



## **PS1.3**

**TRANSFORMATIVE DIGITAL TECHNOLOGY FOR FUTURE HEALTH**

## | BACKGROUND

Geopolitics has shaped the era of modern technology - the internet was a child of the Cold War - and we are now seeing digital technology shape the next phase of geopolitics. Digital technology has upended traditional geopolitical boundaries and has emerged as a powerful force in recent times. In health, this has significance and the “disruption” caused by digital technologies, from Big Data to Artificial Intelligence (AI), holds both potential benefits and risks within health systems. The development of new digital technologies to diagnose, treat and deliver care requires examining whether current systems of governance for facilitating and diffusing innovation in health are adequate. This includes addressing issues of ownership of technologies and how this affects countries, particularly low-and-middle income countries (LMICs), as well as access to technologies, which can potentially narrow the “digital divide” or exacerbate it. Power dynamics emerge between innovators (health technologies and the accompanying infrastructure) and users as well as state and non-state actors (traditional and emerging actors). While information is seemingly democratised, it is not always clear as to who controls information and the narrative, both within and across countries. Misinformation, as observed during the COVID-19 pandemic, can influence public health behavior, if unchecked. Moreover, issues of net neutrality, sanctions and policies by governments to restrict flow of information can have consequences for development and use of technologies as well as on how information is received by people. The rise of surveillance systems, by states and “Big Tech” can be beneficial in times of crises (for example, to assist with contact tracing) as well as on protecting data privacy and ensuring cybersecurity. “Digital diplomacy” is also playing a role in how systems for interoperability of infrastructure and data sharing across countries develops. The rapid rise of AI has spurred experts in the field to call for a pause in development and reflect on how society can cope with changes. More broadly, these issues beg a deeper introspection on how technological changes align with societal values, take ethical considerations into account, bring equitable benefits and maintain public trust. This will allow for a better understanding of the role of geopolitics in shaping the way forward including collaboration on the norms and regulations for the effective use of technology to facilitate the dramatic transition to the digital age.

## | OBJECTIVES

The overarching objective of this session is to examine the role of geopolitics in shaping the governance system for technology for health.

The session will seek to address questions on governance of digital technologies in the context of geopolitics. The following themes and questions have been developed from the paper by Frenk and Moon which highlights the challenges of governance of global health and outlines the functions of global governance, which provides a useful lens to consider these issues[1].

- What are the current mechanisms to address governance of technologies and health data in the international sphere?
- Who are the main actors (state and non-state) involved and what are their roles? Who is not involved and how can they be engaged in the process?
- How are decisions being made at the national and international levels and how can priorities for collaboration be identified?
- What are the regulatory tools required to facilitate innovation and collaboration while maintaining security and addressing issues of privacy and trust?
- How can the benefits derived from technological and data innovations be shared equitably? What are the implications for taking a rights-based approach and ethical use of digital technology for health?
- What can the health sector learn from the application of technology in other sectors (eg banking)? What does it mean in the broader context of and trends in technology and geopolitics?
- What are the barriers and potential facilitators for encouraging collaboration and ensuring mutual accountability at the international level?
- What should governments, multilateral, not-for-profit and for-profit private sector do to enable collaboration on use of technology for health?

[1] The four functions of global health governance are: production of global public goods, especially knowledge-related goods; management of externalities; mobilisation of global solidarity to address the unequal distribution of health issues and

resources, to include financing, technical cooperation, capacity strengthening and support during disasters, among others; and, stewardship to provide a strategic direction for the health system. Link:  
<https://www.nejm.org/doi/10.1056/NEJMra1109339>



Speaker

## Daniel Mwai

*Health Economist and Senior Lecturer*

University of Nairobi  
Kenya

Dr Daniel Mwai, a presidential Advisor on Health under the Presidential Economics Transformation Team in the Executive Office of the president in Kenya. Dr. Mwai is also a leading Health Economist and Health Financing Specialist in Kenya and the region. Dr. Mwai holds a PhD in Health Economics and is a Senior lecturer of Health economics at the University of Nairobi. He has great interest in advocating for expansion of Primary Health Care approach as a resource mobilization tool. In addition, he has strong belief in attainment of sustainable financing of universal health coverage including chronic illness and HIV. Dr. Mwai's work experience and advisory work spans the public sector, private sector and international development partners having work in over 54 countries in Africa and the Caribbean region.