Building capacity among health professions educators in Kenya: Proceedings of the Fourth Annual Maseno University and Northwestern University Health Professions Education Conference

Summary

Investment in health professions education (HPE) and efforts to advance health workforce competency have increasingly been prioritized as strategies to meet evolving population health needs globally. Consequently, establishing forums that foster knowledge exchange, faculty development, and innovation in HPE is important, particularly in low and middle-income settings. The Annual Maseno University and Northwestern University Health Professions Education Conference is representative of this effort in Kenya. The Fourth Annual conference was held in Kisumu, Kenya in April 2026 and brought together health professionals and institutional leaders from across the country to discuss the transformative role of artificial intelligence (AI) in healthcare and health professions education in the region. Sessions explored practical applications of generative AI in clinical care and education, ethical and responsible AI implementation, and educational scholarship and faculty development in HPE. The meeting also recognized the graduates of the inaugural class of the Maseno University Northwestern University Educators (MUNUEd) Certificate Program, an online HPE certificate course adapted for Kenyan learners. Overall, the conference strengthened regional collaboration in HPE, promoted responsible integration of AI into healthcare and education, and provided a platform for dissemination of locally generated best practice recommendations.

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Introduction

Health professions education is increasingly recognized as a critical avenue for responding to systemic health inequities—extending beyond efforts to address health workforce shortages to improving the quality of care provided and promoting a more equitable distribution of skilled health professionals.[1,2] Many institutions are striving to reform existing health professions education infrastructure to alleviate workforce deficiencies. Providing health professionals with a foundation in evidence-based educational theory and practice—in concepts such as curriculum design, program assessment, feedback delivery, and scholarship—fosters the development of educational leaders and promotes cultures of innovation, mentorship, and quality improvement that strengthens institutional, and ultimately health systems', capacity.[2,3]

As Kenya strives to achieve universal health coverage and address shortages and low retention rates among healthcare workers, the development of a proficient health workforce via various educational reforms, including the shift toward competency-based education, has become a national priority.[4,5]

Collaboration between international academic partners has emerged as an effective approach in advancing the field of health professions education while remaining responsive to local priorities. By combining educational expertise with local leadership and institutional knowledge, these partnerships support sustainable capacity building.[2] The partnership between Maseno University and Northwestern University's Institute for Global Health is an example of such an initiative, giving rise to the Maseno University and Northwestern University Health Professions Education Conference. Since the inaugural event in 2023, the conference has been established as a regular opportunity for health professionals across Kenya to collaborate, network, and engage in scholarship in HPE. The following is a summary of the proceedings of the Fourth Annual Maseno University and Northwestern University HPE Conference.

Conference Outline

The Fourth Annual Maseno University and Northwestern University HPE Conference was hosted in Kisumu, Kenya, from 23-24 April 2026, and pre-conference proceedings were held on 22 April 2026. The theme of the conference was *Reimagining Health Professions Education in the Age of Emerging Artificial Intelligence*.

Conference objectives:

- To provide opportunity for Kenyan health professionals to discuss integration and implications of AI in healthcare education
- To recognize and foster HPE-related scholarship
- To provide opportunity for networking, interprofessional



Conference Participants at one of the sessions

collaboration, and community-building among educators and institutional leaders
- To recognize graduates of the MUNUEd Certificate Program

The conference was attended by 79 delegates from 15 institutions across Kenya [Table 1]. Invitations were sent from Maseno University through peer networks. All graduates of the MUNUEd Certificate Program were in attendance. Individuals represented the spectrum of health professions, including clinical medicine and surgery, laboratory medicine, pharmacy, and library and information sciences.

Pre-Conference

Pre-conference proceedings included an interactive session on simulation by Dr. Colleen Fant of Northwestern University and poster presentations by participants of the MUNUEd Certificate Program. A total of 25 posters were presented on a variety of scholarly activities, including needs assessments and scoping reviews, curriculum development initiatives, and novel learning and evaluation tools. Participants presented their posters in small group sessions. A graduation ceremony was held during which graduates received certificates of completion and recognition by program leadership and the Dean of the School of Medicine at Maseno University.

Table 1
Conference Delegates by Institution/Organization

Institution/Organization	Number of Delegates
Maseno University *[Hosting University]*	45
Uzima University	10
Kenya Medical Training College (KMTC)	9
Northwestern University *[Co-Hosting University]*	4
Public Service Board (Kisumu County)	1
Jaramogi Oginga Odinga Teaching Hospital (JOOTRH)	1
Kibabii University	1
Kapsabet High School	1
Masinde Muliro University of Science and Technology (MMUST)	1
Moi University	1
National Spinal Injury Reference Hospital	1
Quantum Kisumu Health Service Ltd	1
Synergy Clinic	1
University of Nairobi	1
Institution not specified	1
Total	**79**



Conference participants

Three posters received Outstanding Poster Recognition Awards:

- "Implementation of Learning Theories in Two Universities of the Western Region of Kenya" by Dr. Stephen Okeyo, Uzima University
- "Strengthening Intrapartum Clinical Decision-Making Among Bachelor of Science in Nursing Students Through Labor Care Guide-based Educational Intervention" by Catherine Simiyu, Kibabii University
- "Mental Health Resilience and Social Accountability in Kenya's Medical Curriculum: A Scoping Review" by Dr. Bernard Awuonda, Maseno University

Conference Topics

Opening remarks were presented by Dr. Ashti Doobay-Persaud of the Northwestern University Institute for Global Health and Dr. David Ongarora, the Acting Deputy Vice Chancellor of Maseno University.

Dr. George Omondi Oyoo of the University of Nairobi presented the opening keynote address titled, "Reimagining Rheumatology Education in the Age of AI." He described the evolving role of AI in the field of rheumatology and reviewed the results of the Emerging European Alliance of Associations for Rheumatology Network (EMEUNET) Survey assessing global adoption and perceptions of AI in the field. Survey results showed wide uptake and application of AI technology, primarily large language models for research, literature reviews, and writing support. He noted that utilization has been concentrated in low-risk and efficiency tasks rather than higher stakes uses such as diagnosis or decision-support. Barriers include limited AI literacy among health professionals; inadequate governance of these technologies; concerns related to ethics, data privacy, and transparency; and low trust that algorithms are relevant to local settings. He emphasized the significant potential of AI to strengthen workforce capacity, particularly in low and middle-income countries, if institutions can prioritize safe and structured integration means.

The keynote address was followed by a series of engaging talks and plenary discussions.

Examples included:

Background noise and reverberation times in university teaching areas at two campuses of Maseno University, Kisumu, Kenya *by Dr. Stephen Ogendo, Maseno University*

Dr. Stephen Ogendo reported findings of his study evaluating differences in noise level and reverberation time across Maseno University campus learning centers and the possible impact upon learning. He and his research team conducted a prospective cross-sectional study comparing background noise and reverberation times between buildings of two different Maseno city campuses. Findings demonstrated that background noise level and reverberation times did not meet acoustic guidelines as advised by the American National Standards Institution. Variation between buildings were identified as were variations among locations within the same rooms and at different times throughout the day. He discussed the potential impact of these environmental factors in hindering learning. The study concluded that institutions must take into consideration reverberation times in designing educational spaces to reduce noise level, promote speech intelligibility, and optimize learning.

Effect of digitalization on students' clerkship within the hospital *by Dr. Allan Yienya, Jaramogi Oginga Odinga Teaching and Referral Hospital (JOOTRH)*

Dr. Allan Yienya discussed his experience and reviewed literature regarding the impact of digitization upon medical student clerkships. He posed important questions, including whether digital learning platforms impair the role modeling aspect of education and whether the lack of body language cues affects learning. He raised concerns regarding challenges in equity as all students may not have equal access to technology or afford data usage costs. He considered the potential loss of social and collaborative learning. He also reviewed the difficulty in providing feedback with an online system and provided strategies for adaptation. He drew attention to the change in culture and professionalism expectations that digitalization has introduced, such as the use of devices on rounds. He highlighted important benefits, such as earlier recognition of certain aspects of learner performance and the ability to continue online learning despite disruptions in classroom teaching. He emphasized the need to develop clear institutional guidelines on use of devices and digital learning platforms.

AI use cases in HPE and Ethical use of AI in HPE *by Dr. Wagaki Gicheru, Kenya Medical Training College*

Dr. Wagaki Gicheru reviewed strategies for incorporating AI in education. She discussed examples of useful video-generating tools, such as Google Vids and Veo 3.1; presentation platforms, such as Napkin AI; and research sources, such as Consensus AI. She explained the predicted evolution of incorporation and impact of AI in HPE utilizing the Gartner's Hype Cycle model. She recognized the need to balance AI in training, but the importance of providing educators with appropriate training in AI to enact balance.

Integration of AI in healthcare: a focus in radiology and imaging *by Dr. Joseph Abuya, Moi University*

Dr. Joseph Abuya spoke of the growing role of AI in the field of radiology and imaging. He discussed benefits particularly with image acquisition—decreased motion artifact, automated patient positioning, and reduced need for sedation as a result. He discussed Kenya emerging as a lead adopter of AI in the region given the shortage of radiologists and AI's role in bridging this gap. He reviewed the regulatory and technical landscape of AI in radiology. He urged practitioners to remain aware of the limited transparency and algorithmic bias embedded in data sets. He reviewed the importance of abiding by medical-legal obligations related to data privacy and informed consent.

Transforming teaching practices with AI *by Dr. Richard Ongowo, Maseno University*

Dr. Richard Ongowo spoke of his experiences utilizing AI in teaching practices. He presented various AI uses, including generation of clinical cases, simulation of clinical decision-making, summarization of complex topics, and exposure to various learning resources. He discussed examples of incorporation in active adult-learning experiences, including problem-based, case-based, and flipped classroom settings.

Reflections of a student teacher *by Dr. Stephen Okeyo, Uzima University*

Dr. Stephen Okeyo reflected on his experience completing the MUNUEd Certificate Program, emphasizing the shift in perspective that comes with taking on the role of a learner as a health professional. He reviewed the opportunity to gain empathy for one's own trainees, to adopt a growth mindset, to practice humility and self-reflection, and to connect with new mentors.

AI in medical education and practice—the promise and the place: a clinical informatician's perspective *by Dr. Dedan Opondo, Synergy Clinics Hospital*

Dr. Dedan Opondo emphasized the importance of supporting trainees to become trusted members of the academic society and fostering their professional identity as healthcare practitioners. He discussed ensuring trainees are not handicapped during their transition from theory to practice and knowledge to skills. He spoke of the potential application of AI in performance capture and evaluation. He argued that to embed and optimize AI in medical education, institutions first need to bolster digital and physical medical informatics infrastructure.

Conclusion

The conference concluded with a "Way Forward Panel" during which Kenyan leaders in HPE offered their thoughts on the direction of the field. Panelists underscored the significance of establishing HPE as a focus in healthcare training institutions across the East Africa region and of continuing to promote opportunities for educator development, interprofessional collaboration, scholarship, and community-building in HPE. The panel also discussed ongoing collaborative efforts of the Maseno University and Northwestern University partnership. This included the announcement of the second cohort of the MUNUEd Certificate Program, which commenced in August 2026, and plans for the Fifth Annual Maseno University and Northwestern University HPE conference planned for April 2027. The conference reflects a continued institutional and bidirectional commitment to the advancement of health professions education in improving health outcomes.

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