Reimagining Value for Healthy Aging:

A Tool to Encourage Investment in Biomedical Innovation

JULY 2022

Global Coalition on Aging

On April 26, 2022, the Global Coalition on Aging (GCOA) brought together a cross-disciplinary and cross-sector group of global experts to consider public policy changes necessary for continued biomedical innovation that will enable 21st century healthy longevity. The roundtable was convened by GCOA to take action in response to global UN/WHO Decade of Healthy Ageing[1] and the proximate challenges to health and longevity highlighted by the COVID-19 pandemic. This roundtable and report were made possible by support from GCOA member Eli Lilly & Company.

In both cases, it is increasingly understood that it is innovation that enables desired outcomes that can then be scaled equitably across society. While the advancement of health innovation—in the areas of vaccines, therapies, and the application of digital health technology—has been the principal enabler to moving out of the pandemic, we as a society have not yet recognized we are paradoxically trapped in an outdated 20th century model for valuing this innovation. Existing systems are not—and have not—adequately prepared for current and future health challenges.

New innovation creates the pathway to 21st century healthy longevity, and this requires investments in age-related diseases from Alzheimer's and cancer to cardiovascular disease, diabetes, and osteoporosis. Making only past and current health innovations available to patients, their caregivers, and society at large is not sufficient, and worse, it will rob future generations of the opportunity for healthy aging.

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The roundtable dialogue revealed five key principles that, taken together, begin to frame how today's and tomorrow's health value propositions should be judged. The roundtable also emerged with a set of calls to action aimed at governments, payers and health systems that can help lead to measures of value for innovation better suited to 21st century needs.

PRINCIPLE 1

Longevity requires a new paradigm for valuing health

We are now living in the age of longevity, which will see the global population over 60 grow to 2 billion by 2050[2] and a parallel demographic shift of more old than young. Our health systems, however, have yet to adapt to this new reality. Our current paradigm for valuing health does not reflect all the elements of value required for healthy aging. Therefore, we need a new paradigm for value.

PRINCIPLE 2

The goal of 21st century healthy longevity requires ongoing innovation

This new paradigm for valuing health should encourage investment in innovation. Today's longevity was made possible by 20th century innovation: sanitation scaled across much of global society, the antibiotic revolution, the broad-based application of childhood immunization and advances in other biomedical technologies. In the 21st century, there is enormous potential for further biomedical innovation, which would increase not just the length of our lives, but the quality of those additional years to achieve healthy longevity. This potential can only be realized if we are able to foster that innovation through increased investment, which is dependent on a hospitable environment for innovation.

PRINCIPLE 3

A new paradigm for valuing health requires new ways to measure and assess the value of innovation

Traditional approaches to assessing the value of health innovation omit key aspects of a new therapy's value, especially when it comes to severe disease, health in older people and societal elements of value such as productivity.[3] Conventional cost-effectiveness analyses (CEAs) are a useful place to start, but using these assessments exclusively results in less effective resource allocation, poorer patient care, and focus on acute disease-based treatment rather than the prediction and prevention necessary for 21st century healthy aging. A new paradigm for valuing health must include a broader perspective on value, moving

from the traditional payer assessment to include what matters most to patients, caregivers and society. The ISPOR Value Flower illustrates an array of underappreciated or ignored elements that should be added to traditional CEAs. These elements include scientific spillovers (follow-on discoveries and developments that build on the initial innovation), real-option value (the potential for the development of other beneficial options that result when a treatment extends life), family spillovers (such as caregiver burden) and equity.

PRINCIPLE 4

In a new paradigm for valuing health, price discussions should consider long-term contributions to healthy aging

According to a 2021 study, if every American gained one year of life expectancy, the value to the economy would be an astonishing $38 trillion.[4] Such value needs to be considered when discussing the price of innovations that have potential to extend healthy lives. Too often, a narrow focus on price and short-term costs limits patients' access to innovations, which then creates a feedback loop that undermines investor confidence and further spirals to reduce innovation itself.

PRINCIPLE 5

In resource-constrained environments, achieving healthy aging that is equitable will require new priorities and processes

Truly healthy aging must be equitable, not restricted to wealthy individuals or nations. To achieve health equity with limited resources, we must identify inefficiency and waste and incentivize their reduction. We need policies and practices that steer investment to high-value innovations that address unmet need and measure value holistically for patients and families. We must reduce spending on low-value care and administrative waste that could be addressed through technology. One strategy that can help is shifting health care tasks, where appropriate, to less specialized health care workers and less expensive sites of care. Such shifting can be enabled by digital health tools and infrastructure, especially if health systems and governments agree on health data governance and interoperability standards. Reduction of inequalities in both the care and quality of healthy aging is very much within our social control and is possible across all countries.

The goal of healthy aging will falter without new innovation.

With the principles described above, governments, payers and health systems must take action to dramatically transform how innovation is recognized and rewarded and therefore how health is achieved in the 21st century. Moreover, as a basis for actions, there may be new research to analyze the root cause of continuing inequities. Additionally, to examine gaps in evidence on what needs to happen in systems and policies that enhance healthy aging and health equity positions. From our roundtable, key action steps then emerged, including that would be based on new research and evidence as suggested:

Call To Action:

1. Policy reforms should reflect the importance of investment decisions in innovation

To stimulate the investment and innovation necessary for healthy aging, payers and policymakers must make regulatory, reimbursement and access decisions based on the new paradigm for valuing health. The signals sent about value—via decisions on reimbursement levels and access restrictions—have a powerful influence on whether and where potential investors put their resources, with potentially dire consequences for achieving the innovation that is needed to address age-related diseases.

2. Use a cross-government approach to accelerate biomedical innovation

As we all witnessed during the COVID-19 pandemic, streamlining regulatory and reimbursement pathways alongside better coordination at the government-wide leadership level can ensure that effective treatments reach more patients more quickly. During

the GCOA roundtable, several specific suggestions emerged: encourage earlier and more expansive communications between manufacturers and payers for pipeline therapies; delink continued evidence generation from limited patient access; yet strengthen the collection of confirmatory data (which has historically been problematic, especially for accelerated approval drugs) and strengthen regulatory authorities' ability to withdraw a drug granted accelerated approval when the post-marketing trial does not confirm the benefit. Other lessons from the pandemic that could also help include embracing telehealth and clinical trial flexibilities as well as allowing for real-world evidence to supplement post-market confirmatory trials. All these actions will abbreviate the time it takes biomedical innovative advances to reach those who need them and provide broader access, improving the lives of patients and their families and caregivers. Care should be taken to ensure increased engagement across federal agencies doesn't have an unintended counter effect on expedited approval decisions.

3. Reassess how HTA bodies value innovation

Health technology assessment (HTA) can be a helpful tool to encourage high-impact innovation for healthy aging, but only if it reflects what matters most to patients, caregivers, and society. HTA bodies should explore such concepts as risk-adjustment based on disease severity, the value of genericization, and the impact of competition in their assessments of biomedical innovations. Recently, health economists have made progress in how to factor in disease severity and future price declines due to genericization into assessments of the value of health technology. If applied broadly, these advances could reverse a common result from current CEA models, namely, overpayment for treatments of mild disease and underpayment for treatments for severe disease with broad population impact, as well as underinvestment in scientific advancements with long-term payoffs.

4. Bridge silos in health budgets

The key to stimulating biomedical innovation is a willingness to pay more today because of the value it will bring across society tomorrow. Currently, there is a silo structure in both public and private systems that pits the budgets for hospitals, physicians, pharmaceuticals, and long-term care against one another. Additionally, budget cycles are short-term focused and are not geared to consider the longer-term value of technologies. Outside the U.S., minsters of finance and ministers of health should work together toward policies that foster a more holistic and long-term valuation of health. In the U.S., there is a need to create incentives for private payers to consider longer-term outcomes, even as patients transition

to other private payers or into public health insurance programs. One way to build bridges between these silos is to encourage outcomes-based contracts or other advanced payment models with appropriately long time horizons, either via incentives or by removing regulatory barriers. Encouraging long-term, outcomes-based payments can help identify both high-value innovations and low-value care and allow payers and governments to allocate resources accordingly.

Endnotes

1. The United Nations Decade of Healthy Ageing (2021-2030) is a global collaboration, aligned with the last ten years of the Sustainable Development Goals, that brings together governments, civil society, international agencies, professionals, academia, the media, and the private sector to improve the lives of older people, their families, and the communities in which they live. The Decade will address four areas for action: age-friendly environments, combatting ageism, integrated care, and long-term care. For more information, see: **https://www.who.int/initiatives/decade-of-healthy-ageing**

2. 'Ageing and Health', World Health Organization, 2021. **https://www.who.int/news-room/fact-sheets/detail/ageing-and-health**

3. Neuman, Peter J. et al., "The history and future of the 'ISPOR value flower': Addressing limitations of conventional cost-effectiveness analysis," Value in Health, 2022. **https://pubmed.ncbi.nlm.nih.gov/35279370/**

4. As referenced during the discussion by Prof. Ian Philp. Source: Scott, A.J., Ellison, M. & Sinclair, D.A. "The economic value of targeting aging." Nature Aging 1, 616–623 (2021). **https://doi.org/10.1038/s43587-021-00080-0**

Global Coalition on Aging

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 aging of the global population into opportunities for social engagement, productivity and fiscal sustainability.

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