SCOWORLD HEALTH ORGANIZATION
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ВСЕМИРНАЯ ОРГАНИЗАЦИЯ ЗДРАВООХРАНЕНИЯ
ЕВРОПЕЙСКОЕ РЕГИОНАЛЬНОЕ БЮРО

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Innovation Ecosystem for Public Health Forum

Copenhagen, Denmark
11-12 March 2024

Original: English

Scope and purpose

BACKGROUND AND RATIONALE

Defining innovation

A governance-level discussion on harnessing health innovations and emerging technologies in the WHO European Region cannot proceed without a clear definition of innovation. It is proposed that in this Scope and Purpose the following definition is adopted:

> Innovation is the development and application of new processes, policies, products or programmes that enhance quality, impact and efficiency in population health.[1]

This definition encompasses the following key characteristics:

a. Novelty: The innovation should be new, creative or original, including applying a solution to a new context.
b. Alignment with public health transformation: The innovation should reflect the changing dynamics in public health.
c. Collaboration: The innovation can arise from internal or cross-sector collaboration.
d. Co-production: Involvement of and cooperation with partners, stakeholders or users are crucial in the development process.
e. Value creation: The potential to generate new or improved means to create value is a critical aspect.
f. Adaptability: The innovation should be adaptable and capable of being adopted, replicated and scaled up.

[1] Public Health Accreditation Board. Defining Innovation in Public Health (accessed 15 January 2024).

g. Evaluation: The generation of real-time information for evaluation and necessary course corrections is essential.
h. Open-source technology: If related to technology, the innovation should use open-source technology to facilitate adaptation and adoption and should favour licences that enable the sharing of intellectual property, whether this applies to software, hardware, medicines, medical devices, processes or services.
i. Equity: Innovative solutions should always aim to reduce inequities and promote levelling up and, at the very least, should not worsen existing health divides.

Rationale

> The bottom line is business as usual will not get us to universal health coverage. We need to embrace innovation in every sphere, at a scale that will transform health systems – whether it's through financial innovation, by professionalizing community health workers, or by using innovative technologies to unclog supply chains and monitor results. – Dr Jim Yong Kim, former President of the World Bank[2]

The European Region is facing a string of complex problems that cannot be solved with traditional public health approaches. The search for innovative solutions must be taken up systematically and with urgency.

- Noncommunicable diseases are a major challenge for public health in the Region. As of 2019, the Region is primarily affected by four major noncommunicable diseases: cardiovascular disease, cancer, diabetes and chronic respiratory disease. These four conditions collectively contribute to 90% of deaths and 85% of years lived with disability in the Region.[3] Innovations in remote monitoring, artificial intelligence (AI) and accessible medical devices, along with policies to promote healthy behaviour, are essential for the management and prevention of these diseases. Novel medicines and new ways of delivering timely acute care represent underused opportunities.
- Despite a high level of adherence to the WHO Framework Convention on Tobacco Control, the European Region has the second highest prevalence of tobacco use among the WHO regions, and the highest smoking rates in women, and is experiencing a slow decline in use

[2] Health Systems for Prosperity and Solidarity: leaving no one behind: meeting background document. Copenhagen: WHO Regional Office for Europe; 2018 (accessed 14 January 2024).
[3] Monitoring noncommunicable disease commitments in Europe 2021 (who.int) (accessed 24 January 2024).

that is far below the agreed targets for 2025 and 2030.[4] New vigour and new solutions are needed.

- An ageing population – 20% are older than 65 years of age[5] – is straining health care resources. Addressing this issue requires innovative home care strategies, including assistive technologies and interdisciplinary teams, especially for multimorbidity,[6] which is common among older people.
- The resurgence of vaccine-preventable diseases, as evidenced by recent measles outbreaks,[7] highlights the urgent need for innovative vaccination strategies to improve coverage and address vaccine hesitancy through community outreach and incentives.
- The rise in vector-borne diseases,[8] exacerbated by climate change and rapid urbanization, calls for advanced surveillance using remote sensing and geographic information systems for targeted control of vectors.
- HIV remains a challenge, particularly among young adults in the eastern part of the Region.[9] Innovative vaccines and long-acting antiretroviral therapies are crucial for transformational prevention and treatment.
- Antimicrobial resistance is a growing global threat,[10] necessitating a coordinated approach, including surveillance, prudent antibiotic use and new treatment strategies.
- Gaps in universal health coverage persist, especially in underserved areas. Innovations in health systems, such as integrated care and digital health solutions, are vital for improvement.

The cost of inaction

[4] WHO global report on trends in prevalence of tobacco use 2000–2030 (accessed 24 January 2024)
[5] Cristea M, Noja GG, Stefea P, Sala AL. The Impact of Population Aging and Public Health Support on EU Labor Markets. Int J Environ Res Public Health. 2020;17(4):1439 (accessed 14 January 2024).
[6] Souza DLB, Oliveras-Fabregas A, Minobes-Molina E, de Camargo Cancela M, Galbany-Estragués P, Jerez-Roig J. Trends of multimorbidity in 15 European countries: a population-based study in community-dwelling adults aged 50 and over. BMC Public Health. 2021;21(1):76 (accessed 14 January 2024). Figure 2, Prevalence trends of multimorbidity in 15 European countries in community-dwelling men and women aged 50 and over.
[7] Statista. Number of cases of measles reported monthly in the European Economic Area (EEA) from 1999 to 2023 (accessed 14 January 2024).
[8] Paz S. Climate change impacts on vector-borne diseases in Europe: Risks, predictions and actions. Lancet Reg Health Eur. 2020;1:100017 (accessed 14 January 2024).
[9] European Centre for Disease Prevention and Control, WHO Regional Office for Europe. HIV/AIDS surveillance in Europe 2022 – 2021 data. Copenhagen: WHO Regional Office for Europe; 2022 (accessed 14 January 2024).
[10] European Centre for Disease Prevention and Control, World Health Organization. Antimicrobial resistance surveillance in Europe 2023 - 2021 data. Stockholm: European Centre for Disease Prevention and Control; 2023 (accessed 14 January 2024).

The need for innovation has become urgent and cannot be relegated to being a fortuitous side-effect of industry policy. Public health ministries and policy must harness innovation now, because advances in technology are disrupting the practice of clinical and population health (what the United Nations Global Compact calls Breakthrough Innovation for the Sustainable Development Goals) and because there is a large pool of potential partners in the European Region working on health innovation, largely untethered from and independent of public health guidance.

- Over the past year, GLP-1 receptor agonist drugs have taken the world by storm, upending the clinical management of diabetes and obesity, creating vast revenues for the companies involved and profoundly impacting the lives of millions of people in the Region. Using traditional approaches to public health, it will take many years before these drugs are incorporated for rational use in any population-level guidance. Globally, similar disruptive developments are being seen in messenger RNA (mRNA) technologies, immunotherapy, genomics, digital solutions and others. Countries failing to implement a proactive innovation strategy could mean them missing out on valuable opportunities to enhance public health outcomes, and the consequences of inaction would be significant.
- The Region has a unique opportunity to harness the potential of innovation hubs and science parks,[11] which actively seek to engage with public health initiatives and contribute to improving public health outcomes. These hubs, often supported by government funding, foster dynamic ecosystems that promote creativity and technological advancements. Examples of such hubs within the Region include those located in Bulgaria, Estonia, Finland, Germany, Hungary, Ireland, Kazakhstan, Luxembourg and Sweden. These hubs possess diverse expertise, abundant resources and extensive networks that can be effectively used to address public health challenges. However, without formal partnerships between these innovation hubs and the WHO Regional Office for Europe (WHO/Europe), there is a risk of overlooking the significant potential for collaboration.

AIMS AND OBJECTIVES

To initiate discussions on leveraging innovation to comprehensively address complex health challenges, WHO/Europe is inviting Member States and other key stakeholders to the Innovation Ecosystem for Public Health forum in Copenhagen, Denmark, on 11–12 March 2024. The purpose of the forum is to create a collaborative platform where stakeholders can discuss how pressing

[11] International Association of Science Parks and Areas of Innovation. https://www.iasp.ws/our-industry/definitions (last accessed 23 January 2024)

public health challenges can be addressed using innovative approaches and emerging technologies. The forum aims to ensure that Member States' diverse needs, aspirations, perspectives and challenges are adequately represented. This event will be an opportunity to inspire the innovation ecosystem, including innovation centres and hubs, to engage with public health initiatives and tackle the complex challenges facing the Region.

APPROACH

Over the course of two days, the forum will showcase real-world case studies that highlight successful health innovation initiatives. These case studies will serve as a basis for discussions on policies and strategies for sustainable innovations in public health. The forum will cover a wide range of specific innovations and emerging technologies, including AI-driven predictive models for noncommunicable diseases, optimization of patient care and innovative public health policies. Additionally, the forum will explore the discovery and development of new vaccines and drugs using advanced techniques such as mRNA technology and synthetic biology. Invitees include olicy-makers, academics, innovation and digital health experts, and representatives from international organizations and foundations.

The forum will include a mix of interactive workshops, panel discussions and presentations. A specific session will be dedicated to discussing the policy implications of health innovations, inviting policy experts and government ministers and representatives to explore how innovations can be integrated into public health policy.

EXPECTED OUTCOMES

- Demonstrate the importance of government leadership in championing innovation policies and to strengthened collaboration, knowledge-sharing and partnership-building among stakeholders and the entire he innovation ecosystem.
- Inspiration and motivation of participants through the showcasing of real-world case studies, demonstrating the tangible impact of health innovation initiatives.
- Deeper understanding and practical insights, gained through interactive workshops and sessions, enabling the innovation ecosystems to engage directly with emerging technologies and discuss implementation strategies.
- Increased awareness of WHO's role in as a change catalyst for harnessing emerging technologies and innovations to improve health outcomes in the European Region.