

**DRAFT**

**Regional Health Innovation Strategy  
for the Western Pacific**



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## Executive summary

Health innovation is the creation and implementation of novel processes, products, programmes, policies or systems that lead to transformations or improvements in health and equity.

Much of the progress in public health historically has been driven by innovation. Over the past three years, COVID-19 has made health innovation more pervasive, involving a wider range of actors than ever before. But the pandemic also hindered progress towards the health-related targets of the Sustainable Development Goals (SDGs) and heightened the vulnerabilities of fragile health systems. To regain momentum and effectively tackle persistent challenges and emerging threats while ensuring inclusivity, there is a pressing need for more and better health innovations.

Health innovation in the Western Pacific is shaped by the Region's diversity in geographic, cultural and socioeconomic conditions. Technological innovation has been a key driver of economic growth. Innovation ecosystems and adaptive governance demonstrate governments' commitment to digitalization. Social innovations are fulfilling public health policy objectives and achieving equity in access to care.

However, there is a disconnect between growth and well-being in many health innovations due to a misalignment of values. Furthermore, the absence of comprehensive evaluations, evidence generation and utilization has hindered informed policy-making for scaling health innovations.

Governments in the Region must take the lead in health innovation and offer lessons for the world: redirect growth-driven innovation models to focus on well-being and equity while still enabling economic success; scale social innovation to improve equitable access to health; and create spaces for learning and evidence generation (for continuous improvement).

Within the Region, opportunities exist for cooperation and mutual learning. This Strategy invites political commitment to a regional approach that will facilitate collaboration and knowledge diffusion to bridge health disparities within and between countries and areas.

The vision of the Regional Innovation Strategy is for governments in the Western Pacific Region to exploit health innovations to increase the impact of their efforts to solve problems and improve future health and well-being. Three objectives emerged from extensive consultations with Member States: (1) set the value and direction for health innovation; (2) strengthen public sector capacity for health innovation; and (3) establish enabling ecosystems for health innovation. These goals can be achieved through four key areas of action: strengthening governance; innovating finance mechanism; building innovation capacity; and measuring the impacts of innovation.

WHO will support Member States through developing and disseminating norms and guidance, demonstrating leadership, enhancing capacity-building in health innovation, shaping and influencing innovation ecosystems, understanding and prioritizing needs, assessing and selecting solutions, and facilitating implementation.

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## 1. Introduction

### 1.1 Health innovation: what and why

Health innovation involves developing and implementing new processes, products, programmes, policies or systems that result in improvements in health and equity.<sup>1</sup> The process follows an iterative approach and can arise from new ideas or a combination of existing concepts. It can take the form of disruptive technological solutions that leverage scientific research and development, or manifest itself as social innovation, addressing health needs by promoting increased participation and empowerment.

Much of the progress in public health historically has been driven by innovation. Over the past three years, COVID-19 has made health innovation more pervasive, involving a wider range of actors than ever before – genomic surveillance and data sharing for SARS-CoV-2, mRNA vaccines, telemedicine, contact tracing and triage apps, clinical management systems, and chatbots to combat *infodemics* (defined as excessive information about problem that is typically unreliable, spreads rapidly and makes solutions harder to achieve.)

The pandemic also hindered health progress towards the Sustainable Development Goals (SDG) health-related targets and made fragile health systems even more vulnerable. The stresses have chipped away at trust, funding and health workforces, amid mounting pressures from noncommunicable diseases (NCDs), climate change and emerging health security threats. Diminishing returns on established interventions for long-standing problems pose more obstacles. To recover and address the challenges of today and tomorrow without leaving behind the most vulnerable populations, more and better health innovations are required.

### 1.2 Current situation in the Western Pacific Region

Health innovation in the Western Pacific Region is shaped by its diversity in geography, culture, and socioeconomic conditions. Technological innovation has been a key driver of economic growth in many countries in the region. This region is now home to countries with high rankings in the Global Innovation Index, top science and technology clusters,<sup>2</sup> and significant investment in research and development. Regional research partnerships to address subjects of mutual interest such as climate change mitigation and biomedical science abound. Furthermore, larger economies have established innovation ecosystems to conduct social experiments and foster technological innovations for health.

The Region has embraced digital transformation: governments are implementing digital health strategies, establishing institutions, creating investment opportunities, collaborating with the industry and learning from other sectors to transform health systems. Institutional adaptation is also a regional priority: some countries have introduced risk-based regulatory approach, partnering early with the digital health industry and allowing its limited operation within health systems; others are fostering communities to co-create principles and toolkits to govern artificial intelligence (AI) for social good. These policy responses to digital innovation allow the public sector to better understand and find appropriate ways to support health innovation while delivering care that prioritizes safety and welfare.

Social innovation approaches have been applied across various health areas to fulfil public health policy objectives and to achieve equity in access to care by governments and social entrepreneurs. The use of frugal technologies has improved the affordability of life-saving oxygen during childbirth and critical

situations in Fiji.<sup>3</sup> Local communities have been empowered to strengthen malaria elimination efforts (Mekong subregion),<sup>4</sup> and to increase utilization of primary health care (the Lao People's Democratic Republic).<sup>5</sup> Various initiatives – the Seoul 50+ initiative (Republic of Korea),<sup>6</sup> dementia-friendly communities (Japan),<sup>7</sup> smoke-free city (Philippines)<sup>8</sup> – demonstrate the potential of cities to drive and scale health innovation. The Victorian Health Promotion Foundation (Australia), The Tonga Health Promotion Foundation and the Yayasan Inovasi Malaysia (Malaysian Foundation for Innovation) exemplify the value of building ecosystems that foster partnerships and mobilize societal resources. Notable changes arise when public health insights, culture, community, data and technology converge in a systems approach. Mongolia incorporated early detection examinations into national health insurance to promote disease screening and utilized screening data for timely intervention. In the Lao People's Democratic Republic, health and climate data are utilized to predict vector-borne disease outbreaks in different provinces. BruHealth in Brunei Darussalam has evolved from a COVID-19 contact tracing app to a comprehensive healthy lifestyle platform.<sup>9</sup> Viet Nam implemented a comprehensive one-stop digital platform to improve access to HIV/AIDS care. Across Pacific island countries and areas, climate adaptation strategies that combine traditional practices and cutting-edge science are being implemented, experimented with and scaled to protect the livelihoods and improve the resilience of island communities.<sup>10</sup>

Despite the Region's diversity and abundance, many health innovations have had limited success tackling challenges or contributing to population well-being, particularly in the case of technological solutions driven by profit and governed by trade and industry. Areas with limited market appeal – such as neglected tropical diseases, rare diseases, antibiotic development, prevention and health promotion, and affordable maternal and child health – have been marginalized. In areas where economic growth and well-being are reconciled – such as digital innovations for health system strengthening – the lack of mature governance, long-term funding and support systems hinders the creation of market opportunities. Consequently, financially disadvantaged and vulnerable populations with the greatest needs are often left behind.

The lack of evaluation and evidence to support institutionalization poses yet another barrier to health innovations that could have a wider impact. There is a need for systematic collection and utilization of evidence to inform scaling decisions, as well as dissemination of lessons learnt from innovation processes and implementation.

### **1.3 Rationale for the Regional Strategy**

The time has come for governments in the Region to assume the leadership in health innovation and offer lessons to the world: redirect growth-driven innovation models with a focus on well-being and equity while still enabling economic success; scale social innovation to improve equitable access to health; and create spaces for learning and evidence generation for continuous improvement.

Countries and areas should prioritize cooperation and mutual learning. Collaborative efforts can mitigate risk and uncertainty associated with health innovations. Larger economies can adapt advanced technological solutions for transfer to low-resource settings, while less affluent countries can share knowledge on frugal innovation.

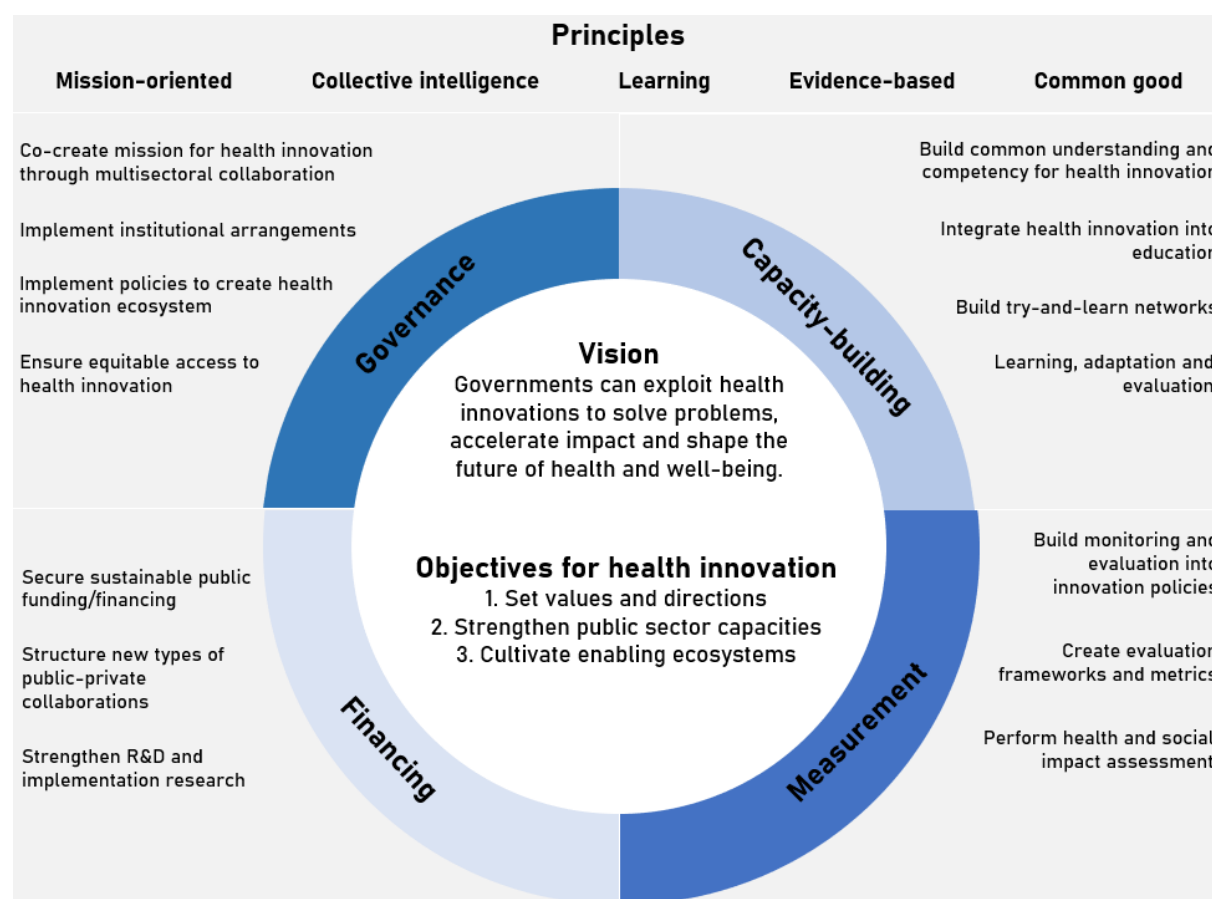
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A regional approach is crucial in supporting countries and areas to foster a conducive environment for health innovation, exploit health innovations and establish an effective regional mechanism for collaboration and knowledge transfer to reduce health disparities between and within countries.



## 2. The Regional Strategy

This document presents a framework that can be used as a basis for country-specific health innovation policies. It builds on the mission in global WHO Thirteenth General Programme of Work to harness innovation to accelerate health impact<sup>11</sup> and the final report of the WHO Council on the Economics of Health for All, *Health for All: Transforming economies to deliver what matters*.<sup>12</sup>



*An action framework diagram*

### 2.1 Vision

Governments can exploit health innovations to solve problems, accelerate impact and shape the future of health and well-being.

### 2.2 Objectives

The Strategy aims to support Member States, as appropriate to country contexts:

- to set the value and direction for health innovations;
- to strengthen public sector capacity for health innovation; and
- to cultivate enabling ecosystems for health innovation.

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### 2.3 Guiding principles

**Mission oriented:** Solving complex public health challenges requires a mission-oriented approach. A well-defined mission articulates the problem to solve, the direction to go and the goals to achieve; engages investment and actors across the entire economy, beyond the health sector; and fosters a portfolio of health innovations. This approach transforms priorities into actionable policy instruments and initiatives that can be implemented by public institutions at all levels.<sup>13</sup>

**Collective intelligence:** Health innovation is stimulated and shaped by collective action. The leading public institutions must bring together diverse actors and sectors to define a shared mission and collaborate towards it, broker the trust relationships between actors, formulate policies and create a sense of ownership among diverse stakeholders, and foster collective intelligence from the ecosystem.

**Learning:** A crucial element for the public sector to lead health innovation is its institutional capacity to learn over the long term. This capacity encompasses the willingness to learn from the process of health innovation, which involves identifying problems, investing and exploring new ideas, as opposed to seeking short-term returns.

**Evidence-based:** Innovation policies should go beyond emphasizing the capacity to innovate based on input factors or intermediate outputs. Instead, they should prioritize an evidence-based approach that focuses on learning from and assessing the impact of health innovations. By doing so, these policies can optimize investment and governance decisions for health innovation.

**Common good:** Humans are at the heart of all innovation narratives. Health innovation should be guided and governed by a sense of humanity, prioritizing the common good to ensure equitable access to its benefit. The public sector must ensure the diffusion of knowledge within and between countries to decentralize innovation capacity.

### 2.4 Key areas of action

Four key areas of actions are to be considered by Member States to achieve the objectives and vision of the Strategy:

#### Governance

Placing health innovation policies at the forefront of policy agendas is crucial to foster and scale health innovation across all levels. This entails implementing supportive policies, investing in education and research, fostering collaboration and partnerships, ensuring a favourable regulatory environment, and cultivating inclusive and sustainable new markets for health innovations.

- Collaborate among multiple ministries and sectors to collectively define missions, establish measurable outcomes, and guide health research and innovation. For instance, Member States may prioritize the silver economy as a mission within national strategies and plans dedicated to promoting healthy aging.

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- Implement institutional arrangements to effectively steer and coordinate innovation efforts and allocate resources. One possible approach is the establishment of an innovation task force operating within the ministry of health.
- Implement policies to create an enabling ecosystem for health innovation. This can involve the establishment of platforms for knowledge exchange, encouragement of industry-academia-government collaboration, policies promoting impact measurement and social procurement, as well as regulatory approaches that facilitate the adoption and diffusion of (and market creation for) health innovations while ensuring proper oversight, such as standard-setting in digital health and AI.
- Safeguard against restrictive patenting of health innovations resulting from public-private collaborations, ensuring equitable access and maximum benefit for those most in need.

**Capacity-building**

The public sector should nurture a culture of continuous learning that promotes both ecosystem-oriented innovation and policy making and enhances internal problem-solving capabilities. This involves staying informed and adaptive to emerging trends in health innovation, nurturing research and innovation capacities, and using alternative methods to measure health innovations beyond traditional approaches.

- Train public sector workers at all levels to develop a common understanding, skills and competencies to innovate for health. One potential approach is to implement health innovation training programmes aimed at improving awareness and knowledge.
- Adapt health and medical science education to equip the next generation with the knowledge and skills for cross-disciplinary collaboration in health innovation. A promising endeavour is the establishment of health innovation programmes (that is, Health Innovation Research Institute at RMIT University in Australia) that brings together interdisciplinary teams and drive research into innovation for public health.
- Build decentralized networks led by public organizations that can use a try-and-learn approach that builds capacity to lead and learn from dynamic partnerships.
- Evaluate progress, learning and adaptation in health innovation using new indicators and assessment tools tailored to its unique nature, aiding informed scaling decision-making. Implementation research is valuable in this regard, as it provides insights into the process, strategies and contextual factors that influence the impact.

**Financing**

A long-term resource commitment is essential to scale up mission-oriented health innovations and create new markets. The role of public institutions is to provide longer lead times and financial stability to navigate uncertainty across the entire chain of health innovation, going beyond upstream basic research. By doing so, the negative impacts stemming from the short-term focus of private finance can be mitigated.

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- Secure sustainable public financing for health innovations in areas with insufficient private capital. Ensure that public investments align with expected returns through various mechanisms. For instance, the public sector can invest in early-stage AMR innovation and implement price capping for new antibiotics.
- Structure new types of public-private collaborations to actively create new markets for health innovation so that rewards are shared as much as risks taken.
- Strengthen research and development to provide a foundation for future breakthroughs in response to growing threats, such as antimicrobial resistance, climate change and ageing. Allocate resources to support implementation research and evaluation of health innovations.

## **Measurement**

The key in the health innovation process is learning. Measuring health innovations supports learning from experience, allows for policy adjustments, sustains the ecosystem and ensures that stakeholders' actions are cost-effective and efficacious. This approach entails examining processes, outputs, and outcomes of health innovations in public and private sectors.

- Build monitoring and evaluation into the design of health innovation policies. Develop assessment frameworks to identify policy implementation outputs, outcomes and impacts.
- Develop learning frameworks and quantitative measures consistent with the nature of health innovations to evaluate health innovations for effectiveness, efficiency and impact. Engage all stakeholders to gather qualitative insights.
- Perform comprehensive impact assessments to measure the effects of health innovation on various aspects of the health system and society.

## **WHO's role**

WHO will support Member States through developing and disseminating norms, guidance and demonstrating leadership, enhancing capacity-building in health innovation, shaping and influencing innovation ecosystems, and facilitating implementation.

## **Norms, guidance and leadership**

- Advocate for the public sector to assume a leadership role in health innovation by emphasizing the importance of innovation ecosystems in systematically generating innovations.
- Develop technical guidance on developing health innovation ecosystems and governance frameworks for scaling health innovations.
- Develop norms and standards for governing health innovation, particularly for technological innovations.

### **Enhance capacity-building for health innovation**

- Support countries in identifying strategic priorities with the greatest health impact, prioritizing problems for solving and shaping missions for health innovation.
- Support countries in assessing and selecting health innovations using a portfolio approach.
- Develop and implement innovation capacity-building programmes tailored to country contexts.
- Develop methodological guidance to support countries in developing evaluation frameworks for health innovation.

### **Shape and influence health innovation ecosystems**

- Establish and sustain regional platforms that promote knowledge exchange, engagement with innovators and experts on innovation, and multisectoral partnerships to advance the regional health innovation agenda.
- Provide technical guidance to Member States in establishing health innovation ecosystems at all levels.
- Prepare case studies that explore innovation ecosystems and extract lessons from other sectors on effectively fostering innovation in a systematic manner.

### **Facilitate implementation**

- Support countries in measuring health innovation and evidence generation to aid country policy-making and planning.
- Facilitate collaborations, advocate for long-term public funding and exploring new financing mechanisms, such as impact bonds.
- Facilitate the engagement of stakeholders, knowledge sharing and learning among countries regarding the evaluation of health innovations.

Annex

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