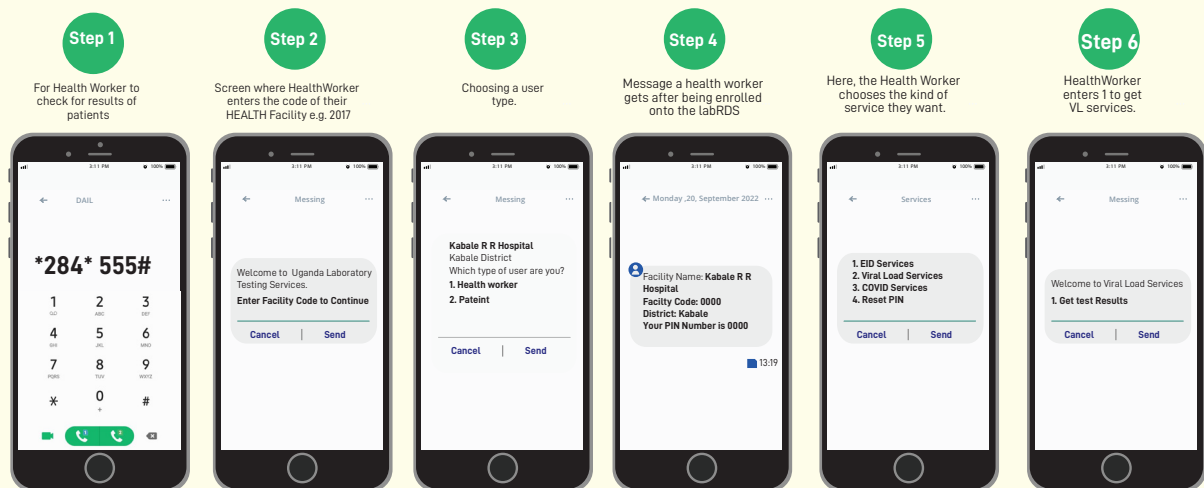


METS WATCH

Innovations to ease access to laboratory results: SMS messaging for laboratory results



Laboratory Results Dispatch System (LabRDS) is a digital solution that eases access to laboratory results by a registered patient or healthcare worker through a phone-based short message service (SMS) supported by an Unstructured Supplementary Service Data (USSD) on any phone. This system is hosted in the national reference laboratory (UNHLS) and can transmit results for Viral Load, Early Infant Diagnosis (EID), COVID-19, and soon Ebola from the reference labs across the country.

Health Care Workers and patients are registered onto the system using their respective phone numbers and attached to their respective health facilities. On successful registration, an SMS is sent to their phone with a facility code and a PIN which enables them to access laboratory results that guide the provider to make

decision on whether to modify the patient care.

This system was developed collaboratively by Ministry of Health (MoH), Uganda National Health Laboratory and Diagnostic Services (UNHLS), Makerere University School of Public Health – METS Program, Clinton Health Access Initiative (CHAI) and African Society for Laboratory Medicine (ASLM) with support from PEPFAR. METS provided support to this innovation through;

- i) provision of technical assistance in the development of the system including backend code improvement; and system syncing with the CPHL Laboratory Information Management System (LIMS)
- ii) supporting stakeholder engagement meetings with MoH senior management, regional and district

stakeholders

- iii) scale-up of this system to all high-volume ART facilities in 60 districts across 5 regions.

Going forward, the system will be scaled-up to all high-volume ART facilities countrywide, with continued support from METS.

It is anticipated that this system will reduce the turn-around time for laboratory results for both clients and providers thus facilitating faster clinical decision making. Currently, Viral Load testing results are readily available within 14 days of testing and these results are sent to the health facility where clients pick them. With this innovation, clients get notified immediately results are ready and to go to their health facilities.

Supporting National and PEPFAR reporting

Since October 2021, METS took lead of the interagency PEPFAR reporting function. METS continues to work with MoH, Implementing Partners (IPs), District Local Governments and other stakeholders to gather, clean, analyse, and share data on program performance.

To accomplish this, METS developed a reporting system, the PEPFAR In-country reporting system (PIRS) and facilitated automated online surge weekly reporting system which is pivotal for interagency reporting mandate. Throughout the year, METS has accessed, mined, processed, and generated data from District Health Information Software-2 (DHIS2) and other sources to meet PEPFAR reporting

requirements and data needs including disaggregation of data to comply with PEPFAR Monitoring, Evaluation and Reporting (MER) requirements. This contributed to timely quarterly reporting.

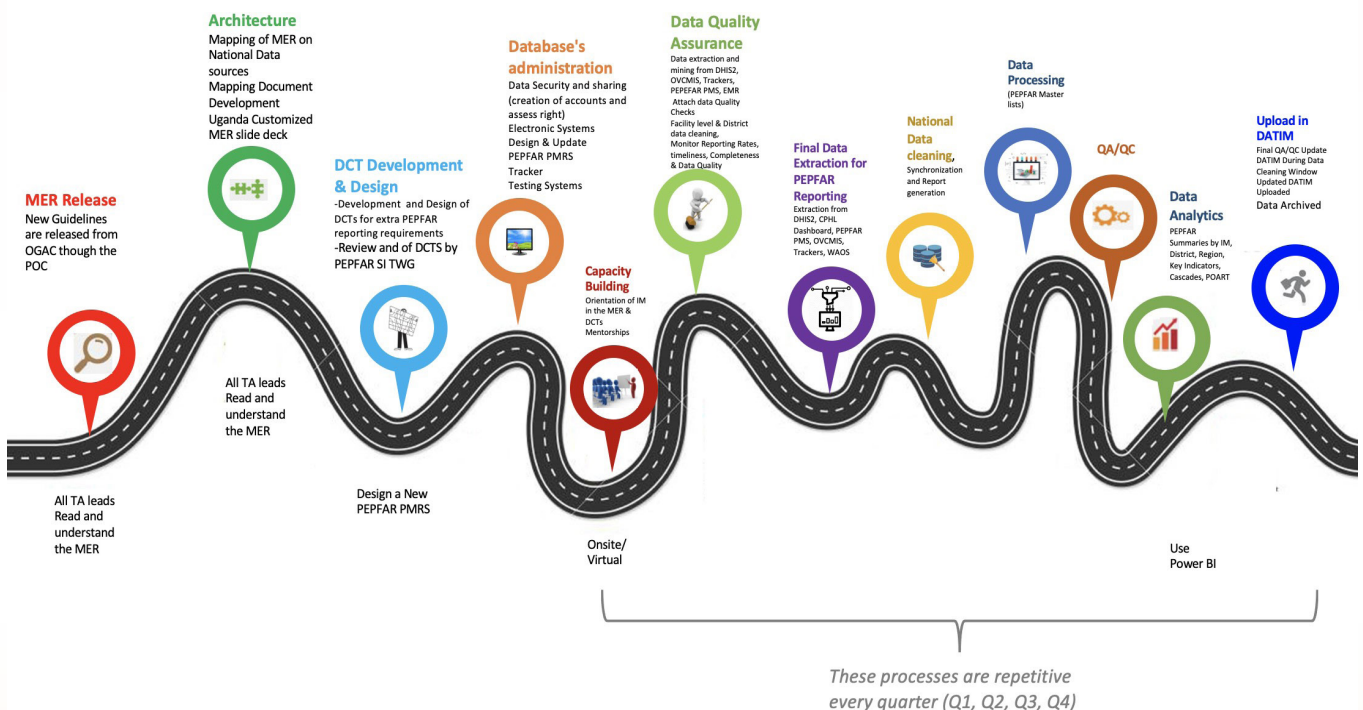
The success of this role was built on executing a number of tasks which included;

- 1) National, regional, and sub-national level data cleaning including monitoring timeliness and completeness of reporting;
- 2) data quality assurance and control (QA & QC) for all data in different reporting systems;

- 3) Design of data collection tools based on MER indicator reference guide;
- 4) Development of slide decks (SOPs) for the MER reference guide to serve as training material for PEPFAR reporting requirements.

Other responsibilities include regularly updating the DAPTS list to include all PEPFAR supported sites, provision of analytics as required by the various USG/GOU entities and timely update of indicator map and administrative units including health facilities to ensure alignment to national systems (DHIS2 & National OVCMIS). Below is the summarized report generation road map.

PEPFAR Reporting



METS and SITES organized quarterly partner dialogue meetings that bring together different stakeholders from MoH, PEPFAR Strategic Information representatives, IPs, PEPFAR

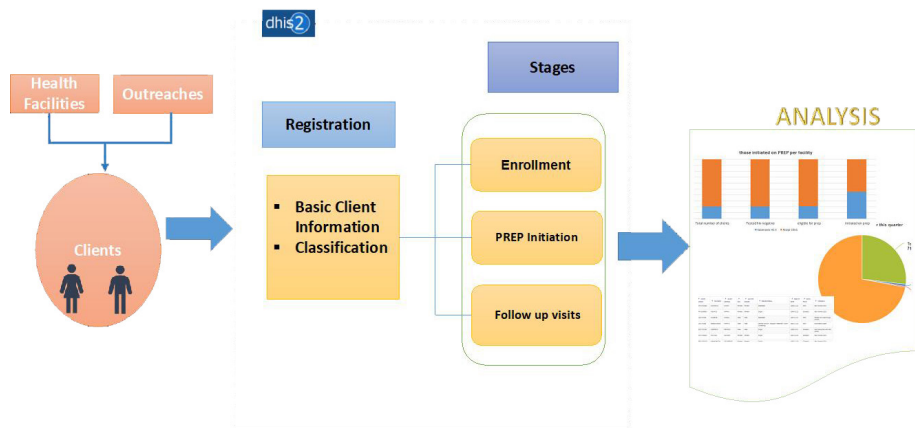
Coordination Office, and Regional Referral Hospitals. The dialogue identified areas of overlap/mutual interest, highlighted areas of potential partnership and encouraged candid

exchange of experiential knowledge to speed up the transfer of knowledge. Importantly, the exercise also served to identify relationships where influence can be leveraged, and learning engaged.

Monitoring Key and Priority Population (KP/PP) Service Delivery

Key Populations (KP) and Priority Populations (PP) are more likely to be exposed to HIV or to transmit HIV infection by virtue of their demographic factors, behavioral factors, health care coverage status, or geography and their engagement is critical to a successful HIV response. UNAIDS considers men who have sex with men (MSM), sex workers and their clients, transgender people (TG), prisoners and other incarcerated people, fisher folk, adolescent girls and young women, long-distance truck drivers, prisoners, people who inject drugs (PWID) as the main KP/PP groups.

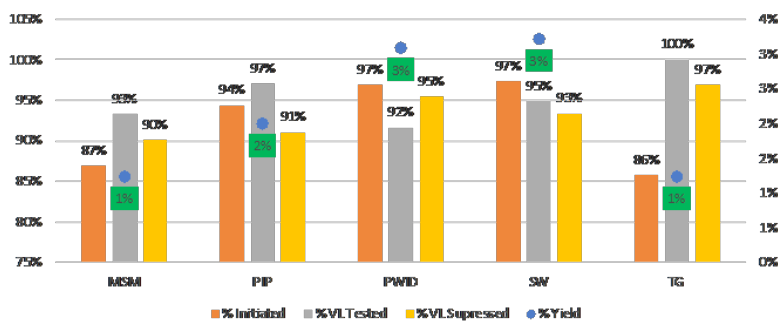
To ensure proper tracking and monitoring of services provided to KP/PP both at the health facilities and within the communities, METS developed a KP/PP combination HIV prevention



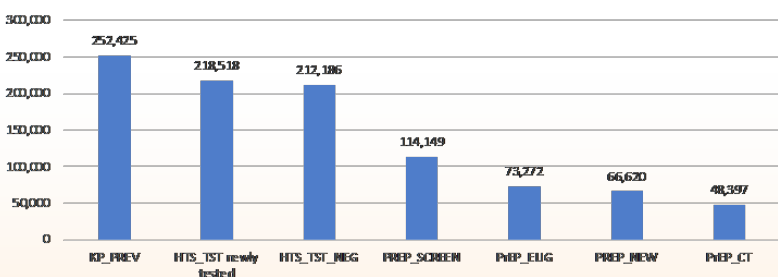
tracker to monitor service provision and services' layering to these populations across the country. The KP tracker captures individual level data for key HIV prevention and care services provided to KP and PP including PrEP, ART, psychosocial support, testing,

screening, family planning, and others. The system also supports monitoring of prevention and treatment cascades, an indication of the quality of services provided to these different populations along a continuum as demonstrated in the figures below;

KP Treatment cascade monitoring July 2022



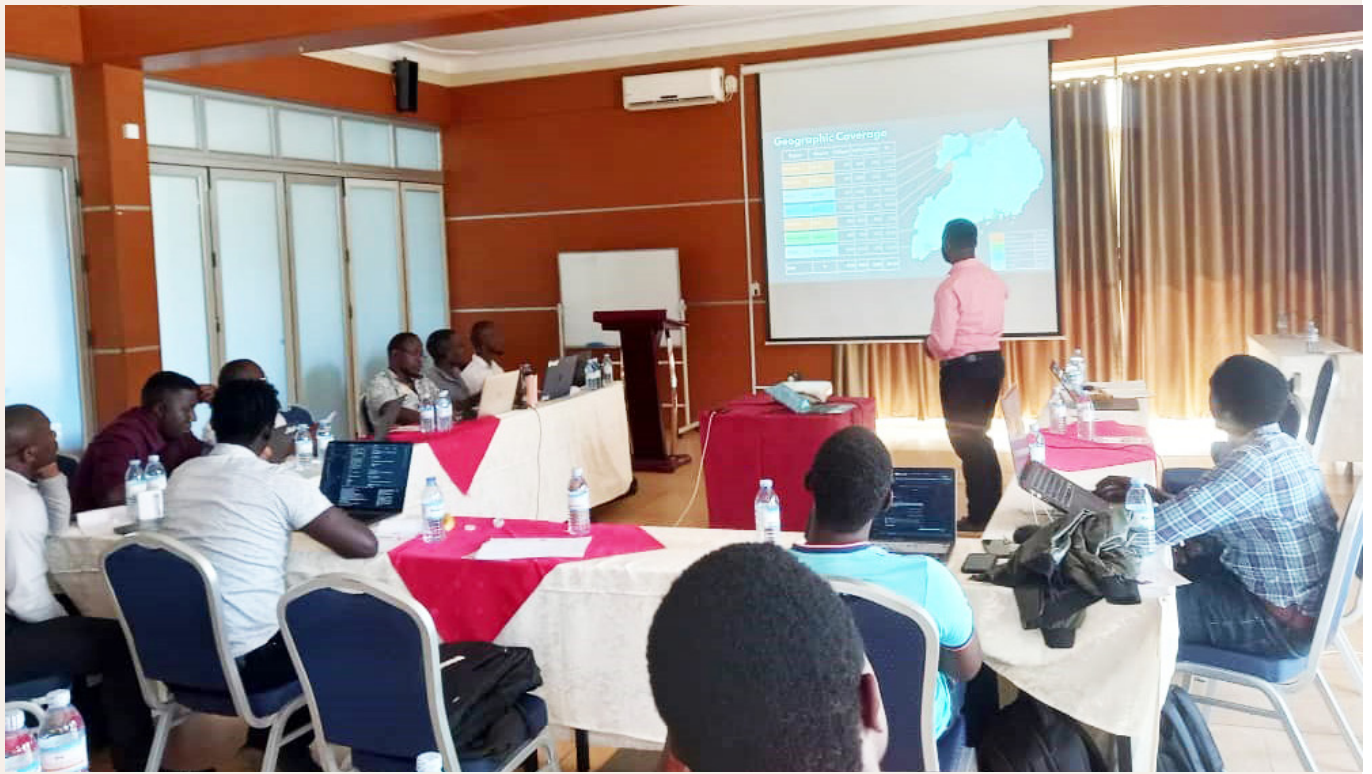
PrEP Negative Cascade



The KP/PP tracker is an online system with over a million individuals monitored for the services they receive. The system is secured to prevent hackers and unauthorized access with different levels of access assigned centrally, to view, read or write the dashboard.

To ensure quality of the data that is entered and reported, METS conducts data and service quality assessments on a biannual basis in partnership with implementing partners across the country. This helps guide health workers to ensure retention and provision of comprehensive service delivery.

Digitalization of the health sector



Brian Ssenoga (Medic Mobile) presenting about community health information system

The current version of UgandaEMR has three major implementation approaches:- Point of Care data entry, retrospective data entry, and use of mobile supported applications. The healthcare services currently supported by Uganda EMR include HIV/TB, COVID-19, Safe Male Circumcision (SMC), HIV Testing Services (HTS), and Mother and Child Health (MCH), among others. There is a planned extension of UgandaEMR beyond HIV/TB to integrate it with other health information systems such as eHMIS (DHIS2), ClinicMaster, laboratory

information system (LIMS), Pharmacy Information Portal (PIP), among others.

Uganda is operating in an era of dynamic technologies where health practitioners will have to adopt and use the latest technological innovations to improve clinical documentation, evidence based reporting, and access to timely and accurate information.

To keep abreast with these evolving technologies, the METS program is running a series of developer bootcamps aimed at improving the technology stack of UgandaEMR and extending its core healthcare services beyond HIV/TB. This will make it more adaptive, scalable, extendable, and non-restrictive to dynamic technologies.

The latest series of these bootcamp (31 - Oct to 4 Nov 2022), with representatives from HISTAC, Medic Mobile, Komusoft, and UgandaEMR Community of Practice, focused on (i) building data capture screens for Outpatient (OPD) and Cervical Cancer (CaCx), (ii) developing design models for reporting interface, (iii) designing clinical decision support workflow for OPD, CaCX, and (iv) documenting requirements for integration of UgandaEMR and the community health information system (CHIS). The next series of bootcamps is planned to take place early 2023, and will focus on updating the clinic flow, data capture, and reporting for the HIV/TB service area.



Vincent Ndazima [CDC] introducing the new EMR stock and dispensing module

PICTORIAL

METS in partnership with Ministry of Health hosted the 2nd HMIS Tools Review Meeting from 7-19 November 2022 in Jinja. The meeting was used to integrate Non-Communicable Diseases (NCD) tools related to Cervical Cancer, Hypertension, Di-

abetes and Mental Health (Alcohol and substance abuse; and anxiety and depression) as well as to finalize the HIV response related HMIS tools, resolve outstanding and emerging issues and develop tools that will be shared for approval. Through the

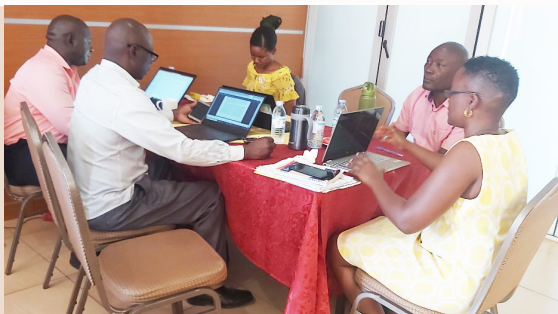
mid-term review, HMIS tools are reviewed to ensure continued production of high-quality statistics that reflect the needs of the health sector that inform planning and decision making.



Mid-Term Review of the HIV/TB Health Management Information System (HMIS) tools



An MoH SPO presenting the agenda and objectives of the meeting



Officers in their respective thematic groups: Clockwise – HTS, PMTCT, KPs, and Care & Treatment/TB



CBS Assessment

METS team carried out a rapid assessment of Case Based Surveillance (CBS) support to health facilities in various district to assess the status of infrastructure at pilot facilities as well as the status of implementation at health facilities. Shown below is an assessment team at Kataraka HCIV, Fort Portal City.



TPT Data validation Exercise

The TPT-PROTECT project is a research project funded by the Bill and Melinda Gates Foundation (BMGF) that is aimed at determining the effectiveness/impact of TB Preventative Treatment (TPT) among people living with HIV who complete treatment. Teams provided on-site support to the study sites on the site-specific gaps that were previously identified from the baseline site-readiness assessment.

Impact was measured basing on the incidence rates of TB disease and all-cause mortality rates.



NEW STAFF



Jacqueline Basemera joined METS as a Human Resource Assistant effective 1st November 2022. She is a seasoned Human Resource and Administrative with 7 years' experience.

Prior to joining the METS Program,

she worked in the Human Resource Department and Executive Council under the office of the Chief Executive Officer at The Uganda Law Society, the leading Legal Aid Service Provider in Uganda.

METS WATCH

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