Global Roadmap for Healthy Longevity Release Webinar – June 3, 2022
Perfected Transcript

DANA KORSEN
Hello everyone, I’m Dana Korsen, Director of Media Relations for the National Academy of Medicine (NAM).

Thank you for joining us this morning for a webinar on our report that was just released entitled, “Global Roadmap for Healthy Longevity.” You can now download a copy of the report at nam.edu/longevityroadmap.

Let me explain our study process. For each requested study committee, or in this case, commission members are chosen for their expertise and experience and serve pro bono to carry out the studies’ statement of task. The reports that result from the study represent the consensus view of the commission and must undergo external peer review before they are released, as did this report.

I'll give a brief overview of what to expect for this webinar. First, it's scheduled to last one hour and we will begin with introductory remarks from Victor J. Dzau, President of the National Academy of Medicine followed by a presentation summarizing the report by the commission members, who I’ll introduce momentarily, and then we’ll open it up for questions. Simply use the button below the live stream to submit questions using SLIDO.

Also, just to note the slides presented today and a recording of the webinar will be available at nam.edu/longevityroadmap.

And now I’d like to introduce the members of the commission who wrote the report and are here with us today. First, we have Dr. Linda Fried, Commission Co-chair and Dean of Columbia University Mailman School of Public Health and Director of the Robert and Butler Columbia Ageing Center.

Next, we have Dr. John Wong, Commission Co-chair and Isabel Chan Professor in Medical Sciences and Senior Vice President of Health, Innovation and Translation, at the National University of Singapore.

Next, we have Dr. Isabella Aboderin, professor of gerontology and Perivoli Chair in Africa, Research and Partnerships at University of Bristol.

And last but not least, Dr. John Beard, professor at ARC Center of Excellence in Population Ageing Research at University of New South Wales.

Now, I will turn it over to Dr. Dzau to get us started.

VICTOR DZAU
Thank you, Dana, and good morning, good afternoon, and good evening. I’m Victor Dzau, the President of the National Academy of Medicine US and it is my great pleasure to launch the “Global Roadmap for Healthy Longevity” report. I think this is a very important report; it will provide recommendations to leadership, public and private, nationally and globally, in planning our society for the future. You know, the report’s taken over two years because of COVID; but I believe the report is stronger than ever,
because of our experience in COVID and, of course, the disproportionate impact on the elderly. So, let me have the first slide please.

I think we all know the world is ageing. And today 8.5% of people worldwide, 420 million, are over 65 and by 2050 this is projected to more than double, reaching 1.6 billion and, of course, when you look at the global population of people age 80 and over is expected to more than triple.

At the same time the fertility rate is dropping and what you see in this slide in the upper left-hand corner is a drop in the fertility rate and, in the upper right-hand corner, I think is a very telling slide which is the trajectory of those over 60 which is shown in the yellow and those less than age 5.

At year 2020, you can see, the two lines cross each other. In other words, we can have a lot more older people than younger people that will replenish, if you will, the population. And what you’re seeing at the bottom is the population pyramid, where in the 1950s, we are seeing truly a pyramid with more youth at the bottom and more elderly at the top.

You can see over now and project for the future that this pyramid is going to be quite different and we can even see an inversion pyramid if we continue this trajectory.

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So, what are the implications? Well, this demographic shift, or change, impacts the society in many different ways: families, communities, societies, industry, and economies in both industrialized and developing countries.

First of all, we all know, the rates of chronic disease and disability are rising rapidly, particularly in the older population. The health systems are facing increasingly complex patient profiles and rising costs. In the US alone, the Medicare expenditure is projected to almost double by 2050 as part of the domestic GDP; and, of course, social insurance and retirement programs are becoming strained as the number of dependents increases. And when you throw in workforce size and composition will be particularly impacted as baby boomers transition to retirement leaving major skill gaps in the workforce.

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This is why we are talking about how to achieve healthy longevity. Healthy longevity is not about just about living longer, but living a healthier, more productive life, whatever your age. It is more than just physical health- it also includes mental and social well-being. It is really characterized by learning and growth, diverse and intergenerational relationships, engagement in productive and rewarding activities, and work and society roles with meaning and purpose at every age.

This is what is known as the longevity dividend. If longer lives and good health are combined with the structures needed to enable healthier older adults to be productive and engaged in life, society and individuals of all ages will benefit. That is what you’re going to hear from the report that there are many upsides to getting older.

The older population presents a tremendous opportunity for every industry; we call it the silver economy. It is estimated that the value of this new market, if you will, is about $15 trillion in 2020.
And so, studies have shown that older people are certainly happier, more satisfied, less depressed, experience less anxiety and less stress than younger people. Personally, I feel more satisfied, not depressed and not anxious, but very happy about what I do as my colleagues do. We will realize that health and longevity, however, require life course approach.

So, it’s not really trouble when you get older if you start throughout your life to be healthy, being able to maintain this lifestyle.

This is why it's so important that societies have to prepare socially, scientifically, financially, for longer lifespans; it is a global imperative. This slide shows you a number of very important studies, which have been carried out by WHO, African Union, AARP and others. But it is felt that there's still a need for a comprehensive effort to assess the challenges presented by global ageing through the lens of health, social, and economic enablers, policy and practice, and that's what we're trying to do. We need science technology innovation to increase health span, transform the field, and generate this longevity dividend.

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So, this is why the National Academy of Medicine in the US launched this global grand challenge on health longevity. You can see, we launched it and are building with great attendance from many different countries back in October 2019

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A really important component of the grand challenge is this roadmap we're going to talk about today. The grand challenge will address the challenges and identify opportunities for global population ageing. It should catalyze change to promote health longevity, to catalyze breakthrough ideas and research to extend years in good health, and generate transformative and scalable innovation worldwide and enable everyone, all the stakeholders, to work together to achieve the promise of healthy longevity.

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So, with that we appointed an international commission. This commission is charged to answer the question about what we need to do to enable healthy longevity. Now to make it truly global and international we, in fact, appointed an international set of experts and thoughtful leaders consisting of 17 eminent individuals, representing 8 different countries in 6 different continents from public and private sectors with expertise in gerontology, geriatrics, social determinants of health, behavior health, health environment, business sector, workforce, economic health care bill refinancing, science and technology and, certainly, financing, as well. We’re very lucky, as you can see, that this commission’s co-chairs are Dr. Linda Fried and Dr. John Wong; Linda’s from the United States and John is from Singapore and you will hear from both of them.

This commission worked really hard and I’m really grateful to them for providing this really important report.

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This commission is overseen by an international oversight board of 12 distinguished individuals from foundations, business, government, and academia and represents 6 countries and 4 continents and the board oversees the project, provides strategic guidance, and dissemination options for this project and I’m very pleased to be one of the co-chairs joined by Jo Ann Jenkins and Keizo Takemi.

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What do we ask the commission to do? We ask the commission to answer the questions about how to strengthen communities and enrich lives of older people; explore and recommend approaches enhancing the structures, systems, and environment in our society, in each country, and globally; to identify and analyze potential approaches and reforms across the entire spectrum of institutions and systems and identify avenues for innovative age-related research. And, finally, to coordinate with other global initiatives to achieve an integrated and synergistic effect. And they've done a fabulous job. I am so pleased and so proud and I believe this report can have great impact, and I hope that leaders everywhere in both public and private sectors would take on the recommendations to really move forward this global initiative and to make a difference.

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If we don't start doing things now, planning and moving, we're going to end up with more people living with poor health, suffering, and dependence and a GDP that is lower than it would be with better health and full inclusion of older people. This is the cost of inaction. We're going to increase the fiscal burdens on the government and the burdens on individuals and families; and, of course, we are going to have lost opportunities for people of all ages, young and old.

Let me stop here by simply thanking the commission, the ILB and particularly our staff for working so hard for over 2 years on this report. I will pass this over to Linda Fried, one of the co-chairs, for her vision for healthy longevity.

Thank you.

LINDA FRIED
Thank you, Victor and good morning, afternoon and evening.

I’m honored to be with all of you and thrilled to have you join us. What I’d like to do on behalf of the commission is to share with you what the alternative is to the cost of inaction, which is a vision for what healthy longevity could mean for all of us as individuals, as communities, and societies.

To arrive at that, the commission chose a distinct approach of creating a vision that starts with the endpoint. Setting a vision for what the evidence says could be accomplished to transform societies for healthy longevity and longer lives by 2050, with that year being far enough into the future to have accomplished tremendous change and close enough to be relevant in many of our lifetimes. Particularly relevant for people in their 20’s today who will be entering older age by 2050.

What we envisioned, based on the scientific evidence of what is possible, is that we can create long lives, not with illness, but with health and function. What the evidence further suggests is that people with health in older age can then have the opportunity to engage in meaningful and productive activities that meet their goals. And to bring their social capital, which is unprecedented both in
capabilities and scale, to society that will contribute to both the strengthening economies and to intergenerational wellbeing and cohesion.

This vision is for all people including, but not limited to, older people with results that would benefit all of society from the return on developing healthy longevity for all. Particularly in creating equity, so that all older adults who currently face barriers in terms of health or full participation in society can thrive. We recognize in this that a society of healthy longevity in 2050 will understand the immense value that older people bring to all generations and to the flourishing of society at large and that when older people are thriving in the ways that we envision, all people will thrive.

And we emphasize that the relationship between old and young is critical in this and that achieving healthy longevity in the ways that we will suggest will enable the next generation of older people to live long lives with health in which they, as well as people of other age groups, are valued and able to contribute in meaningful and productive ways. And finally, we emphasized that equity must underpin this vision for 2050 and the investments that are made to accomplish this.

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Now that vision for 2050, which you will find in much more detail in the commission report, is anchored in the evidence that we now have of what is possible.

Research in recent decades has shown us that it is possible for people to live most of their lives in good health, so that their longer health span can approximate their now longer lifespan and then, to that end, prevention works and matters at every age and stage of life. Then all generations will benefit when barriers to older peoples’ full participation due to health and due to transformations of society are eliminated. And particularly that there is the potential for a huge return on investment for individuals in society from investments in social health and physical infrastructure that can improve health at all ages and enable older people to be engaged, whether it’s work or volunteering in ways that they value and that strengthen communities in society. It’s notable that many of the things that we’ve learned in the last decades really contradict myths upon which many of our approaches and policies are built. For example, a common myth is that older people working prevent younger people from having jobs and, in fact, the evidence is very strong that workforce participation among older people is positively correlated with jobs for younger people, and also that intergenerational teams are both more productive and innovative. This is just one example of numerous common myths that our current policies and social organization are really worked around and what has happened to disprove them over the past few decades.

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The commission envisions a virtuous cycle of healthy longevity where the creation of health across our now longer lives increases the ability for individuals and society to realize the full potential of human, social, and financial capital. And that the realization of this can strengthen society and communities themselves, bring dignity and worth and satisfaction to individuals, and support the ability of societies to further invest in human and social capital, as well as building the infrastructure and enablers of a society for longer lives.

In all of this, equity and social cohesion must be at the center for this virtuous cycle to succeed and we recognize that these investments will have high return and through accomplishing the resolution of the
disruptors in the top right of the slide which adversely affects our ability to create health and well-being for us across our now longer lives. Next slide please.

The commission arrived at 5 principles for societies to have healthy longevity:

The goal here and the principle is that people of all ages, and this is the focus of this report, particularly older adults, are able to reach their full potential to live life with good health functioning, meaning, purpose, and dignity.

That the best health and functioning possible at all ages is enabled, meaning that societies are investing across the full life course because the development of what health is into older age is a cumulative life course proposition.

That societies will be successful in reducing disparities and enhancing equity, both within countries and across countries, is essential to laying the groundwork for all people to experience the opportunities of being healthy through now longer lives.

That the human, financial, and social capital of older people is realized through the investments that will be needed but with large returns for individuals and for society at large.

And finally, that we join together as a world to use data and meaningful metrics to track the achievement of outcomes and guide decision making.

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There are many relevant sectors and actors to accomplish this; in fact, a creation of healthy longevity for all, which the evidence says is more than possible, will require all of society engagement from individuals, all levels of government, and the NGOs in the private sector, including both employers and labor unions.

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The report is divided into 4 domains that must be addressed to achieve healthy longevity: social infrastructure, physical environment, health systems, and the resulting longevity dividend that will be realized through investments in lifelong education and the opportunities for work and volunteering, if desired, in retirement.

Ultimately, in the long term, societies can generate more value with less overall investment, through simultaneously investing in these 4 different segments.

So, the commission created a roadmap designed to recognize that a large proportion of health is determined by society across many sectors. It is a complex system of factors that have to be shifted to design and implement a society for longer lives which we do not yet have. It will require starting now with 2050 as the goal by identifying key levers and starting points that could propel the vision, bring short-term returns, and amplify commitments to ongoing implementation.
And so, the commission has identified key levers for the first 5 years starting now to initiate an all-of-society transformation for societies of long lives with health in which all older people, because of investments across the life course, have the opportunity to age with health and to be engaged in society in ways that deeply matter.

Thank you and I’ll turn to Isabella Aboderin to talk about what social infrastructure enables to accomplish this.

**ISABELLA ABODERIN**
Thank you very much, Linda, and good morning, afternoon, and evening.

It’s my pleasure and my honor now to speak to the report’s recommendations for action on social infrastructure.

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So, the report considers the critical role of social determinants of health in shaping prospects for healthy longevity. The report recognizes that such social determinants, as captured in this figure, have more influence on health than the provision of healthcare has and that they need to be addressed over the entire life course because adverse exposures in early life set the stage for health status and trajectories later in life.

The report does not attempt to address all social determinants comprehensively; rather the commission prioritizes a subset of social determinants in this chapter of the report and in the physical environment chapter.

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In relation to social infrastructure, the report focuses on 5 key targets for action.

First, the prosocial strengths of older adults, which manifest in a desire to help others and which constitute a resource to communities in need of social cohesion. All too often, however, these strengths are not sufficiently recognized or fostered.

Second is ageism, which the World Health Organization identifies as a “neglected global health issue and which contributes to disparities facing older adults in social programs, housing, healthcare, and employment.”

Third, is social inclusion, which can help to combat loneliness, build intergenerational connections, and increase social cohesion.

Fourth, is the lack of financial security which affects older people in all countries; but is particularly pronounced in low- and middle-income countries, where many people have no access to pensions. In Sub-Saharan Africa, for example, only 23% of older adults above the retirement age receive a pension; the figure for central and southern Asia is 26%; in Europe more than 95% receive a pension.

The fifth and last key target is the digital divide, which exacerbates inequality at all ages and on multiple levels.
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Considering these key targets, the report’s 2 major goals are: first, to see social cohesion augmented by intergenerational connections and the creation of opportunities for purposeful engagement by older people at family, community, and societal levels. The second key target is to see comprehensive social protections and financial security that mitigate the effects of financial vulnerability at older ages.

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To achieve these goals, the report highlights the need for action to foster a range of core supporting structures. These include laws and policies to eliminate age-based discrimination, public information campaigns that disrupt stereotypes and promote the value of older people, multi-generational advocacy to fight age discrimination and to accomplish shared goals, multi-generational approaches to policy and action to strengthen social cohesion and reduce loneliness, pension and social protection systems that explicitly include people outside of the formal economy, programs promoting individual savings and financial literacy and, lastly, access to secure banking systems and investment opportunities.

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For the next 5 years, and to initiate transformation in social infrastructure, the report makes 3 main recommendations: first, that governments should develop evidence-based, multi-pronged strategies for reducing ageism against any age group.

Second, that by 2027 all governments should develop plans for ensuring basic financial security for older people recognizing global disparities and access to pensions.

And third, in order to improve financial security and retirement, that governments and employers together should develop strategies for increasing financial literacy, as well as mechanisms for promoting pension contributions, self-funded pensions, and lifelong savings.

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The report speaks, too, to the cost of inaction on these recommendations. The examples on this slide point to merely a few of these costs, financial, as well as in terms of health and well-being, that would accrue to individuals, families, and societies.

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And finally, the report considers likely returns on investments in transforming social infrastructures. Evidence on the positive effects of old age-focused social protection schemes on social cohesion, as well as evidence on the association of social engagement with better physical and mental health speak to this.

But just as the examples on the previous slide underestimated the total cost of the status quo, these indications do not even begin to describe the measurable and intangible benefits that could accrue if social infrastructures for health and longevity were realized.
And with that, I’d like to thank you and hand it over to Dr. John Wong.

JOHN EU-LI WONG
Thank you very much, Isabella, and good morning, afternoon and evening. It is also my great honor and pleasure to join all of you for the launch of this very important report.

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I will be speaking about the physical environment which affects the way we live, learn, work, and play throughout our entire life course, for better or for worse.

The global ecosystem, the natural environment, the built and the built-environment all impact on our activities, the local economy, our community, our lifestyle and, ultimately, on our entire community as individuals. In fact, WHO estimates that at least 24% of death and disease can be linked to environmental hazards, so this is a fundamental issue that we have to address if we want to achieve this by 2050.

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The commission has identified 6 key targets that it would like to address. These key targets pertain to all ages, but because older people tend to have greater challenges, we would like to particularly call out:

Housing which meets the needs, both in terms of allowing functionality and safety and, even as the next speaker will show, transformation of care, so that we can get health care delivered at home.

Public spaces and infrastructure to enable people to exercise, to get out, and for social cohesion in a safe and incentivized way.

Safety is critical, especially when people are in their older age.

Transportation and especially public transportation that really addresses last mile gaps.

Isabella spoke about the digital divide, and the importance of making sure that digital technologies are in place so that societies can benefit from what technology offers.

And then, lastly, the issue of climate change and the environmental hazards which our populations are all going to face.

The goal by 2050 is to have physical environments and infrastructure that can support both functioning and engagement for people of all ages and especially at an older age

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So, these are the supporting structures that needs to be put in place. Very importantly, we need to include older people in co-design of the built-environment which should be built not through the lens
of older people but with older people, so that we can understand, again from all ages and from different cultures, what people want and how can we allow people to remain in their communities.

Public spaces that promote social cohesion and intergenerational connection, while also encouraging physical activity are critical. We need age-friendly communities and housing design protocols that enhance access to food, transportation, social services, and engagement. And because climate change and environmental emergencies do have a disproportionate burden on older populations, we need to have programs to mitigate the effects of extreme heat and extreme weather.

And to benefit all populations, we need to reduce air pollution, especially from fossil fuels, which will also help the environment.

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The commission calls for 5 recommendations and these recommendations are with the government and private sector partnering together to design user-centered physical infrastructure that allows cohesion across generations. This should be at several levels. At the city level trying to develop mitigation strategies to address issues of air pollution and severe climate events.

At the neighborhood level ensuring that we have infrastructure that allows people at the neighborhood level to live, learn, work, and play as a community. In other words, what are the learning opportunities, what are the work opportunities, and what are the play opportunities in the neighborhood.

And then, at the whole level, ensuring that the physical infrastructure addresses the challenges as populations age in terms of safety while allowing functionality. Certainly by 2027 and even by 2050, a significant amount of the housing stock will have already been built so how do we ensure that the existing housing stock meets our needs.

Next, broadband access is important. For example, this whole meeting is being conducted virtually, and the importance now of broadband access for everything from delivery of health care to ordering food, social connections, and learning.

And then, lastly, designing public transportation options. Because most of the world depends on public transportation it is very important to address first mile and last mile needs. And this is something that we need to call on companies, foundations, and local governments to implement.

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What is the return on investment? The commission's report cites some examples. So, for instance a study in 2017 showed that providing housing and support services reduces emergency room visits and hospital stays and can generate a return of investment of $1.57 in United States dollars in savings for every dollar spent.

Investing in broadband shows that you can increase GDP by 0.3% if you double broadband speed and it also has this positive affect across middle- and high-income countries and certainly can benefit low-income countries, too.
And finally, the last slide.

The need to invest in community gardens. Community gardens allow older adults the opportunity for exercise, as well as social interaction and, in Gambia, studies show that community gardens created jobs, empowered women and youth, and enhanced food security, nutrition, and health.

So, these are just some of the examples that the report calls out on the importance of investment in the physical environment.

I will now pass over to Dr. John Beard to discuss health systems.

JOHN BEARD

Thanks very much, John, and greetings everybody. This work on health systems was very heavily informed by a meeting, which was convened in Singapore in 2020, just before the pandemic started.

And I’d like to thank all the participants for helping us in our work. One of the things that came out of that meeting was an understanding that while older people are often stereotyped as frail and dependent, the reality is that most people over the age of 65 actually live independently.

But, most people over the age of 65 also experience multiple chronic conditions and so the work of the commission focused very heavily on how we can prevent and better manage these chronic health conditions and, thereby, ensure that we maximize health and functioning as we age.

You can see here on the slide the goals which we set.

First was to ensure that we had integrated public health, social service person-centered healthcare and long-term care systems and that these were designed to extend years of good health, rather than just focus on throughput.

The second, which we particularly wanted to emphasize, was the need for high-, middle-, and low-income countries to develop quality long-term care systems which will enable people even with significant losses of capacity to continue to live lives of meaning, dignity, and purpose.

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So, to achieve this, the sorts of structures which we need must span a whole range of services. In terms of public health, we need to focus on the underlying risk factors for ageing and for chronic conditions.

We’re increasingly understanding that the biological systems that underpin disease as we grow older and which are associated with ageing may be targetable in themselves, so we need to better understand that.

But we mustn’t forget the social determinants of health that Isabella spoke about earlier, and we need to make sure because as people age, we see increasing diversity in their experience of health and that diversity isn’t random. Often the people with the worst health are the people who’ve experienced the cumulative impact of disadvantage across their lives. So, we need to make sure that as we focus on health systems, we also think about the social determinants, which means that those people with the worst health often have the least access to the resources they need to address their needs.
Finally, we need to be thinking about something that became highlighted, I think, through the pandemic related to much better data systems and analytic systems for surveillance, precision public health, and the assessment of the efficacy of the interventions we put in place.

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We need to focus on prevention and primary care, but we also need to think about the health services themselves. And here the focus needs to shift from the systems which we currently have, which were often developed to treat independent acute conditions, cure them, and then see the end of the person. But we need to understand that chronic conditions require chronic management, and that requires integrated and person-centered care. And person centered because everybody's needs are different and that the care, they receive can be tailored to meet those needs appropriately.

We need to have much better primary care systems that include preventive screening, address risk factors for chronic conditions, and promote positive health behaviors. We need to have much better sharing of health records and the development of goal-based plans in conjunction with the clients themselves, and we need to ensure that there's a collaboration with social services so that, as I mentioned before, social determinants are not overlooked in all this work.

Another crucial thing is to ensure that we have an adequate geriatrics workforce, and this is an undervalued part of the medical profession in many countries. We need to shift and raise its profile to ensure that we have an adequate number of geriatricians for the growing needs which we will see over the next 20 years. We mustn't forget the end of life, and we need to develop much better systems of palliative and hospice care.

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Also, I was really pleased that the commission was very solid in their support for long-term care. When we talked about long-term care it wasn't just about institutional care; what we realized is that most older people expressed a desire to, if possible, receive care in their homes or in their communities. So, we need to develop new and innovative systems which ensure the delivery of care in the place that the person chooses. And we need to think about how we can fund that in a sustainable way. And we need to make sure that those systems don't just focus on the basic things and dignity but also ensure that people, even with significant losses of capacity, have lives of meaning, dignity, and purpose. And in doing that, we need to not forget the caregivers, particularly family caregivers, and ensure they have adequate support, training, and help to do the job that's expected of them. In doing that, we're hoping that technology will be able to provide some opportunities for providing information and better surveillance and monitoring of people, so we can identify their needs much earlier.

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The recommendations we had are in order to achieve the goal of the best possible health for older people. Governments over the next 5 years should develop strategies for increasing investments in robust public health systems that can build and lead collective action, promoting health at the population level and across the life course. This is actually crucial and we're at a critical juncture, I think, after the pandemic, with people realizing the systems we have are inappropriate, inadequate, and that we need to invest to do better.
We need to shift the focus of health systems away from throughput and towards achieving healthy longevity; and, particularly, we need governments to consider how we can develop health and long-term care systems that are integrated and how researchers can develop strategies for making available culturally sensitive, person-centered, and equitable long-term care.

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And there's very clear evidence that there's a strong return on investment for these sorts of investments. In terms of individual health there's evidence that if people can adopt healthy lifestyles in midlife, it may add up to 10 years to their lives. And in terms of the economy, we know that for every dollar that's invested, we get between $14 and $30 back in terms of the return. So, it’s a very clear case for investing in this area.

With that, I’d like to pass back to Linda.

JOHN EU-LI WONG

Linda is having some technical challenges so I’ll step in.

I think that the commission has shown that, in terms of the labor force over the age of 65, there's a disproportionate burden of low-income countries still being involved in labor at an older age. You know in high-income countries, the proportion is low, but certainly in high-income countries, there is a great interest and desire to continue contributing.

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So, the commission identified 3 key targets that it wanted to address: the first on work and retirement, the second on volunteering, and the third on lifelong education and retraining.

The goals by 2050 included unleashing the economic and social benefits generated by people living, working, volunteering, and engaging longer. Very importantly is that the social infrastructure that's required at the institutions and the business systems that enable work to be safe and meaningful and allow the community to engage at every stage of life. And in terms of education and training opportunities that allow people to participate in lifelong learning and growth, because our current educational structures are very often not geared to older and more mature workers.

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So, what are some of the supporting structures that we would like to see in place?

The first is that we would like to see an increase in older adult participation in the paid workforce, as well as volunteer roles to allow societies to benefit from this pool of human and social capital.

We need incentives in place, because there are many people would like to continue working, who have challenges, and there are policies and, unfortunately barriers which need to be addressed. So, we need to have incentives in place to recruit and retain all the workers and to make sure that all the workers
who continue working jobs that are created, take into account their preferences, physical strength, and capabilities.

And, as mentioned, we need to address policies and incentives, because there are policies and incentives across countries which inadvertently may actually impede people remaining or joining the workforce.

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Volunteering is a critical component of how people can contribute at older ages because the evidence has shown that people do want to contribute and give back, especially with a greater amount of available time, as well as experience and wisdom. So, we need formal programs to provide in place, rather than ad hoc, programs.

We need to relook at the way education is delivered and it has to be age-appropriate in terms of the way education is delivered. As workers and as people go through life and experience several different career changes, we need to make sure there’s expanded access to education, vocational training, and higher education, to make sure that we can upskill workers of all ages. This requires the involvement of both employers and unions, as well as the employees.

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We need to make sure that governments work in collaboration with the business sector to design the work environment and to make sure that the policies are there to allow people to remain in the workforce safely. A redesign of our educational systems is required, especially because we think that the science of learning and the science of education delivery is very different for an older population than the younger population.

Why is this investment so important?

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This is data from David Bloom and colleagues published in 2020 where they looked at the economic contribution, both in Europe and the United States, for people over the age of 50 and it was stunning to see that older adults contribute 29% in Europe and 40% in the United States of GDP growth through both market and non-market activities, and this is without any formal structures in place. This is not a small figure and should not be neglected, but really built upon.

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Evidence shows that people in high-income countries want to work and many of them need to work more years to support their lifestyle and having the health, as well as the education, enables them to do so. Andrew Scott and colleagues have shown that just in the United States, delaying the onset of chronic conditions by one year can generate $37 trillion to the economy.

Data shows that age diversity improves team performance of multi-generational teams in several settings, including roles which involve high degrees of complexity. Age diversity improves team performance, with older workers having greater resilience, as well as experience; and the younger
workers having a lot of energy, a lot of drive, and the ability to pick up very quickly on technology, and combining them together leads to superior team performance.

And there is data to show, as Linda mentioned earlier, that labor force participation rates among older people are positively correlated with labor force participation rates of younger people. Older people remaining in the workforce do not jeopardize younger people from entering the workforce.

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But there are challenges; there are challenges that we need to address.

The first issue that we have to address is that if we don't invest in healthy longevity, there are going to be substantial numbers of people, especially people in jobs involving high degrees of physical labor, who are going to be in poor health and will have difficulty in terms of remaining at work and have to transition out. Then we will have to address issues of unemployment, disability pensions, and early retirement.

Age discrimination remains an issue and it affects the ability of all the people who want to remain in work but can't. We have to be careful here, because if we say raise retirement ages bluntly, people who want to work may have difficulty working because either they can't find appropriate employment or there are challenges, and therefore, they may have difficulty claiming pensions. And very importantly, now we're seeing the challenges for workers in informal and gig economies that lack financial protection.

Finally, let's talk about volunteering. There is a lot of data that formal volunteering in later life is actually good for people's health. It supports healthy longevity, enhances a sense of meaning and purpose, and provides value to societies, both social value and financial value. There is a positive effect on mortality risk, cognitive function, depression, physical function, happiness, and studies do show anatomical changes in the brain and biological changes in cytokines.

Next slide please.

So, finally, the issue of looking at volunteering, contributing, giving and passing on an important role that older people can do really boosts their self-worth, significance, and meaning. And this really allows in terms of Maslow's Hierarchy of Needs the ability to contribute to people's self-esteem, life satisfaction, and the ability to contribute.

DANA KORSEN

Thank you all. We have some questions to address.

Can you address why countries should prioritize healthy longevity now; why is now the time to be focusing on this, and why by 2050?

JOHN EU-LI WONG
Okay, well, maybe I'll start and then ask John, Isabella and Linda.

Well, I would probably say that like climate change, demographic change is well on its way.
And both of these are such complex issues affecting our society that it really requires investments, policies, innovation, and adaptive innovative interventions, very importantly, based on science data and metrics across the whole of society before we can come up with ways to address the challenges that Dr. Dzau showed earlier in the webinar. If we don’t start working on this now, I think that the cost of inaction, again laid out by Dr. Dzau, by not investing in healthy longevity with people living longer we will have a greater proportion of people living longer with poor health and suffering which will lead not only to increased financial burdens on themselves and their families, but lost opportunities and increasing challenges for both societies and communities.

Again, this is something that, unless we address it now with 2050 not being that far away, basically all the 20-year-olds are going to be facing this in their lifetime and, very importantly, by 2050 half of the world is going to have populations where 1 in 4 are over the age of 60. And you know, the current definition of a super age society is 1 in 4 over the age of 65; so, you know, I think we do have our work cut out for ourselves, and if we don’t make this call- and the call is not just the United States National Academy of Medicine Commission but it’s the United Nations, WHO, the African Union, there are many other organizations making a similar call.

LINDA FRIED
I think the flip side really as a take-home point is that the work of this commission is to say there is a very important set of optimistic alternatives to the costs of maintaining the status quo and the cost of an actual. The evidence points to a very optimistic scenario that health can be extended through longer lives. That all of society can benefit if roles of older people are enabled through a variety of policies and practices; that this requires a shared commitment to building a society for our longer lives now in each country and from a global perspective. It’s essential to recognize the optimistic narrative of the value of older people in society if their place is enabled. And that the return on investment would be very high for individuals, for their families, for their communities, and for young people if this all-of-society set of transformations were invested in.

JOHN BEARD
No, I agree, Linda. John, I really like the climate change analogy, because I think we’re at a tipping point with the climate and we’re at a tipping point with the population and some countries are past the tipping point. Countries like Japan and Germany are actually past the tipping point of population ageing and their countries have managed to invest and put in place universal health coverage, both of them have mandatory long-term care insurance games and they can cover the needs of their populations and have continued to be able to thrive economically.

And, other countries are just coming to the tipping point and other ones should be able to see that far ahead and start to put in place the systems that Linda’s talking about which will enable their prosperity in advance. And those investments for countries where there’s not a lot of population ageing just yet is not very high because there’s only a small population that they need to target. So, I think this is a crucial time to invest, not waiting till 2040 and 2050, because if we don’t do it now, then we’re all going to suffer as individuals and economically.

DANA KORSSEN
Thank you all for that. The next question is how did COVID19 affect your report and what are the impacts of COVID19 on demographic trends?

JOHN BEARD
I was just going to say from the health system side of things COVID19 just laid bare that the current health systems are not adequate. We saw mortality rates which really, we shouldn't have had to see. We had a fantastic response in terms of vaccine development, but the basic systems of healthcare and long-term care were inadequate to meet a global pandemic, and so it made it clear that we have to rethink those systems and come up with new ways of doing things.

LINDA FRIED
I think we also saw, and continue to see, the consequences of inequity in every country of the world, both in terms of the health status of people confronted by a novel agent COVID19 and the vulnerabilities particularly of people already in ill health with chronic conditions, as well as in older age.

When developed at younger ages, there are generally consequences of inequities and access to public health and medical care, as John was saying, and then on top of that, inequities in the way the world has been able to respond in terms of provision of therapeutics. And how unprepared we are at each of these levels; investing in healthy longevity, as we have been talking about across the life course, to build cumulative health, rather than the cumulative disadvantages of health will be an essential preparation for future pandemics, as well as for creation of a world that can thrive in the face of longer lives.

JOHN EU-LI WONG
I fully agree with Linda and John and my only point to make is that COVID19 showed us that when you take countries and stress them with a health issue, it affects more than just health, it affects the whole of society. It affects economies; it affects education. And it revealed the challenges that every society has when you're faced with a stress that affects everyone when an illness and disease does not. Certainly, a larger burden was felt by an older population, but everyone was affected and the report does call out 5 areas that we should invest in because of COVID19: gero-science, readiness assessment, the importance of intersectorial collaborations, the importance of data and analytics and, as John mentioned, the need for rebalancing and redesigning both public health, the healthcare system and long-term care.

JOHN BEARD
One has of the things which became evident through the pandemic was the way we identify vulnerability by chronological age. And we often said that people over 65 are at a greater risk of severe consequences of COVID19 than younger people and that's true. But that's a very crude measure, and what I think we also focused on in the report is that ageing is associated with a whole lot of underlying biological changes which we're only just really starting to understand.

And as we better understand those, we will be in a much better place to be able to say who are the vulnerable people and who are not, not just on the basis of their chronological age, but on the basis of a direct measurement of their health, and I think that's actually very exciting and if people look at the report, I hope they has found that thing coming through it.

DANA KORSENM
Thank you all.

Next question: where all the money come from to pay for everything that you recommend that countries should be doing?
LINDA FRIED
I’ll start that off by saying that we were very careful to start with the recognition that different countries will have different priorities and contexts and realities in this planning in terms of what the goals are and what would be meaningful in their country.

But we also start with mindfulness that there are some essential foundations that have to be laid in order to really enable the shifts for the long-term future for the young people who will be old people, by the time 2050 arrives. And those shifts do require investments. They require creating a floor of financial security in all countries appropriate to the resources and realities of those countries. But they also require things that don't cost resources that could unleash the social, economic, and human capital that older people can bring. Investing in the design of new policies and practices that enable people to continue working, should they desire to do so. Investment in the creation of new kinds of programs for volunteering in older age, so that people can contribute and make a difference in the ways they value to their communities and their society is needed. Enabling this kind of social capital will be simultaneously an investment in health and function in longer lives. Our recommendations also bring in, for example, the redesign of the built-environment to designing for multiple benefits. Every country of the world must be thinking about the physical infrastructure of our countries in terms of being climate change proof in terms of enhancing sustainability. At the same time, without additional costs, we should be designing for longer lives as well as sustainability. And, and this kind of planfulness in the first few years with investments and financial security can lay the basis for starting even 5 years out to see a return on investment.

JOHN EU-LI WONG
Can I build further on Linda's comment by stating that there are, firstly, some issues which I would say, require very little money but require a change in our mindsets and the narrative.

And I think that the first issue is recognizing that all members of society should be valued throughout their life course because they have interests, they have skills, they have expertise and really different demographic groups can benefit from each other. So really addressing ageism and calling out the elephant in the room, that does not require money, that requires a mindset and I think that’s fundamental if we are going to unleash the opportunities that this report has shown.

Secondly, I think one of the most important diagrams of this report is the virtuous cycle whereby if we value all members of society and we create this social contract with equity and social cohesion at the core, we can create a virtuous cycle, which raises both the floor of society, as well as the ceiling of the society to create greater opportunities for everyone. This will generate both human, social, and financial capital and these will then generate the resources which will enable work, a better physical environment, stronger public health, better health care, better long-term care systems and, this in turn, will feed back into promoting healthy longevity and creating that virtuous cycle. John Beard showed the return on investments, just in terms of health and Isabella showed the cost of inaction. So, I think that these investments will really pay for themselves, as we go forward, but it requires a change in mindset and that change in mindset is free.

LINDA FRIED
If I can build further on what John just said, I would say that it's very important to understand that the change in mindset and the change in the narrative will really open up an opportunity to see the way forward that will be relevant for any given country.
But an outcome which is critical, is that we’re not just preparing the way for young people to be able to have healthy, longer lives but the investments that are needed so that children have the opportunity for health and education are essential foundations for healthy longevity, but that enabling older people to contribute to society and the ways that we’ve talked about will also lead to opportunities that at the present are not there for young people to thrive. Many countries are worried that their second demographic dividend of young people moving into the workforce is not succeeding adequately and we need in many places, perhaps all places, all hands-on deck with older people playing a role to ensure that young people, our future old people, succeed.

DANA KORSEN
Well, thank you all. As a reminder, you can access the report at nam.edu/longevity roadmap and with that I’d like to thank all of our speakers.

Thank you all again for joining us today; have a great rest of your day.