













CONCEPT NOTE

Scaling AI for Sustainable and Inclusive Health Systems in Africa

November 6th - 7th 2025

Makerere University, Kampala Uganda

Introduction

The 2nd AI in Health Africa Conference builds on the inaugural event's success, deepening discussions on AI-driven healthcare solutions tailored to Africa's and the Global South unique contexts. This conference will focus on AI innovations, policy frameworks, and AI-driven healthcare applications, bringing together government officials, researchers, industry experts, healthcare practitioners, and innovators. A key highlight will be the exploration of South-to-South collaboration.

Guided by the HAINet Kathmandu Declaration, we seek to empower resource-limited settings to become net producers of knowledge, innovation, tools, and technologies in Health Al—enabling them to leapfrog healthcare service delivery. Special emphasis will be placed on how Al can be localized and contextualized within African healthcare systems, focusing on issues such as:

- Integration of AI with indigenous knowledge systems (local healers, traditional birth attendants, and indigenous healthcare workers).
- Al adoption across diverse linguistic and cultural landscapes.
- The perspective of African healthcare practitioners on Al's role in their work.
- Sustainable indigenous healthcare business models and Al's role in strengthening them.

Additionally, discussions will focus on how AI can be incorporated into existing digital tools and structures rather than developing siloed AI solutions. The conference will also consider the impact of Generative AI in healthcare innovation and the ways AI can enhance the effectiveness of current healthcare technologies.



Objectives

- 1. Understand Al Policy and Regulation: Facilitate a high-level panel discussion with policymakers and industry leaders to review the draft Al Framework and make key recommendations for an ethical Al framework in healthcare by the end of the conference.
- 2. Showcase Al Innovations: Through keynote sessions and real-world case studies, highlight how Aldriven solutions simplify everyday clinical tasks, from diagnostics and patient monitoring to workflow management.
- **3. Enhance Capacity Building:** Through targeted masterclasses and workshops, equip at least X participants—from medical professionals to policymakers and industry stakeholders—with the practical, ethical, and strategic insights needed to successfully integrate Al in healthcare.
- **4. Explore AI in Localized Healthcare Contexts:** Organize a panel discussion featuring experts on indigenous health practices and linguistic diversity, producing a set of recommendations for localized AI adoption in healthcare.
- 5. Integrate AI into Existing Healthcare Systems and Workflows: Lead an interactive roundtable with healthcare technology experts to identify and document three practical ways AI can enhance critical clinical workflows—such as patient admission, discharge, and care coordination—by augmenting existing digital health systems rather than replacing them.



Conference Sub Themes (Tracks)

To structure discussions and ensure comprehensive coverage of the theme, the conference will be divided into the following sub-themes:



Al Policy and Ethics in Healthcare: Exploring regulatory frameworks, data governance, & ethical considerations

As AI becomes more deeply embedded in African health systems, questions of ethics, accountability, and governance rise to the forefront. This theme explores the development of inclusive regulatory frameworks that protect patient privacy, ensure data sovereignty, and balance innovation with public trust. Discussions will highlight ethical dilemmas around algorithmic bias, consent, and equitable access—drawing lessons from global standards while advancing African-led policy pathways.



Localization and Contextualization of AI in Healthcare: Addressing language barriers, cultural adaptations, and indigenous knowledge systems

Al tools must be adapted to the rich linguistic, cultural, and epidemiological realities of Africa. This track investigates how Al can be made truly local—accommodating multiple languages, contextualizing diagnostics and treatment protocols, and integrating indigenous health knowledge. Sessions will spotlight local Al models, participatory design approaches, and the role of community trust in scaling digital health innovations.



Capacity Building and Al Literacy for Healthcare Professionals: Training and upskilling health practitioners to leverage Al tools

For AI to make a meaningful impact, health professionals must be empowered to use it confidently and effectively. This theme focuses on curriculum development, clinical integration, and hands-on training to build AI literacy across cadres—from frontline workers to specialist doctors. It also addresses the changing role of medical education and the need for cross-sector partnerships to nurture Africa's next generation of AI-enabled health leaders.



Leveraging AI for Strengthening Existing Healthcare Systems and Workflows: Enhancing the interoperability of AI with existing healthcare infrastructure and digital health tools

Rather than replacing systems, AI should strengthen what exists. This track dives into how AI tools can improve supply chains, clinical decision-making, disease surveillance, and health information systems by integrating with national digital strategies. Key topics include interoperability, standards alignment, and the practical use of AI to fill health system gaps—especially in resource-limited settings.



Generative AI in Healthcare – Threats and Opportunities: Exploring how generative AI accelerates medical research, decision support, and diagnostics—while also addressing critical health challenges such as MSRH, NCDs, infectious diseases, and antimicrobial resistance.

The rise of generative AI opens new frontiers—from creating synthetic health data to drafting clinical summaries or simulating patient outcomes. This theme explores how generative tools can power rapid diagnostics, personalized care, and research—while also grappling with misinformation, data hallucination, and clinical risks. It will center real-world applications in maternal health, cancer, AMR, and chronic diseases, balancing promise with responsibility.



Sustainable Business Models for Al Innovations: Showcasing ground breaking Al-driven solutions in diagnostics, treatment, and patient management, while exploring economic strategies tailored to traditional and indigenous healthcare systems.

Innovation needs sustainability. This theme highlights African entrepreneurs, innovators, and public-private collaborations building scalable, inclusive, and financially viable AI solutions. It explores new models of reimbursement, donor funding, local manufacturing, and AI-as-a-service—paying special attention to solutions that bridge formal and informal care, including traditional healing systems and community-led models of care.



DAY 1					
08:00hrs-09:00hrs	Registration (Featuring highlights from AIHAC 2023 and partner showcases.)				
09:00hrs - 09:20hrs	Opening Remarks: Prof. Buyinza Mukadasi, Dr. Rose Nakasi Dr. Andrew Kambugu, Prof. Tony Oyana				
09:20hrs-09:30hrs	Welcome Remarks - Makerere University: Prof. Barnabas Nawangwe				
09:30hrs-09:50hrs	Partner representatives: Ministry of ICT & National Guidance – Dr. Aminah Zawedde Ministry of Health – Hon. Margaret Mugisha				
09:50hrs - 10:10hrs	Keynote Address: Hon. Dr. Monica Musenero (Minister of Science Technology and Innovation)				
10:10hrs-11:00hrs	 Plenary Session: The Future of Al in Africa's Healthcare Exploring the policy, institutional, and innovation landscape shaping Africa's Aldriven health future. Hon. Dr. Monica Musenero: Minister of Science Technology & Innovation Dr. Aminah Zawedde: Permanent Secretary Ministry of ICT & NG Paul Mbaaka: Ministry of Health Dr. Stella Kivila: Salient Advisory Science for Africa Moderator: Dr. Andrew Kambugu: Executive Director, IDI 				
11:00hrs-11:30hrs	TEA BREAK				
11:30hrs-12:30hrs	Abstract Presentations				
12:30hrs-13:00hrs	Makerere AI Health Lab Showcase: Highlights from Makerere AI In Health Lab's projects in diagnostics, data governance, and AI innovation - Dr. Rose Nakasi				
13:00hrs- 14:00hrs	LUNCH BREAK				
	BREAKOUT SESS	IONS			
14:00hrs-15:00hrs	Al Policy and Ethics in Healthcare: Data Security, Al Governance, and Ethical Adoption in Africa Presentation: APHRC Moderator: Kutha Banda (Seed Global Health Zambia) • Dr. Agnes Kiragga (APHRC) • Dr. Joseph Mwaka (Mildmay) • Katamba Dylan (MUK) • Kutha Banda (Seed Global Health Zambia) • Juliet Nakazibwe (Restless Uganda) • Alex Mutebe (MRC/UVRI) • Nassan Natseri (WHO)	Localization and Contextualization of Al in Healthcare. Addressing Language Barriers and Indigenous Knowledge Integration Moderator: Ggaliwango Marvin Richard Senono (IDI) Irene Jean Kagogwe (Qstats Health) Oluwasogo Ogundowole (Radeon Health Technologies) Fabrice Passaquay (Kajou)	Workshop: Frontline Perspectives: The imperative role of Healthcare professionals in Al for Healthcare Moderator: Prosper Ahimbisibwe Gideon Abako (Elrha HIF) Dr. Yacoub Hachine (Vigilant Living) Ninsiima Annamary Balewa (MUST) Irene Mutozo (MUK, School of Psychology) Dr. Alfred (MUK, School of Public Health)		

15:00hrs-16:00hrs	Masterclass: Building Multilingual AI NLP strategies for African and Global South Health Systems Moderator: NAAMII Boluwaji Fagbuaro (University of Hull) Olivia Koburongo (Mama Ope) John Quinn (Sunbird AI)	Masterclass: Designing inclusive AI Health policies: Provide hands-on guidance for translating ethical principles into national AI health policies Moderator: Kutha Banda Paul Muyinda (MUK) Andrew Okello (Mearl Hub Afrika) Alex Mutebe (MRC/UVRI) Eutychus Ngotho Gichuru (MUK) Diamond Advocates	Workshop: Cocreating communityinformed AI solutions. Use humancentered design to prototype AI solutions grounded in indigenous health practices and patient perspectives. Presentation: Potential Harm of Large Language Models for the Health Sector in Africa, Assoc. Prof. Rehema Baguma Moderator: Dr. Sylvia Nabukenya Juliet Nakazibwe (Restless development) Victoria Mukami (University of Embu) Dr. Ruth Obaikol (IDI) Olasupo Oyedepo (OO&A)
16:00hrs-17:00hrs	Al Innovation showcase and networking session: Featuring Al Startups (Hackathon) and research Labs Dr. Martin Balaba & Henry Semakula (IDI)		

DAY 2					
08:00hrs-09:00hrs	Registration				
09:00hrs-09:30hrs	· · · · · · · · · · · · · · · · · · ·	Presentation by NAAMI: Al capacity building in the Global South (Al school) ASTRIA: Reimagining Education, Research and Campus Operations – Assoc. Prof. Janice D. Busingye			
09:30hrs-10:30hrs	 challenges Presentation by Mastercal Dr. Roy Mayiga (RIF M Bruce Kirenga (MLI/C) Godliver Owomugisha Mike Ayiko (Muni Univ Fikun Aluko (Skilharve 	 Presentation by Mastercard Foundation Dr. Roy Mayiga (RIF MUK) Bruce Kirenga (MLI/CHS) Godliver Owomugisha (Busitema University) 			
10:30hrs-11:00hrs	Abstract presentations	Abstract presentations			
11:00hrs-11:30hrs	TEA BREAK	TEA BREAK			
11:30hrs- 13:00hrs	Interactive session: Reimagining Health workflows with Generative AI: Immersive co-creation to prototype AI solutions for clinical workflows in low- resource settings. Moderator: Prof. Engineer Bainomugisha • Dr. Daniel Kabango (Plena Scentia) • Tolulope Olowolaju • Brian Turyabagye (Mama Ope • Ggaliwango Marvin (MUK) • Khauka Derrick (Catalysts Africa LTD)	Al Powered Health Innovations and Startups. Case Studies of Al in Diagnostics, Patient Management, & Telemedicine Moderator: Dr. Ruth Obaikol Gideon Abako (Elrha HIF) Eric Jagwara (Zindi Africa) Irene Jean Kagogwe (Qstats Health) Fabrice Passaquay (Kajou) Ssemaganda George (MUK) Dr. Mayur Kumar Chhipa (ISBAT)	The role of Generative Al in Healthcare Innovation. How Al Can Improve Decision Support and Medical Research Presentation Dr. Kayode (Witts University) Moderator: Dr. Miriam Ccare • Dr. Kayode (Wits University) • Prof. Khondaker A. Mamun, PhD (UIU Bangladesh) • Prosper Ahimbisibwe (MSCAN)Ninsiima Annamary Balewa (MUST) • Olivia Koburungo (Mama Ope) • Mutale Sampa		
13:00hrs-1400hrs	LUNCH BREAK				

BREAKOUT SESSIONS				
14:00hrs-15:00hrs	Al in Strengthening Existing Digital Health Systems. Enhancing Interoperability & Integrated Al Solutions Moderator: Richard Malumba • Dr. Mayur Kumar Chhipa (ISBAT) • Charles Batte • Faye Sylvain Landry (Université Cheikh Anta DIOP) • Richard Ssenoga • Baluku Hannington (Treatinet)	Sustainable Al-driven Business Models for Indigenous Healthcare Practical approaches to Al Integration in traditional Health practices Moderator: Dr. Stella Kivila Andrew Okello (Mearl Hub Afrika) Eutychus Ngotho Gichuru (MUK Boluwaji Fagbuaro (University of Hull) Chraish Miiro (Impala Healthtech Research)	Roundtable Discussion: Establishing the AI in Health Africa and Global South Network Roadmap for Collaboration and Future Initiatives Moderator: Dr. Rose Nakasi Prof. Engineer Bainomugisha (CoCIS) Martin Karungi (NITAU) Mr David Kateeba (MIST)Richard Senono (IDI) Dr. Rosalind Parkes Ratanshi (IDI)	
15:00hrs-16:00hrs	Hackathon Presentations & Awards: Showcasing prototypes developed during the conference hackathon. Dr. Martin Balaba & Henry Semakula (IDI)			
16:00hrs-16:30hrs	Key Takeaways & Recommendations: Summary of insights and next steps. Moderator: Linda Nsababera Speakers: Richard Malumba (MAIHL) IDI Team			
16:30hrs-16:50hrs	Closing Keynote & Launch of the Africa AI in Health Network Speaker: Mrs. Lorna Magara			
16:50hrs-17:00hrs	Vote of Thanks & Adjournment Prof. Buyinza Mukadasi (Steering Committee)			