## **Development of the National Health Data Warehouse**

Health care data is currently stored in multiple systems which limits access and delays decision making for either patient care or program improvement. To address this, MoH, with support from partners like Makerere School of Public Health METS Program, CDC Uganda, JHPIEGO, Infectious Diseases Institute (IDI) and the Uganda Strengthening Supply Chain Systems (SSCS) is developing a National Data Warehouse.

The Ministry of Health (MoH) plans to transform the siloed healthcare data into a well-organised and efficient system that gives aggregated information with insights. The main goal of this warehouse is to create a central data hub that will ease data management to improve healthcare decision-making. The national data warehouse project is not just about technology; it is about making healthcare decisions easier and more effective.

and pave way for an era of efficiency and progress in healthcare.

The national data warehouse project has several teams:

- 1. 'Project management' team oversees setting up teams, tracking tasks, and ensuring smooth operation.
- 2. Business requirements' teams gather and conduct needs assessments.
- 3. 'Developers' focus on the technical issues, and import data from different systems into the warehouse, creating data models, and enforce data security.
- 4. 'Analysts' interpret the data, create reports and visuals to improve understanding.
- 5. 'Documentation' team compiles guides and documents explaining the warehouse operation.



The analytics team of the Data warehouse team, during one of their weekly working meetings at CiSand Hotel, Jinja on 29th January - 10th February 2024



Participants that attended the Jasper training in Jinja in January 2024

Moving forward, data in the warehouse will be used to create analytic outputs that aid better understanding and making of informed decisions regarding improvement of the healthcare system. Plans to create additional visuals are underway as a way of improving the visualization component.

To support this journey, a training program was held in January 2024 to equip the team with knowledge on the Jasper Soft system; a customised data storage, reporting and analytics platform.

## Mortality surveillance for healthier communities

In an effort to systematically track and understand deaths within communities, mortality surveillance plays a crucial role. Currently, the Ministry of Health (MoH) is focused on enhancing mortality surveillance across the country. With support from METS, technical assistance has been provided to MOH to improve death notification, reporting, and use of data related to all causes of mortality in the country.

Recent events include the development of a national roadmap for mortality surveilance, aimed at strengthening implementation of mortality surveillance in Uganda, which is in its final stages, and awaiting MoH approval. Weekly reporting meetings have been instrumental in analysing trends in deaths at national and regional referral hospitals.

The MOH is currently implementing electronic medical records systems (EMR) across health facilities. METS has supported the MoH to digitalise and scale up use of the Health Information System (HMIS) form 100 for notification and certification of medical cause of death using the EMR.

This is an initiative currently being rolled out to 76 health facilities, involves staff orientation on correct form-filling and reporting procedures and working closely with regional implementing partners. This process is aimed at linking information in the EMR to DHIS2. This information will subsequently be transmitted to National Identification & Registration Authority (NIRA), to improve death notification and registration rates in the country. Plans for procuring tablets to aid community death surveillance and reporting are in progress, along with data review meetings.

On 16th April 2024, a team from the CDC Foundation, CDC-Uganda, Uganda National Institute of Public Health, MOH, Reach out Mbuya, UCSF met in the METS boardroom to discuss how use of EMR can improve death notification and registration. Partnerships, such as these have furthered discussions on collaboration and solutions to existing challenges such as limited internet access and suboptimal documentation of community deaths.



MOH, UNIPH, Reach out Mbuya, CDC-Uganda and CDC Foundation representatives pose for a photo with METS staff after a collaboration meeting held on 16th April 2024 at the Program offices

These initiatives mark significant progress towards improving mortality surveillance nationally, which will aid better understanding and response to mortality trends and cause of death and as a result, better planning for healthier communities.

## **DREAMS Program GBV Portfolio Review**

The Determined, Resilient, Empowered, AIDS-free Mentored and Safe (DREAMS) program delivers evidence-based HIV prevention interventions that target high-risk adolescent girls and young women (AGYWs) in selected districts in Uganda. The DREAMS program offers different prevention packages to beneficiaries of different ages. The HIV prevention service package includes; HIV risk assessment, mental health assessment, gender based violence (GBV) routine inquiry, curriculum-based HIV and violence prevention, PrEP screening, STI screening and basic economic strengthening for AGYWs out of school. Annually, the DREAMS services package is reviewed to address the changing needs and risk factors of AGYWs in the country.

METS, in collaboration with Ministry of Health and supported by CDC, conducted a GBV portforlio review in the districts of Masaka, Lyantonde, Sembabule, and Kalangala. The review focused on assessing the **DREAMS** efforts in addressina program's gender-based violence in these central region districts. particularly concerning AGYWs' enrollment, prompt service delivery post-enrollment, and referrals to additional support services where needed. Additionally, the program facilitates cross-referrals between DREAMS and other initiatives, including support for orphans and other vulnerable children, HIV prevention, maternal and child healthcare, and family planning.



Review Meeting at Mugooye HC III in Kalangala



Logan Joseph and Sophie Nantongo (L) from CDC meeting with a safe space staff in Lyantonde District during a review meeting

As a result of the review, plans are underway to increase the number of mentors within the program to provide enhanced support for ACYWs, aiding in their transition towards sustainability. Furthermore, a peer-led employment program will be initiated to provide opportunities for trained beneficiaries. Local government officials, implementing partners, staff, and beneficiaries all participated in the review process, which included focus group discussions to assess the program's progress.



Next steps include conducting other program specific portfolio reviews to guide service delivery at different levels of care.

## **Gallery**



The national data
warehouse information
products team working
meeting held at METS offices
on 12th April 2024

METS team meeting with MoH AIDS Control Program Manager, Dr. Robert Mutumba (C), to discuss Recency Surveillance updates on 11th April 2024.





Team from UCSF and OpenMRS paid a courtesy visit to METS during the OpenMRS Hackathon week held in April 2024.

Discussions delved into ways of enhancing data capture within OpenMRS distributions, with a focus on UgandaEMR.

Maureen Katusiime- a surveillance data specialist at METS during mortality surveillance site activation at Komamboga HC III, in Kampala





Nancy Karunganwa Dr. Alice Namale Maureen Katusiime Sharon Abowe Isaac Sebuliba Ausse Kalega