

Tracking Trends in HIV Outcomes: The Implementation of HIV Case-Based Surveillance

The Monitoring and Evaluation Technical Support (METS) Program, in partnership with the Ministry of Health (MoH) and various implementing partners, is spearheading the HIV Case-Based Surveillance (CBS) initiative across Uganda. This effort utilizes electronic medical records (EMR) and digital health information systems (HIS) to enhance data collection and monitoring of HIV trends.

By February 2024, CBS had been activated in 504 health facilities, with 349 sites (69%) actively transmitting data (see map below). Data is collected using primary HIV data collection tools covering prevention, care, and treatment, which is then entered into the EMR and transmitted via the internet to a central database hosted by the MoH.



Sites submitting data versus the sites activated per region



Map showing district coverage: Status of CBS implementation in Uganda; Feb 2024

	No. achieved	Target	%
Number of Districts implementing CBS	109	146	75
Number of Sites activated for CBS	504	800	63
Number of Sites transmitting data	349	504	69

The table below shows CBS site activation and implementation progress, including district coverage, sites activated and sites transmitting to the central database hosted at MoH.

Significant gaps in data transmission persist, as the majority of regions have not achieved 100% transmission from the activated sites. Challenges such as internet access and cost are being addressed with regional partners to improve coverage.

Trends of New HIV Diagnosis

An analysis of HIV diagnosis trends over a 20-year period (2000-2022) was conducted using data from 349 health facilities across 109 districts, encompassing 202,152 clients and 3,228,359 clinical visits. The data revealed an increase in new HIV diagnosis over time, peaking in 2014 and 2018, before starting to decline. Notably, the number of diagnoses among females consistently exceeded those among males each year (see figure below). This is consistent with findings from the Uganda Population-Based HIV Impact Assessment (UPHIA 2020-2021).



CBS complimenting other HIV surveillance programs

The ongoing implementation of HIV Case-Based Surveillance by METS and MoH is crucial for understanding and addressing HIV trends in Uganda. Despite challenges in data transmission, the collected data provides valuable insights into infection patterns and highlights the need for targeted interventions, particularly among females. Continued efforts to improve internet access and data transmission will boost the effectiveness of this surveillance system, ultimately contributing to better health outcomes for people living with HIV in Uganda. Next steps include continued scale up of CBS implementation to reach 80% of ART sites; improving data transmission from facility to the national repository to achieve at least 90% of the CBS activated sites; and strengthening data analytics and use of the data for program improvement. Additionally, the program plans to disseminate CBS information products during the planned annual meeting in September 2024.

Enhancing HIV Prevention Data Collection Through Bootcamps

From May 27th to June 14th, 2024, a workshop was held in Mbarara, Uganda, to update the Health Management Information System (HMIS) tools for PrEP (Pre-Exposure Prophylaxis) in the HIV Prevention Tracker. Organized by the Makerere University School of Public Health's Monitoring and Evaluation Technical Support (METS) Program, in collaboration with HISP Uganda, the workshop focused on digitizing paper forms to efficiently collect data on key and priority populations.

The workshop brought together participants from various organizations with different roles. Reach Out Mbuya handled user testing, USAID-SITES focused on system integration, and METS and HISP concentrated on updating the process. The primary goal was to finalize updates to the PrEP Tracker, aligning it with the latest stable version of DHIS2 (2.4), and to ensure seamless integration with existing data collection systems.



Ausse Kalega discussing the merging processes.



Discussing the program rules for the various population categories

Participants worked diligently to standardize program indicators in line with monitoring and evaluation reportina (MER 2.7) and other stakeholder requirements. They also planned national training for the changes in the tracker, developed training materials, and tested system integrations with KPIC USAID-SITES' Generator system, which automatically generates unique IDs for clients during registration.

Key outcomes of the workshop included the successful alignment of the PrEP Tracker with revised data tools, program rules, and indicators, as well as the implementation of facility based HMIS tools within the tracker. This alignment ensures that the updated tracker meets current needs and improves data management and analysis.

Next steps involve updating the development system with new community data collection forms, configuring additional program indicators, developing user manuals, upgrading the production system to the latest version, and conducting thorough system testing and user training. Regional trainings on the new changes will commence in the first week of August 2024. After all trainings are done, the newly tested changes will be pushed into production instances. System users will fully transition to the updated KP Tracker come 1st October 2024.

These updates to the PrEP Tracker will enhance system security, functionality, and data management, ultimately supporting improved program monitoring and decision-making. This initiative will contribute significantly to better health outcomes for key and priority populations in Uganda.

Electronic Medical Records (EMR) pgrades in Eastern Uganda

Monitoring and Evaluation Technical Support (METS) Program, recently announced the inclusion of UgandaEMR as part of the country's official EMR packages during the annual EMR stakeholders meeting at Hotel Africana, Kampala. Building on the success of UgandaEMR, the new and improved version, UgandaEMR+, has been launched, with Reach Out Mbuva (ROM) Kampala and Baylor Bunvoro spearheading the process. The AIDS Information Centre (AIC), an implementing partner operating in Eastern Uganda, has initiated the upgrade of facilities in the Teso region to this latest version.



Isaac Akileng takes participants through how to extract data, generate reports and submit the reports directly to DHIS2

METS played a crucial role in providing technical support throughout the training and upgrade processes. They offered practical, hands-on experience with UgandaEMR+ to ensure a smooth transition to the new system.

The initiative successfully trained over 15 AIC staff members, including M&E leads, IT personnel, data officers, and M&E managers, in the practical use of UgandaEMR+. Additionally, the two facilities, Ochero HCIII and Kapelebyong HCIV, were upgraded and their staff trained on the new system.

The Ministry of Health, in collaboration with the A two-week activity kicked off with a week-long training session at Northeast Villa in Kumi district, targeting AIC's M&E leads, data officers, and IT staff. The training focused on the enhancements of UgandaEMR+, including improved point-of-care (POC) functionalities and data visualization techniques. Following the training, the METS team, along with selected AIC staff, divided into two groups to upgrade and train facility staff on UgandaEMR+ at Ochero HCIII and Kapelebyong HCIV. The hands-on training ensured that the facility staff were well-equipped to use the new system effectively.



Hands-On Training of Ochero HC III staff on UgandaEMR+

Following the successful upgrades, there will be continued hands-on training and supervision to ensure full utilization of UgandaEMR+. The AIC team will expand the UgandaEMR+ upgrade to other facilities in the region. This phased approach will ensure a robust implementation and seamless integration of UgandaEMR+ across more health facilities in Eastern Uganda.

METS is in the process of transitioning the governance of UgandaEMR to the MoH's Division of Health Information. This will see MoH manage and coordinate efforts towards the development, design and implementation of ugandaEMR. They will be responsible for the overall system and data governance. METS is working closely with the designated EMR focal person, Jamil Mpiima to ensure successful transitioning.



Dr. Joshua Musinguzi efforts to minimize HIV incidence and death in Uganda. His strategic focus on translating knowledge into policies and actions has helped Uganda manage the HIV epidemic. A seasoned public servant whose dedication to end HIV/AIDS in Uganda spanned decades.

May God comfort the Musinguzi family and rest our comrade's soul in peace

Gallery

Salute Dr. Amy Boore, Program Director, Division of Global Health Protection - CDC

Professor Rhoda Wanyenze, Dean School of Public Health, MoH Director General, Dr. Henry Mwebesa and other key stakeholders were in attendance at the farewell





Komusoft Solutions presents the 'gathered' requirements during the meeting analysing the UgandaEMR Clinical Laboratory Module. In attendance was Vincent Ndazima and Jonathan Ntale from CDC-Uganda.



Partners joined the Ministry of Health to bid farewell to Amy Boore, the Program Director – Division of Global Health Protection. Dr. Amy Boore was instrumental in providing technical assistance to METS during efforts to implement the global health security agenda. Specifically in the implementation of National Integrated Surveillance Systems (NISS) and building of the national Data Warehouse. She supported METS during the response to the Ebola outbreak in Mubende Region in 2022 especially in the pillars of surveillance, strategic Information, Research, and Innovation (SIRI) and Information systems for Ebola response. Furthermore, she supported the implementation of Acute Febrile Illness (AFI) surveillance especially in protocol development, and review of standard operating procedures.



UgandaEMR+ training for USAID SITES and Uganda Health Activity held on 18/06/24, it is hoped that this will lead to upgrades of all USAID point of care sites to UgandaEMR+

Dr. John Lule (R) conducting a training for clinicians at Ruharo Mission Hospital on syndromic surveillance for Severe Acute Respiratory Illness (SARI) and Influenza Like Illness (ILI) on June 19th 2024.





METS team set up for a demo of HIV Treatment Services (HTS) point of care in UgandaEMR+ during the HTS Implementers Meeting that was held at Kabira Country Club on 20/06/24



Nancy Karunganwa Dr. Alice Namale Dr. Edgar Kansiime Isaac Akileng Ausse Kalega