

# Pan African Health Informatics Association (HELINA)

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## HELINA 2020/2021 Conference

The annual HELINA Scientific Conference was originally scheduled to take place from October 6 -8, 2020 in Kampala, Uganda, hosted by the Uganda Health Informatics Association (UgHIA), the newest Member of HELINA. However, due to the disruptions caused by the COVID-19 pandemic, the HELINA Board in consultation with UgHIA, have now scheduled this conference to take place from 7th - 11th June, 2021 as a blended conference (with options for virtual and in-person attendance). The conference theme is “Use of Digital Technologies to Build Capacity of Health Professionals in Low and Middle Income Countries”. The Kenya Health Informatics Association (KeHIA) is supporting UgHIA through a HELINA mediated peer mentorship arrangement. Accepted and presented full research papers will be 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 will be electronically published in the conference Proceedings with ISBN by Koegni-eHealth and made available on the conference website.

## Policies and Frameworks for Health Informatics in Africa

HELINA collaborated with the Africa Centres for Diseases Control and Prevention (Africa CDC) to develop the policy and guidelines for public health informatics in Africa. The 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.

In 2019, HELINA was a member of the Taskforce that developed the Framework for Public Health Workforce Development 2020 -2025 <https://africacdc.org/download/framework-for-public-health-workforce-development-2020-2025/>. In 2020, the HELINA President and Secretary (Dr. Tom Oluoch and Mr. Steven Wanyee) were engaged as members of the Africa Union Taskforce developing Policy and Standards for Health Information Exchange in Africa. They went ahead to lead the Policy and Standard Working Groups formed by the Task Force to coordinate the technical tasks of developing the document. The Policy and Standards document is currently under review by African Union member states and will be published in December 2020.

HELINA participated in a workshop on harmonising MSc Health Informatics curriculum for East Africa. The workshop was convened by Professor Martin Were, Vanderbilt University School of Medicine, USA & Moi University School of Medicine, Kenya. The process was led by the Inter-University Council of East Africa (IUCEA) as part of a process called the Credit Accumulation and Transfer (CAT) System. All Universities in the region were invited including representatives from Industry, Kenyan Ministry of Health, CUE, HELINA, IMIA and IUCEA. This effort was necessary due to disparities identified in the eight existing accredited MSc in Health Informatics in East Africa. The output was presented to IUCEA for ratification in December 2019.

## Resource Mobilization

In 2020, HELINA prepared two consortial bids for funding in collaboration with key stakeholders with an interest in health informatics in Africa. Although not successful,

HELINA learnt many lessons and is currently applying those to prepare for future funding proposals. HELINA is currently negotiating a technical and financial partnership with GIZ, modelled after an existing collaboration between GIZ and the Asian eHealth Information Network (AeHIN).

## HELINA Data Mining and Big Data Analytics Working Group

### A- Activities

Within a partnership between the Cameroon Statistical Society and the HELINA's Working Group “Data Mining and Big Data Analytics”, Prof. Georges Nguefack-Tsague; coordinator of this Working Group, chaired a session on “Big Data, Data Mining and Machine Learning”, with an emphasis on “Deep Learning and Automatic Pneumonia Detection”, during the first Cameroon Statistical Scientific Days (CSSD 20), organized on October 22 -23, 2020 in Yaoundé, Cameroon.

### B - Perspectives for 2021

1. Efforts should be made to make other work sets functional.
2. Studies should be conducted to assess the extend to which Africa universities integrate curricula on data mining.
3. The only web activity is via LinkedIn; need to effectively create a web page for the WG.
4. Other planned activities should be implemented the coming year; these include:
  - a) Software, references, and notes on data mining and Big data analytics;
  - b) Locating major big data base on health in Africa, and
  - c) Situational analysis of education on data mining and big data analytics in Africa.

## HELINA Education Working Group (EWG)

In 2020, the HELINA Education WG took a leading role in revamping the HELINA website. The result was creation of the [helinanet.org](http://helinanet.org) website which has several features, including a Discourse-based discussion forum, a Moodle-based eLearning platform, and a Zoom conferencing resource for HELINA members, among others. Content within this website is being increasingly updated, with particular emphasis on providing relevant educational materials on the eLearning platform, and supporting robust and moderated discussions through the forum. With EWG support, HELINA now has a LinkedIn, Facebook, Instagram and Twitter presence. Development of the new HELINA website was conducted with support from Vanderbilt University Medical Center and Institute of Biomedical Informatics at Moi University (Kenya).

The EWG has continued to provide support to institutions interested in developing and enhancing health informatics degree programs. In East Africa, the EWG worked with eight universities in the region, which have accredited Masters in Health Informatics (MSc HI) degree programs, to develop minimum competency standards for MSc HI programs. The goal was to facilitate student, staff and labor mobility in this common education, labor and economic zone. The harmonization work was informed by an evaluation of competencies covered by existing MSc HI degree programs in region, with findings from the evaluation published in the International Journal of Medical Informatics in a study entitled 'Coverage of IMIA-recommended Competencies by Masters in Health Informatics Degree Programs in East Africa.' (Int J Med Inform. 2020 Nov;143:104265). Development of minimum and harmonized MSc HI competencies was undertaken in close collaboration with the Inter-University Council of East Africa

(IUCEA). The review and final approval of the minimum standards is currently underway through the IUCEA.

Another key activity by the EWG in 2020 has been to support the development of a common curriculum for an MSc Public Health Informatics program for 13 francophone African universities. Institutions participating in this initiative come from Burkina Faso, Burundi, Côte d'Ivoire, DR Congo, Guinea, Madagascar, Mali, Rwanda and Senegal. A first virtual colloquium with formal expression of interest from the participating universities was organized on 27 August, 2020. Topics discussed during the colloquium included: curriculum objectives, competences to cover, teaching resources, infrastructure, program management and governance, and accreditation issues. Follow-up meetings were held in smaller groups with a purpose to finalize the program so that it can start in September 2021. Additionally, the EWG is providing inputs to University of Botswana and University of Zimbabwe as they develop their own health informatics training programs.

The EWG also conducted a workshop on e-health strategic planning and e-health enterprise architectures co-organized with Vrije University Brussels. The workshop was held at the School of Public Health in Kinshasa from 7 to 15 February, 2020 and attracted 34 participants from DR Congo. In addition, the HELINA EWG, working with the Burundi Health Informatics Association, conducted a five-days training (9 to 13 November, 2020) on the use of digital clinical decision support solutions for first level health care providers in Bujumbura, Burundi. The workshop was attended by 126 nurses from 50 health centers and focused on routine usage of clinical pathways that were developed for 48 common reasons for clinical encounter.

The HELINA EWG is also proud to announce the formation of the South African Health Informatics (SAHIA) Education Working Group chaired by Prof Graham

Wright. The SAHIA EWG and HELINA EWG are collaborating with GNUHealth to provide a series of eight webinars on open-source topics aimed at implementers in Africa. SAHIA also collaborated with the Private Healthcare Information Standards Committee (PHISC) for a virtual event entitled: An introduction to HL7 FHIR® that had 123 registrants.

## HELINA Governance

The Governance of HELINA remains unchanged. The following members are still serving their terms in the following roles which will expire in December 2021;

- President : Tom Oluoch, PhD, Health Scientist (Informatics) at the US Centers for Disease Control and Prevention.
- President elect : Frances Baaba Da-Costa Vroom, PhD, Lecturer at University of Ghana, Department of Biostatistics, Incoming.
- Secretary : Steven Wanyee, MSc, Biomedical and Health Informatics Specialist, IntelliSOFT Consulting Limited
- Treasurer : Innocent Nanann, PhD, Dental Surgeon, Abidjan, Côte d'Ivoire
- Past President (IMIA Vice President for HELINA Region): Ghislain Kouematchoua Tchuitcheu, PhD, FIAHSI, Executive Director Infrastructure and Chief Information Officer at the Hamburg Association of Statutory Health Insurance Physicians, Germany.

## Regional Editor

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