies and models of care, must first be realized. The dialogue followed the May 2021 report by GCOA and the Health and Global Policy Institute (HGPI) titled, ***Incentivizing Innovation for Healthy Ageing and Economic Growth in Super-Ageing Japan,*** which crystallizes the insights from a closed-door May roundtable with Japanese and global experts and decision makers.

## Experts on October 27 agreed on the following key takeaways:

1. Spending on health innovation must be viewed as an investment, rather than a cost.

A short-term focus on reducing health expenditures neglects the potentially catastrophic long-term health and economic consequences in a rapidly ageing world. Instead, governments must take policy action to support progress on new healthy ageing solutions for conditions like vision impairment, cardiovascular disease, osteoporosis and fragility fractures, cancer, dementia and other neurological disorders, and communicable diseases that place older adults at high risk, such as influenza, shingles, pneumococcal pneumonia, and COVID-19. Ultimately, this approach can deliver healthier ageing for all living in OECD countries as well as massive ROI by replacing costly acute care with a more sustainable "predict and prevent" model.

2. Healthy ageing solutions like the "predict and prevent" model and integrated care not only improve quality of life and mitigate care costs, but also support overall economic productivity.

Age-related health challenges have complex impacts that ripple across people's lives, families, jobs, and communities. At a national level, this means healthy ageing is essential for sustaining workforces, productivity, and inclusive economic growth. Policy approaches should reflect this comprehensive lens, recognizing the importance of healthier and more active ageing for labor and fiscal as well as healthcare policy.

3. As the first super-ageing society, Japan is exploring important new policy models to spur health innovation, including a more dynamic drug pricing system and incentives for employer investment in age-friendly workplaces.

These models seek to catalyze public-private collaboration in the service of healthy ageing. The Japanese government is considering how to work with companies from around the globe to accelerate biopharmaceutical innovation, as well as celebrating the success of its program for employers to empower their workers for healthy ageing.

4. The future of work depends on addressing age-related health conditions, such as presbyopia, osteoporosis, and dementia to help older workers extend their careers and continue contributing to overall economic growth.

Many older workers must leave the workforce prematurely due to age-related health conditions; for example, presbyopia drains tens of billions of dollars in productivity each year. Policies that address such conditions will deliver dividends by enabling workers to stay in the workforce and continue contributing as a key pool of talent in the future of work.

5. Integrating key digital technologies for health and transportation into larger health ecosystems will support active and healthy ageing.

There is enormous potential for these technologies to integrate data, interventions, and care from domains that are currently siloed. This can help to address healthcare workforce shortages, support streamlined, personalized care, and provide early interventions that mitigate costs and enable widespread healthy ageing.

GCOA thanks all panelists and attendees for joining the event and contributing their valuable insights, experiences, and perspectives. We look forward to continued collaboration to develop, refine, and scale the innovative solutions that enable healthy ageing in a world of more old than young, already strategically challenging OECD governments.

KEY TAKEAWAYS / 1

# Spending on health innovation must be viewed as an investment, rather than a cost.

There is an urgent need for governments to make innovation a centerpiece of their health, ageing, and economic policies. Incentives for health innovation —including reimbursement and appropriate value assessment, protection of intellectual property, and access to therapeutics, medical devices and digital technologies—must be put in place to ensure a sustainable trajectory as the global population of those over 65 doubles by 2050.[1] New solutions are needed to mitigate the resulting health and economic burden of age-related health challenges, such as vision impairment, cardiovascular disease, falls and fragility fractures, and Alzheimer's disease.

However, panelists noted that common misconceptions can restrain needed policy action. Health spending is often viewed as a cost to be minimized in the short-term, with little focus on the long-term consequences and potentially far greater costs of inaction. Widespread ageism can also cause decision-makers to believe that age-related health challenges are "inevitable," rather than problems that can be solved with new solutions.

The greatest opportunity for innovation-as-investment lies in the shift from costly acute care towards the "predict and prevent" model. These innovations seek to identify at-risk people throughout the life-course and provide interventions that enable healthy ageing, thereby avoiding the much higher downstream costs of emergency department visits, hospital utilization, and other forms of acute care. The current acute care model also strains healthcare workers and health systems, especially given the ongoing and lasting impacts of the COVID-19 pandemic, as well articulated at the roundtable by **David Gallagher, Regional President, International Developed Markets, Pfizer:** *"Sixty-six percent of people aged over 70 have at least one underlying condition, placing them at increased risk of severe impact of COVID-19. As we speak, Pfizer has delivered more than 1.8 billion vaccines. We want to see the same sense of urgency, collaboration, determination, and willingness to innovate in other health challenges."*

The potential ROI of predict-and-prevent is immense. For example, the economic costs of caring for older Americans with the flu is estimated at $87 billion each year.[2] These are avoidable costs for a vaccine-preventable disease, but mitigation requires greater investment in adult immunization campaigns, as well as enabling tools and technologies. Other solutions include access to eyecare, early screening for cardiovascular disease and osteoporosis, digital tools for healthy ageing, and fracture liaison services. And, as **Mary Bussell, research lead for the Economist Impact report,** *Integrated Care Pathways for Bone Health: An Overview of Global Policies,* noted, "Today, in people over 50, one-third of women and one-fifth of men are likely to have an osteoporosis-related fracture. In the EU, fewer than 20% of those with an osteoporotic fracture were receiving care in the year after their fracture and up to 56% of individuals with a fracture become dependent on informal care. In France, Germany, Italy, Spain,

Sweden and the UK osteoporotic fractures collectively cost €37.5 billion in 2017 and the expectations of the risk will increase 27% by 2030.

By adopting this innovation-as-investment lens, OECD countries can address a range of age-related health challenges, improve people's quality of life, and protect health system capacity. This is essential to establish a pathway for healthy ageing, fiscal sustainability, and economic productivity.

**IN SCOPE**

*"When we talk about innovation, we cannot forget the role of the health workforce and therefore the opportunities we have to innovate in the way we organize services and the delivery of care. Unfortunately, this sector is still characterized by significant understaffing, low pay, long working hours and low societal recognition."*

Francesca Colombo,
Head of Health Division, OECD

KEY TAKEAWAYS / 2

# As the global leader on ageing, Japan is exploring important new policy models to spur health innovation, including a more dynamic drug pricing system and incentives for employer investment in age-friendly workplaces.

Japan has long been the global leader on policy responses to ageing, given its status as the oldest country in the world. Milestones include Japan's focus on ageing during its Presidency of the G20 in 2019, the creation of the Dementia Friendly Japan Initiative, and the implementation of a long-term care insurance model.

Today, Japan is once again exploring forward-looking policy solutions that could serve as important models for countries around the world. First, a proposal by the INES (New Drug Innovation Study Group) includes the introduction of a dynamic drug pricing system that would create incentives to encourage private investment into innovation. The proposal would also reform public frameworks, so that more resources can be allocated to support innovation.

The dynamic drug pricing system seeks to create a robust environment for innovations that could drive preventive, cost-saving interventions. This would reverse the current trend, as the number of clinical of trials and drug development expenditures are slowing. Recognizing the long-term risks of this trend, Japanese policymakers are considering how to revitalize innovation with an emphasis on public-private collaboration and understanding the value of new treatments. This would build market confidence and innovation, creating a virtuous cycle.

The second model is a certification scheme for companies that invests in employees' health. The goal is to make workplaces more age-friendly, help people stay in the workforce for longer, and mitigate the public and private costs of acute care for age-related health challenges. As ministries and the private sector alike recognize the importance of employee health in economic productivity, there have been huge increases in applications to these health and productivity management schemes, with over 4,000 SMEs recognized in 2020 alone.[3]

As Japan is at the forefront of global population ageing, it is the first to face many of the resulting challenges—and the first to develop new solutions.

## IN SCOPE

*"First, in order to reward innovation, the Japanese drug pricing system needs to introduce a pricing method that compares the value of new drugs with existing treatments in order to set a price that's value-based. Second, the price revision needs to be adjusted to the total drug expenditures."*

Professor Kazumasa Oguro,
Faculty of Economics, Hosei University

*"Cooperation between global businesses and public organizations that have a deep understanding of the Japanese social system and culture is indispensable for healthy ageing innovation. I want to send the signal that health innovation is highly valued in Japan, and that we're excited to share about our experiences with the world with the help of international organizations."*

Mikiro Suga,
Head of Health and Welfare,
Japan External Trade Organization (JETRO)

*"It's important that all governments have an understanding of the challenges raised by ageing societies. In Japan, the sense of urgency to innovate for healthy ageing is shared among many stakeholders, creating room for policy improvements."*

Kazushige Tanaka,
Deputy Director-General, Commerce and Service Industry Policy Group, Ministry of Economy, Trade and Industry (METI), Japan

KEY TAKEAWAYS / 3

# The future of work depends on addressing age-related health conditions, such as presbyopia, to help older workers to extend their careers and continue contributing to overall economic growth.

In our age of longevity, helping older workers to extend their careers is an economic and social necessity. For individuals, this is the only way to pay for lives that now routinely stretch two, three, or four decades beyond traditional retirement age. For societies and employers, this is the only way to sustain the workforce, maintain productivity, and ensure inclusive economic growth. As a result, longer careers are just as essential to the future of work as hybrid work models, AI integration, and other widely discussed trends.

However, age-related health challenges often prematurely end individuals' healthy, productive years in the workforce. According to the global *Aegon Retirement Readiness Survey*, two-out-of-five retirees were forced to retire earlier than expected because of a health problem.[4] Solutions that prevent or delay these health challenges not only improve people's quality of life, but also enable them to continue their careers and contributions.

Unaddressed presbyopia—or the gradual loss of vision related to ageing—represents one of the most significant but overlooked challenges in this area. Roughly 510 million people globally have unaddressed presbyopia, leading to annual global productivity costs of at least $25.4 billion for people under the age of 65 in 2011 alone—and this total has likely increased significantly in line with population ageing.[5]

This presents an important opportunity for employers and governments to invest in greater awareness and action on presbyopia. While 85% of people aged 40 or older will develop presbyopia, just 55% of people with presbyopia globally have it corrected.[6] By connecting people with these interventions and improving global access to eyecare, governments can unlock a simple, but vital tool for extending working lives and bolstering economic productivity. Further, a similar model can be applied to other age-related health challenges, such as osteoporosis and the impact of fragility fractures. In both these cases, the roundtable clearly emphasized the link between digital technology innovation applications for better monitoring and earlier detection leading to prevention as well as more effective treatments themselves.

## IN SCOPE

*"We're seeing the development of AI-based systems to allow screening to [also] take place outside an ophthalmologist setting...anywhere from an optician/optometrist or a primary care physician.... We can then use digital tools in the home to help patients continue to monitor their care. With the right level of collaboration between sectors, we can [even more] meaningfully [and positively] impact vision health."*

Dr. J. Jill Hopkins,
SVP and Global Head Ophthalmology
Development Unit, Novartis

*"We know that eyecare interventions are some of the most straightforward and most cost-effective interventions...Despite that, you've got over 800 million older people around the world who live with preventable sight loss fundamentally because they don't have access to eyecare....Globally, we lose an absolute minimum of over $400 billion a year in lost productivity, for not having good access to healthcare."*

Peter Holland,
CEO, International Agency
for the Prevention of Blindness

KEY TAKEAWAYS / 4

# Healthy ageing solutions like the “predict and prevent” model and integrated care not only improve quality of life and mitigate care costs, but also support overall economic productivity.

Together with the shift towards innovation-as-investment, healthy ageing solutions require recognition of the cascading societal, economic, and community impacts of age-related health challenges. Not only do these conditions lead to direct care costs, but they also force older employees to leave the workforce, place a burden on caregivers, and drain economic productivity. In fact, in economic terms, these "indirect" costs often account for a large share or the majority of the total burden of age-related chronic conditions.

These dynamics apply across a wide range of age-related health challenges. Currently, every person with Alzheimer's disease and dementia will need steadily increasing levels of care, which is often provided by family members. As a result, 50-60% of the total indirect cost of Alzheimer's results from informal care and the inherent lost economic opportunities for caregivers.[7] In the case of osteoporotic fractures, not only do fractures generate around €37.5 billion in annual care costs in major European countries —they also lead to 7.6 million missed days of work each year.[8] Globally, vision impairment is estimated to cost $400 billion each year in lost productivity.[9]

These dramatic figures underscore the scale of the challenge—but also the opportunity. There are proven interventions and models to prevent, slow or stop neurodegenerative diseases, vision impairment and osteoporotic fractures, as well as promising progress on diagnostics and treatments for Alzheimer's disease. However, putting these interventions into action will require a systems-thinking approach—one that values the widespread benefits for families, communities, employers, and national workforces.

Health innovations do not exist within a vacuum. Incremental advances within a supportive environment are critical to long-term breakthroughs and scaling across health systems. With longer term thinking and a focus on overall sustainability, policymakers can help ensure new solutions are developed and deployed effectively. This means healthy ageing should be a priority not just for health ministries, but also for finance ministries, labor ministries, and other economic leaders.

### IN SCOPE

*"Our 21st-century healthcare system has to evolve from 'it's broken, let's fix it' model to a predict and prevent model—the dynamic of our global ageing population demands it."*

*Phyllis Barkman Ferrell,*
*Global Head, External Engagement,*
*Alzheimer's Disease and Neurodegeneration,*
*Eli Lilly & Company*

KEY TAKEAWAYS / 5

# Integrating key digital technologies for health and transportation into larger health ecosystems will support active and healthy ageing.

Digital technologies play an essential and growing role in every aspect of modern life. They offer tremendous potential for enabling healthy ageing, especially by integrating data, interventions, and care across domains that are currently siloed. This can help to address shortages in the healthcare workforce, enable better management of chronic conditions, and streamline care delivery alongside other essential services like transportation and nutrition.

New at-home digital health technologies are increasingly helping patients, families, and care teams to diagnose and monitor a number of chronic conditions, including vision impairment, bone health, and Alzheimer's disease. These technologies can collect data that provide a fuller picture of how a person lives and potential care needs.

In addition, growing collaboration between health-focused companies and other sectors such as transportation will play an increasing role in delivering healthcare, including providing services to older adults and their caregivers. These partnerships can fill gaps in accessibility and help older adults receive needed care. With a growing digitally savvy population, these kinds of collaborations will play a huge role in the integration of services and products.

With this more integrated approach, there can be more personalized delivery of care across a variety of wellness factors, from physical and cognitive health to financial fitness. This more patient-centered approach requires a focus on co-design and bringing older persons into the development process, while also working to democratize medicine through the provision of personal devices that can help healthcare systems collect health data remotely.

### IN SCOPE

*"The workforce shortage is definitely top of mind when we talk about digital health. We need to ensure that the next wave of clinician leaders are prepared to use digital health where it can provide the best care, while balancing it with a more personal touch."*

Julie Viola,
Business Marketing Manager,
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# Additional Reading

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# Endnotes

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**About GCOA**

GCOA represents a cross-section of global business including technology, pharmaceuticals, healthcare, home care, financial, transportation, and consumer sectors. We engage global institutions, policymakers, and the public to drive debate on, create, and promote innovative policies and actions to transform challenges associated with the ageing of the global population into opportunities for social engagement, productivity and fiscal sustainability.

GCOA would like to express appreciation to our member company Home Instead for their support of this important and timely roundtable.

**For more information, visit**
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