The Africa Chapter is raising awareness of OHDSI in Africa to improve interoperability and promote collaboration across Africa and globally

OHDSI in Africa and Partnerships with European Institutions

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Background

Africa faces significant health challenges from a high burden of infectious diseases, maternal health issues, and rising incidence of non-communicable diseases. African governments are striving to establish efficient systems for sharing health data and promoting interoperability among various repositories as health data are increasingly migrating to electronic data capture. The OHDSI framework for data standardization and collaboration through a federated approach, as well as the extensive suite of programs for quality checks, visualization and rigorous analysis of observational data can accelerate efforts of African entities to strengthen health information systems and analyze large health data sets, both within and across African countries, to generate evidence for improving health systems and patient care, in a manner that is privacy protecting, transparent in methodology, and economical through use of open-source tools.

Methods

Africa Chapter members are spreading awareness of OHDSI to other African researchers, health data custodians and government officials, using the Value Proposition document written by Chapter members in 2023. Chapter members have begun the process to obtain permission to do an OMOP ETL of a specific healthcare database in their country. At Chapter meetings, more experienced members are transferring their knowledge and experiences, as well as introducing synthetic datasets, to give members who are new to OHDSI an opportunity to become familiar with OHDSI tools. The OHDSI Africa chapter is seeking to build collaborative relationships with other data science programs such as DS-I Africa, African Open Science Platform and VODAN.

Results

• Institutions in Rwanda, Kenya, Malawi, Tanzania, and South Africa have created OMOP versions of local health data.
• The LAISDAR project located at the Rwanda Biomedical Center contains 3.6 million unique subjects in OMOP CDMs transformed from OpenMRS and OpenClinic EMRs at 15 hospitals.
• The INSPIRE network at the African Population Health and Research Centre (APHRC) carried out ETLs to the OMOP CDM using data from the Health and Demographic Surveillance System in Kenya, Tanzania and South Africa.
• APHRC is collaborating with UK institutions The Alan Turing Institute and London School of Hygiene and Tropical Medicine, CODATA (France), I-DAIR (Switzerland) and institutions in Cameroon, Ethiopia and Senegal on a Wellcome Trust funded project “Data Science Without Borders”, which will conduct research using data harmonized to the OMOP CDM.
• The Virus Outbreak Data Network (VODAN) Africa has established data science partnerships in 12 African countries and invited OHDSI Africa Chapter members to meet at Leiden University (Belgium) on 04 Jun 2024 to discuss a plan for collaboration.

Conclusion

Awareness of OHDSI is growing in Africa with several African institutions successfully implementing the OMOP CDM and OHDSI tools. Several OHDSI Africa Chapter members are poised to do OMOP CDM implementations at their institutions. Despite the availability of vast amounts of health data in Africa, these remain siloed in different organizations and captured in varying formats and terminologies. Facilitating knowledge transfer from experienced OHDSI members, within Africa and globally, to those less familiar with OHDSI tools, will expedite interoperability and capacity building in Africa. Funding is urgently needed to empower African scientists to lead this transformative effort.
Background color codes for different OHDSI poster categories

- Observational data standards and management
- Methodological research
- Open-source analytics development
- Clinical applications
Main finding goes here (plain English). Emphasize the important words.

**Title:** Investigating the dynamics of X on Y.

**Background:** 70,000 people needed a portrait-orientation style layout for #betterposter, according to the Open Science Framework download counts.

Result 1: Quickly explain what the graph shows. Help people think.

Result 2: Big figures are easier to skim at a distance, and more accessible.

**Methods**

1. Immune checkpoint inhibits T-cell activation.

   ![Diagram 1](image1.png)

2. Anti-PDF-1 antibodies permit T cell activation

   ![Diagram 2](image2.png)

**Limitation:** This is only one interpretation of findings that suggest effective posters are uncluttered, have big figures & text, and include callout boxes with takeaways. It is missing your personality and creative flair.

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