PMAC PRINCE MAHIDOL AWARD CONFERENCE 2026

PS 3.2

DIGITAL FUTURES IN A DEMOGRAPHIC SHIFT: TECHNOLOGY FOR HEALTH, JUSTICE, AND THE PLANET.

| BACKGROUND

Many low- and middle-income countries are experiencing youth surges. Young populations are not only digital natives but innovation drivers—AI is emmeshed in and influences their life and life decisions. Yet, they often face unequal access to the digital tools, training, and platforms that could power health and climate solutions from the ground up. At the same time, aging societies face growing gaps in long-term care, chronic disease management, and labour force participation. AI-enabled elder care, home health monitoring, and robotic support offer potential solutions—but raise questions about data ethics, human dignity, and intergenerational workforce displacement.

Digital health, surveillance technologies, and planetary monitoring systems are increasingly critical to anticipating and managing climate-health risks. But inequities in digital infrastructure, data sovereignty, and AI governance can are are deepening the divide between high- and low-capacity health systems and between generations. Key questions remain. Who governs how health data are collected and used? How do we ensure older adults, marginalized groups, and future generations are not digitally excluded or exploited? How do we ensure technologies serve social and planetary goals, not just commercial ones?

In this session, we'll explore the dynamic interplay between rapid AI evolution and demographic transitions, and how differentiated demand and use of AI and digital tools across the generations are shaping the design and deployment of digital technologies for health and climate.

| OBJECTIVES

1. **Map and debate current and potential future use cases for AI for health and climate across the generational divide -** critically assess the role of AI, robotics, and digital tools in transforming health care access and delivery, health care worker labour markets, and public health systems—across ages, rural/urban, poor/rich, genders, ethinic groups and more.

2. **Examine equity concerns** around algorithmic bias, digital exclusion, and data colonialism in the Global South, and propose governance solutions rooted in transparency and justice.

3. **Highlight examples of youth-led and intergenerational innovations** that use digital tools for planetary health, health equity, and social protection.

4. **Identify scalable strategies for building digital and data infrastructure in LMICs** that support inclusive, adaptive, and rights-based approaches to technological governance.

Panelist

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Alexo Esperato is Senior Health Specialist at the Asian Development Bank (ADB), Southeast Asia Region. Previously, he was a Senior Program Officer- Health Systems at the Bill and Melinda Gates Foundation; a health systems consultant at the World Bank, and Technical Officer on Quality of Care at the World Health Organization. In these positions, Alexo worked on health care delivery and financing in Southeast Asia, India, the Middle East and Latin America. Alexo obtained his PhD in health systems (Johns Hopkins University), after having trained in economics (B.A. – Lewis and Clark College) and public policy (Master's Degree- Universitat Pompeu Fabra/Johns Hopkins). Alexo has also authored several peer-reviewed health systems studies, including economic evaluations as well as a Lancet Report on Primary Health Care.