



International

**CPHIA** 2023

Conference on Public Health in Africa

**OFFICIAL SIDE EVENT (VIRTUAL)**

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**Official Side Event Report**

# Empowering Patients Through Digital Health Information for Public Health in Africa

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**Thursday, November 23<sup>rd</sup> 2023**

**12:00 - 14:00 (CAT)**



## Speakers



**Moderator**  
**Dr Daniella Munene**  
Head of External Affairs  
Africa Health Business



**Jean Philbert Nsengimana**  
Chief Digital Advisor  
Africa CDC



**Cyril Seck**  
Strategy Advisor  
Africa CDC



**Dr. Anne Moen, RN, PhD,  
FACMI, FIAHSI**  
Professor in Health Informatics  
and Nursing, Faculty of  
Medicine, University of Oslo  
and Coordinator  
Gravitate-Health



**David Chen**  
Co-CEO  
Kapsule



**Robert Cryer**  
Country Technology  
Services Manager  
The Global Fund



**Edwin Syeunda**  
Partnerships Associate and  
Digital Coordinator  
Africa Health Business

## Background

African countries continue to face many challenges as they strive to ensure that health systems maintain essential health services as they respond to ongoing and emerging health threats. The Africa CDC encourages governments, policymakers, and stakeholders to allocate a larger portion of their national budgets to healthcare initiatives and more so to essential health services. Gravitate-Health's goal of providing easily accessible and understandable health information aligns with the broader objectives of improving public health in Africa.

Many African nations face challenges related to medication safety and pharmacovigilance. Integrating Gravitate-Health's focus on safer medication use and pharmacovigilance into public health initiatives can reduce adverse drug reactions and improve patient safety.

The roundtable session brought together experts, policymakers, healthcare professionals, and representatives from relevant organizations to engage in a constructive dialogue on these critical topics. The goal was to drive collaboration and generate practical solutions that can contribute to improved public health outcomes in Africa through the empowerment of patients with digital health information.

## Roundtable Objectives

- To nurture commitments towards increased investments for public health in Africa with a specific focus on leveraging digital health solutions to improve healthcare access and outcomes.
- Utilization of digital health tools: Ensuring that participants leave the session with an understanding of how to effectively utilize digital health tools and resources for better public health outcomes.
- To bridge the gap between healthcare infrastructure and patient empowerment: Identify areas of investment in digital health and informatics in Africa

## Session's Key Takeaways

### Summary

1. Overview of digital health information
2. The Africa Digital Health Networks
3. Improving vaccine safety through digital solutions
4. Advances in health management information systems in Africa
5. Addressing systemic/institutional justice from a personal and public health perspective
6. Digital health standards adoption
7. Data privacy and confidentiality: personal data transparency

## Current Status of Digital Health Information

By breaking barriers and repositioning Africa in the global health architecture, Africa has witnessed a growing interest in leveraging digital technologies to improve healthcare outcomes. This encompasses a variety of aspects such as telemedicine and telehealth, health information systems, and electronic health records among others; that contribute to the improvement of healthcare delivery, accessibility, and outcomes.

The adoption of digital health information presents a promising trajectory, with the potential to address healthcare challenges and improve overall health outcomes. However, addressing infrastructure gaps, ensuring data security, and fostering collaboration among stakeholders is crucial for sustained progress with a focus on patient empowerment and patient-centred care.

## The Africa Digital Health Networks (ADHN)

The ADHN initiative aims to serve as a hub for Africa's digital health communities of practice, fostering communication, partnerships, and collaboration in the development and adoption of digital health solutions. With over 50 institutions and 190 individuals expressing interest as founding members, ADHN has set objectives to strengthen the digital health capacity of 100,000 frontline health workers by 2030, accelerate the adoption of digital health technologies, promote interoperability and open standards for person-centered care, organize training and knowledge-sharing platforms, advocate for policies supporting digital health maturity, and identify initiatives enhancing health security and outcomes in Africa.

The unification of stakeholders such as health agencies, associations, tech startups, investors, and development partners under one network will improve coordination, share best practices, advocate for increased digital health investments, and enable partnerships to scale digital health adoption in Africa.

By implementing the Africa CDC Digital Transformational Strategy, efforts are made to coordinate and engage various stakeholders in fostering unity across Africa. This serves as a community for learning and collaboration among individuals and organizations involved in digital health. This strategic approach is geared towards making digital health a significant contributor to Africa's health security agenda.

## Improving Vaccine Safety through Digital Solutions

Following the global changes brought about by COVID-19, the significance of vaccines in public health has become more evident than ever. Digital solutions in healthcare can be categorized into monitoring, reporting, and optimization which form a feedback loop crucial for continuous improvement in healthcare processes, including ensuring vaccine safety. Emphasis is placed on the necessity for sophisticated handling, particularly considering their vulnerability to degradation, especially in the context of

the ultra-freezing requirements for COVID-19 vaccines. Real-time data plays a crucial role in monitoring product conditions and providing supply chain reporting information, enabling clients to assess the efficiency of their supply chains.

While addressing the challenges and barriers in vaccine safety, the availability of accessible data empowers commercial institutions to target areas with increased focus, potentially reducing the price of treatment and expanding access to a wider population. The collaborative approach among the public and private sectors, academia, donors among other stakeholders, coupled with the iterative use of digital solutions, sets the groundwork for an improved health system that addresses current challenges and promotes evidence-based decision-making in Africa.

## Advances in Health Management Information Systems in Africa

The key question addressed was whether country Health Management Information Systems (HMISs) offer traceable patient data for effective feedback. The emphasis on programmatic reporting has resulted in a top-down approach, but there is a strong need to build from the ground up which can be supported by integrated electronic medical records (EMR). This approach aims to provide clinicians with a longitudinal view of the patient, a cross-disease perspective, and access to lab results, prescriptions, and medical history from any visited clinic or hospital.

The focus should be on implementing electronic medical records (EMRs) in clinics and community health information systems (CHIS) to distribute data and information at the source. This approach is deemed crucial for enhancing data quality and providing feedback to patients. The metaphor of 'data defying gravity' is used to convey the necessity for a bidirectional flow of information, emphasizing that data should not only ascend but also descend to health workers and patients. Closing this feedback information loop is seen as vital for fostering motivation to gather high-quality data, consequently fortifying the health system.

Challenges of implementation can include ensuring reliable power and connectivity, establishing unique patient IDs and capacity building of the health workforce. Key enablers identified in achieving this include strong governance, clarity of purpose, and alignment with standards such as HL7, DICOM, and ICD 11. Also crucial is the implementation of patient, facility, and health worker registries, along with the use of global goods.

## Addressing Systemic/Institutional Justice from a Personal and Public Health Perspective

Gravitate-Health aims to transform how patients access and understand health information and improve adherence to treatment and overall quality of life. Through the incorporation of electronic health records, approved electronic product information, and various health education materials, Gravitate-Health delivers a federated open-source platform with personalized subsets of information.

With an emphasis on the importance of trusted sources, multilingual capabilities, and adherence to international standards, their commitment to addressing systemic and institutional justice is reflected in the project's goals of contributing to cross-border mobility and creating a more inclusive and interconnected healthcare ecosystem.

Prioritizing adherence to advanced interoperability standards and collaborating with organizations actively involved in European Health Records Information Exchange formats, ensures patient safety and continuity of treatment. Access to relevant information from trustworthy sources, presented understandably, is a significant factor in achieving this goal.

## Digital Health Standards Adoption

Despite the current limited implementation of digital health standards, there has been a noticeable surge in their adoption as the understanding of their capability advances. The vision of achieving seamless data sharing across African countries hinges on the widespread adoption of these standards. Despite being a relatively new concept, the expectation is that as demand rises, developers will increasingly recognize compliance as a crucial aspect of conducting business in this evolving landscape.

Standardization will enable the broader vision of establishing an interconnected African platform for seamless data sharing across 54 countries. The evolving nature of standards suggests that, while currently not omnipresent, they are gaining traction, and their adoption is becoming a virtual license for effective business operations in the digital health sector. As developers recognize the growing demand and benefits of these standards, increased compliance is expected to drive their widespread integration into the industry.

## Data Privacy and Confidentiality: Personal Data Transparency

A crucial aspect of addressing data concerns is transparent communication. When institutions request or collect data, there is a need to be transparent about how the data will be used, any commercial interests involved, and the ultimate purpose of the data. Educating patients and the wider population about the benefits of their data is essential. Providing information on how data will contribute to improving health systems, resource allocation, and potential commercial uses can help build trust.

The focus is on presenting the benefits of sharing subsets of data, offering a more precise treatment by leveraging historical data while leaving the extent of data sharing to the user's discretion. Transparency, education, and user empowerment emerge as critical elements in addressing concerns related to data misuse. Balancing innovation, institutional positions, and user choices is crucial in navigating the complexities of data utilization in the health sector.

## Speaker Quotes

*"Through the Africa Digital Health Network, we are going to strengthen the digital health capacity within the continent, accelerate the adoption of digital health solutions i.e., mHealth, telemedicine, promotion of digital public infrastructure approaches and open standards to advance interoperability for person-centred care."* - **Jean Philbert Nsengimana, Chief Digital Advisor, Africa CDC**

*"Access to relevant information that is understandable and is from trusted sources is key to ensuring patient safety and will ensure that we leave no one behind."* - **Dr Anne Moen, RN, PhD, FACMI, FIAHSI, Professor in Health Informatics and Nursing, Faculty of Medicine, University of Oslo and Coordinator, Gravitate-Health**

*"The Africa Digital Health Network is a community of learning and practice of individuals and organizations engaged in digital health. It is part of Africa CDC's digital transformation strategy that is aimed at ensuring that digital health becomes a key contributor to Africa's health security agenda."* - **Cyril Seck, Strategy Advisor, Africa CDC**

*"In the data world, there is a saying that 'data defies gravity' - which means that while data often goes up, it hardly comes back down. We need to change this. Data must come back down to the health worker and the patient to close the feedback loop. This will ultimately lead to more motivation to collect quality data, further strengthening the health system."* - **Robert Cryer, Country Technology Services Manager, The Global Fund**

*"The collaboration among the public sector, private sector, academia, donors among other stakeholders gives Africa a unique opportunity to leapfrog into digitization and drive sustainable healthcare change and improvement for years to come. However, rules around data must enable, not stifle, digital health innovators."* - **David Chen, Co-CEO, Kapsule**



### About CPHIA 2023

The International Conference on Public Health in Africa (CPHIA) is organized by the Africa Centres for Disease Control and Prevention (Africa CDC) and provides a unique African-led platform for leaders across the continent to reflect on lessons learned in health and science and align on a way forward for creating more resilient health systems. The CPHIA 2023 was hosted by the Zambian Ministry of Health in Lusaka, Zambia, under the theme **“Breaking Barriers: Repositioning Africa in the Global Health Architecture”**.



### About Gravitate-Health

Gravitate-Health is a public-private partnership with 40 members from Europe and the US, co-led by the University of Oslo (coordinator) and Pfizer (industry lead) with the aim of developing a digital health information tool called the G-lens to guide citizens and patients to understandable, trustworthy, up-to-date information that meets their needs and fits with their health context and literacy levels.


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### About Africa Health Business

Africa Health Business is a dynamic and influential pan-African advisory and consulting firm driven by the compelling vision of **“in Africa, by Africa, for Africa”**. Headquartered in Nairobi, Kenya, AHB is dedicated to strengthening the private sector to play an impactful role in solving Africa’s healthcare challenges. We provide market insights and foster productive stakeholder engagements to enhance access to equitable healthcare across Africa.



 +254 704 838 150

 [info@africahb.com](mailto:info@africahb.com)

 [www.africahb.com](http://www.africahb.com)

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