



Programme

Artificial intelligence and global health

Wednesday 27 – Friday 29 June 2018 | WP1626

This Wilton Park meeting will provide the opportunity for an exploration of Artificial intelligence (AI) in health in low and middle income (LMICs) countries by convening a diverse round-table dialogue including experts in AI, leaders in global health policy and delivery, and donors supporting global health.

AI has the potential to fundamentally transform the way that healthcare is provided in LMICs. With the promise of improving access to, and quality of, health service delivery, AI could play a prominent role in helping countries achieve Universal Health Coverage (UHC) and the Sustainable Development Goals (SDGs). AI can - and is already - supporting virtual diagnostics and remote patient care, providing interactive training for health workers, and helping people keep track of their own health and the health of their families. It has the potential to streamline health operations - leading to better allocation of medicines and staff, preventing stock outs, and reducing waste. At the same time, by collecting vast amounts of information, AI systems will be instrumental for governments in tracking disease more effectively and enabling them to predict or respond quickly to potential global health pandemics when they arise.

Yet the anticipation of what's possible with AI should not distract from the social, ethical, political and other issues raised by big data and machine learning. Even though the questions of when general artificial intelligence will fully arrive are contested (this decade, next decade, next century?), and what AI and in particular general AI will mean for the world, it is obvious that machine learning will drive extensive social and economic changes for individuals, families and populations. What might this mean for the delivery of healthcare in LMICs in the next 10 years, or even in the next five?

In partnership with:



African Alliance
of digital health networks

With support from:



McGovern
FOUNDATION



PATH

foundation
BOTNAR

Sponsorship of individual participants:



World Health
Organization



This event will explore issues such as:

- How can governments ensure that algorithms respect basic principles of equality and non-discrimination?
- Safety and trustworthiness of AI technologies: does the algorithm know best? Who is accountable if it makes a mistake?
- Equity, access and fairness: will the current inequalities in relation to health care be eradicated, or exacerbated? Will AI become the preserve of those who can afford it?
- Who has the right to the data? And who doesn't?
- How will AI impact the human relationships in health care delivery?
- What is the impact of increasing precision in predicting health outcomes - where progress in diagnostics is not matched by improvements in access to treatment or medicines.

“Welcome to the most important conversation of our time...the questions raised by the success of AI aren't merely intellectually fascinating. They're also morally crucial because our choices can potentially affect the entire future of life.” (Max Tegmark, Life 3.0)

This Wilton Park meeting, the third in our Technology, Innovation and Global Health Series, will explore these issues, and as an initial scoping discussion will consider the case for a stronger framework around AI and health in LMICs. It will explore the intersection between AI and health care provision in LMICs and the opportunities and implications for health providers, ministries of health, donors and others who are seeking to improve health provision in LMICs.

Goal and objectives

- Consider the potential for AI to improve health and health outcomes in LMICs.
- Assess the current health challenges in LMICs and how they can be addressed by the integration of AI into provision and delivery.
- Identify where LMICs can lead in AI due to their different needs and priorities, and more open regulatory environment. Determine where reverse innovation can advance global science while upholding ethical principles.
- Develop a deeper understanding of the ethical challenges that will face health providers as they increasingly use AI to augment their services.
- Progress thinking on ethical frameworks and governance of AI technology in health.
- Explore concrete next steps to develop principles for AI in global health that can be shared widely within the global health policy community to help develop international policy making in this new field.

In partnership with the African Alliance for Digital Health Networks and with support from the Patrick J. McGovern Foundation, Path and Fondation Botnar. Sponsorship of individual participants from World Health Organization Special Programme of Research in Human Reproduction.

Wednesday 27 June

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| 1500-1600 | Participants arrive |
| 1600-1630 | Welcome and introductions Robin Hart Senior Programme Director, Wilton Park, Steyning Lesley-Anne Long Strategic Advisor, International Development; Co-Founder, African Alliance for Digital Health Networks; Member, Wilton Park Advisory Council, Washington DC |
| 1630-1730 | 1. The future of global health: the transformative potential of AI <p>The opening session will explore the transformative potential that AI could have on global health in the coming decades and the conditions, challenges and opportunities for AI technologies to have global reach. How might new AI technologies be transformative to improve global health and make progress towards health SDGs and UHC? How global will AI's reach be? What are the right conditions to maximise the opportunities and minimise risk?</p> Padmanabhan Anandan Chief Executive Officer, Wadhvani Institute for Artificial Intelligence, Mumbai Andrew Jackson Client Executive Northern UK, Wales, Scotland and Ireland, IBM, London |
| 1730-1800 | Tea/coffee |
| 1800-1900 | 2. Charting the landscape: what can AI bring to health in LMICs? <p>This session will focus on the potential uses of AI in health and explore the capabilities and speed of development of new technologies for LMICs. What technologies exist and are in the pipeline? What role for AI in relation to tracking disease, global health shocks and pandemics? What role for AI in hospitals and other clinical settings? How will AI be used in mediated clinical pathways such as diagnostics and clinical decision support tools? What can AI deliver to areas with no or low health provision? Where are the quick-wins and types of AI applications that could achieve significant health outcomes and be feasible and relatively simple to deliver? Explore which AI interventions become possible at different levels of digital health maturity in LMICs.</p> Chair: Lesley-Anne Long Strategic Advisor, International Development; Co-Founder, African Alliance for Digital Health Networks; Member, Wilton Park Advisory Council, Washington DC Mridul Chowdhury Founder, Chief Executive Officer, mPower Social Enterprises Lt, Dhaka Edna Soomre Head, Digital Health Programme, SPIDER, Kista Khamisi Kalegele Chief Research Officer, Information Communications Technology, Commission for Science and Technology (COSTECH), Dar es Salaam |
| 1900 | Briefing for Session 4 facilitators in the Common Room |
| 1900 | Reception followed by dinner |

Thursday 28 June

0800-0845

Breakfast

0845-0900

Briefing for Session 6 facilitators in the Library

0900-1030

3. Making it happen: leadership, policy and implementation

Recognising the potential transformation that AI could bring, this session will ask how might this be translated within LMICs? By whom? With what support? What role for governments? What are the challenges and barriers that need to be overcome? What are the risks associated with a time lag in availability of AI that could exacerbate health inequalities as supply of health services is outstripped by rapidly growing demand? What capacities and training will be needed? How can this link with already existing digital health infrastructures and policies?

Chair: Olasupo Oyedepo

Co-founder, Director, African Alliance of Digital Health Networks, Abuja

Indy Johar

Co-Founder, Executive Director, Dark Matter Laboratories, Lahore

Glaudina Loots

Director, Health Innovation, Department of Science and Technology, Cape Town

David Novillo Ortiz

Advisor, eHealth, Pan American Health Organization (PAHO), Washington DC

1030-1115

Photograph followed by tea/coffee

1115-1300

4. AI and health in LMICs: focused discussion groups

Discussion in smaller groups will build on the previous plenary session by focusing on specific AI technologies in health and their role in LMICs. Followed by feedback in plenary (1230-1300).

Virtual diagnostic treatment, interventions and remote care including for hard to reach and/or vulnerable people (Library)

Matt Berg

Co-founder, Chief Executive Officer, ONA Systems Inc, Nairobi

Garret Mehl

Scientist, Department of Reproductive Health and Research, World Health Organization (WHO), Geneva

Role of AI for training and supporting health workers (Common Room)

Huguette Diakabana

Co-founder, Deputy Director, African Alliance of Digital Health Networks, Ouagadougou

Anna Hakobyan

Executive Director, Evidence, Measurement and Evaluation, Children's Investment Fund Foundation (CIFF), London

Disease outbreaks, emergency response (Boardroom)

Lesley-Anne Long

Strategic Advisor, International Development; Co-Founder, African Alliance for Digital Health Networks; Member, Wilton Park Advisory Council, Washington DC

Merrick Schaefer

Digital Health Lead, United States Agency for International Development (USAID), Washington DC

1300-1400

Lunch

1400-1500

Garden tour

1500-1615

5. Getting the future right: how?

Plenary session will address the wider policy and protection challenges, discussing amongst other issues: the safety and trustworthiness of AI technologies; how policy and protection standards can be developed and maintained; alignment to human values; broader intentional as well as inadvertent influences of AI and potential risks/unintended consequences of AI; data privacy and confidentiality; and the policies needed to ensure data is not misused; and will ask how regulation and policy keep up to date with developments in AI.

Chair: Annette Sobel

Associate Professor, Director, Texas Tech University Health Sciences Center, Lubbock

Derrick Muneene

eHealth and mHealth Regional Technical Advisor, World Health Organization, Regional Office for Africa, Brazzaville

Effy Vayena

Professor, Bioethics, Department of Health Sciences and Technology, ETH, Zurich

Joel Selanikio

Co-Founder, Chief Executive Officer, Magpi, Washington DC

1615-1630

Tea/coffee

1630-1745

6. Breakout groups: how to ensure equity, access, affordability and fairness?

Breakout groups will consider broader issues that may arise from advances in AI health care technologies to make suggestions for the establishment of principles. Participants will be able to join two of these groups during the session.

Fairness, equity and access (Library)

Tom Otis

Chief Scientific Officer, Sainsbury Wellcome Centre; Professor of Neuroscience, University College London (UCL)

Ethics: human rights, inadvertent bias (Common Room)

Irene Dankwa-Mullan

Deputy Chief Health Officer, Watson Health, IBM, Armonk

Lesley-Anne Long

Strategic Advisor, International Development; Co-Founder, African Alliance for Digital Health Networks; Member, Wilton Park Advisory Council, Washington DC

Responsible reverse innovation (Boardroom)

Skye Gilbert

Deputy Director, Digital Health Solutions, PATH, Seattle

1745-1830

7. Plenary feedback from breakout discussions

Chair: Annette Sobel

Associate Professor, Director, Texas Tech University Health Sciences Center, Lubbock

1900

Reception followed by dinner

Friday 29 June

0800-0845

Breakfast and checkout

0900-0945

8. What don't we know

What are the key research questions for AI and global health in LMICs? Where are the research gaps? How can these be filled?

Garret Mehl

Scientist, Department of Reproductive Health and Research, World Health Organization (WHO), Geneva

0945-1115

9. International partnerships: getting it right

This session will explore the role for donors, philanthropists and other international actors in AI development in LMICs and finding the most effective and appropriate ways to support ministries of health and healthcare providers with the implementation of any technologies and policies. How can they lead? How to prevent AI becoming a fragmented field both nationally and internationally that digital health has become? Explore what principles for AI in global health would be useful for partnerships.

Chair: Lesley-Anne Long

Strategic Advisor, International Development; Co-Founder, African Alliance for Digital Health Networks; Member, Wilton Park Advisory Council, Washington DC

Hila Azadzoy

Director of Partnerships, Ada Health, Berlin

Matteo Berlucchi

Chief Executive Officer, Co-Founder, Your.MD, London

Stefan Germann

Chief Executive Officer, Fondation Botnar, Basel

Olasupo Oyedepo

Co-founder, Director, African Alliance of Digital Health Networks, Abuja

1115-1145

Tea/coffee

1145-1155

10. Evaluation survey

Completion of online survey

1155-1300

11. Conclusions and next steps

An action-oriented closing discussion will focus on next steps, and ways to further the development of AI principles for global health in LMICs

Robin Hart

Senior Programme Director, Wilton Park, Steyning

Lesley-Anne Long

Strategic Advisor, International Development; Co-Founder, African Alliance for Digital Health Networks; Member, Wilton Park Advisory Council, Washington DC

1300

Lunch

1400

Participants depart