Pan African Health Informatics Association (HELINA)
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Africa CDC Workforce Development Framework

The Africa Centres for Diseases Control and Prevention (Africa CDC) is a specialized technical institution of the African Union (AU) launched in January 2017. It is mandated to support Member States in capacity building in public health. A Task Force for Workforce Development was established in 2018 and has prepared and published a Framework for Public Health Workforce Development for 2020-2025. HELINA contributed to the development of this Framework and will therefore contribute to the operationalization of the Framework. HELINA has nominated two members to serve on the Health Information Exchange (HIE) Taskforce that will coordinate and draft a report to guide the African member states on technical, policy and governance issues around HIE.

Harmonization of Minimum Competencies for Masters in Health Informatics in Africa

On May 8 & 9, 2019, higher education universities in East Africa that have accredited programs for Masters of Sciences in Health Informatics (MSc HI) met to set minimum standards for an MSc - Health Informatics program. This process was led by the Inter-University Council of East Africa (IUCEA) as part of the Credit Accumulation and Transfer process under their mandate.

The minimum standards allow for credits to be transferable between institutions in the East Africa region. The harmonized curriculum was submitted through the Commission of University Education in Kenya to the IUCEA for tentative approval in the third week of December, 2019. Once approved, all existing and new MSc HI programs in East Africa will have to meet the outlined minimum competencies, with programs able to extend these requirements as part of institutional differentiation. HELINA board and Education Working Group were represented at this meeting and contributed to the review of the harmonized MSC-HI curriculum.

As the next steps, there has been a request to present the harmonized curriculum for MSc HI for East Africa at the annual Association of African Universities meeting in March 2020. HELINA Education Working Group will explore potential for more broadly harmonizing MSc-HI beyond East Africa. A panel discussion, entitled ‘Harmonizing Minimum Competencies for Masters in Health Informatics in Africa Leveraging University Accreditation Bodies and Professional Societies’ was held as part of the 2019 HELINA conference.

HELINA 2019 Conference

The 2019 edition of the Pan-African health informatics conference (HELINA) took place from 20th – 22nd November, 2019 at the University of Botswana, Gaborone, Botswana. The conference was hosted by the University of Botswana (UB) e-Health Research Unit in collaboration with the Ministry of Health and Wellness (MoHW), Ministry of Transport and Communication (MTC), Botswana Institute for Technology Research and Innovation (BITRI) and the Botswana Health Information Management Association (BoHIMA). The conference was co-chaired by Dr. Tom Oluoch (HELINA President) and Mr. Kagiso Ndlovu (LOC Chair / UB eHealth Research Unit Coordinator). The Botswana Minister of Health and Wellness, Dr. Lemogang Kwepe, officiated the conference opening ceremony.

The conference focused on evidence to practice of digital health interventions to achieve universal health coverage (UHC). This conference also featured three pre-conference workshops:

1) Drone Technologies for public health and related fields,
2) Data Science in Healthcare, and
3) Scientific Writing workshop.

The Drone Technologies workshop was officiated by the University of Botswana and the Botswana International University of Science and Technology in conjunction with the Botswana Civil Aviation Authority. It aimed at exploring drone technologies for public health and related fields with the goal of developing a draft policy on the use of drones for healthcare product/service delivery. The workshop was hugely successful with delegates spoilt for choice on content and demonstrations of varied drone technologies.

The Data Science workshop was officiated by the CDC Atlanta. Participants explored the development and use of digital case studies in public health using Jupyter Notebook, an open source data science platform for working with reproducible, shareable computational narratives about solving problems in public health informatics. Participants gained practical knowledge in using the Jupyter Notebook ecosystem of tools and increased capabilities to utilize data using descriptive, diagnostic, predictive, and prescriptive analytics and visualization methods to inform program implementation and improvement, identifying gaps and/or needs, and support decision making.
The Scientific Writing workshop was officiated by the HELINA Education Working Group. The goal was to build capacity of junior health informatics personnel with an interest in research on the whole process from generating a research idea to writing a scientific paper for publication.

**Scientific Program**

The scientific program committee (SPC) was chaired by Prof. Nicky Mostert from South Africa, and co-chaired by Prof. Georges Nguefack from Cameroon, and Dr. Frances da-Costa Vroom from Ghana. The SPC received after the call for papers a total of 133 submissions out of which 8 full research papers (4.5%), 5 work-in-progress papers (6%), and 11 case studies and experience or concept papers (8%) were accepted. 109 (82%) papers and case studies were rejected or retracted. A double-blind peer review process was used for evaluating each paper. All submissions were anonymized before being submitted to at least 2 reviewers based on their expertise. The SPC decision was based on the recommendations and comments from reviewers. Accepted and presented full research papers were published in a special edition of the Journal of Health Informatics in Africa (JHIA) – http://www.jhia-online.org – and the accepted work-in-progress papers, case studies/experience papers were electronically published in the conference Proceedings with ISBN by Koegni-eHealth and are available on the conference website – http://conf.helina-online.org. Further to the papers and case studies accepted by the SPC, 6 keynote-speakers were invited and 26 posters – mostly revised rejected papers from the double-blind peer review process – accepted by the LOC and SPC. All accepted posters were presented during the poster session of day 3 of the conference and voting was conducted for the best 3 posters, which received awards for their efforts.

**Participation**

The Conference attracted 175 participants from 17 countries – Belgium, Botswana, Ethiopia, Ghana, Germany, Japan, Kenya, Mozambique, Nigeria, Norway, South Africa, Switzerland, Tanzania, Uganda, United States of America, Vietnam, and Zambia. They were primarily members of academia, researchers, public and private sector players, NGOs and health informatics practitioners.

According to the post conference survey, delegates were very satisfied with the organization, the abstracts, papers and poster presentations as well as the keynote speeches and panel discussions. They also provided feedback on areas of improvement for future conferences. Suggestions included longer timeslot for poster presentations, include tutorial, more participation from Master and PhD students, and more reports of implementations.

**Sponsorship**

HELINA 2019 had three commitments from financial sponsors Stop TB Partnership, Geneva, the Ministry of Health and Wellness, and the Botswana Institute for Technology Research and Innovation. Further to this, Virtual Business Network offered in-kind internet connectivity and the University of Botswana offered the conference venue at subsidized cost.

**Regional Editor**

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