MONITORING AND EVALUATION TECHNICAL SUPPORT (METS) PROGRAM

ANNUAL REPORT 2022

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WORD FROM THE DEAN

Congratulations upon making it to 2023!

It gives me great pleasure to share with you this issue of the METS Annual Report 2022, a compilation of events that have shaped our workplans.

It is the responsibility of the Makerere University School of Public Health to teach, research and improve service delivery and this we are doing through innovations that we believe will impact our communities positively.

Uganda has survived several pandemics, and this has continued to underscore the need to improve our public health response and investment to build the capacity of our front-line workers to manage these situations. COVID-19 taught us that systems are necessary in the new world if we are to realize our responsibility to deliver effective and uninterrupted services to our clients across the country.

The negative impact of these pandemics raised critical questions regarding preparedness, resource allocation, need for health systems and the willingness and capacity of the health workforce to handle the job at hand. It is for this reason that METS has focused on collaboration with implementing partners to offer technical assistance and training of health workers, district health teams as well as social workers to equip them with knowledge and skills to manage new challenges while providing improved health care to the people of Uganda.

Functionalization of digital platforms to support availability of real time data, and surveillance of disease and the response is key. To support this, documentation of existing health innovations and research has been a core activity in the period under review.

Our focus in the new year will be to continue to consolidate these efforts and integrate Non-Communicable Disease (NCDs) prevention, treatment, and awareness as a way of addressing the quiet epidemic killing millions of Ugandans.

Special thanks to all the stakeholders especially Ministry of Health, United States Centers for Disease Control and Prevention (CDC), USAID, University of California San Francisco, the Health Information Systems Program (HISP)-Uganda, Implementing Partners, and the staff at the various sites we have supported over the years. Without your support, our mandate would be impossible.

Prof. Rhoda Wanyenze
Dean MakSPH

MONITORING AND EVALUATION TECHNICAL SUPPORT PROGRAM (METS) ANNUAL REPORT 2022

EDITORIAL
Dr. Alice Namale
Dr. Simon Muhumuza
Nancy Karunganwa

Photo Gallery: Communication and Public Relations and METS Team

WORD FROM THE DIRECTOR

I am delighted to share with you the progress made by our team over the past year. The Program has been working diligently to strengthen the capacity of the Ugandan Government in implementing a regionally centered and district-implemented HIV and TB program through innovation in health information systems, case-based surveillance, monitoring, evaluation, and quality improvement support.

One of our mandates at METS is partner involvement, and we are proud to report that the Program has been engaging several Implementing Partners to execute its tasks. Through collaboration, outreach programs, and partnerships with Local Government, we have been able to make a significant impact in improving HIV prevention, treatment, and care in Uganda.

Speaking of impact, we have seen tremendous progress over the past year and are closer to achieving the 95-95-95 targets by 2025. Through our efforts, we have been able to improve access to HIV and TB services, reduce new infections, and increase the number of people living with HIV on treatment. These results are a testament to the hard work and dedication of our staff, partners, and community members.

However, we recognize that there are still challenges to overcome. Competing needs for funding, inadequate internet connectivity, and change in attitudes, especially among health workers towards the Ministry of Health digitalization strategy continue to pose significant challenges to our program efforts as well as our partners. Despite these challenges, we remain committed to our mission and are working tirelessly to overcome them.

As we move forward into the new year, we remain committed to our core values of professionalism, integrity, innovativeness, responsiveness, accountability, and teamwork. We are excited to continue our work towards an efficient health sector in Uganda using strategic information. Together, we can make a difference.

Dr. Alice Namale

WORD FROM THE MANAGER PROGRAMS

The budget year 2022/2023 has been a great year for the METS program. We are proud that we have been able to deliver on our mandate and this annual report outlines key achievements and milestones for the program. I know you will enjoy reading the details of this in the report but let me highlight a few of them and the impact they have had on programming.

The centralized procurement of health information system (HIS) hardware by METS for all health facilities has had a positive impact of increasing the number of ART sites with electronic medical records (EMRs) as well as EMR Point of Care sites. It is believed that with increased EMR coverage we will be able to have better quality data, shorter waiting times at health facilities, and better retention in care because of the appointment reminders imbedded in UgandaEMR.

A strategic shift was made from the former HIBRID system in which PEPFAR data was reported to the PEPFAR In-Country Reporting System (PIRS) that is more efficient and effective in supporting reporting because it is automated and linked to the electronic medical records system. In addition, the weekly surge reports on key HIV indicators that provide real time monitoring for corrective action for all PEPFAR implementing partners has resulted in remarkable improvement in the performance of the indicators as well as programming by PEPFAR.

Four quality improvement collaboratives were implemented in this year targeting the program areas of TB/HIV, PMTCT, DREAMS and PrEP. The collaboratives are noted by the Ministry of health as innovative approaches to improve quality of services given the results of these collaboratives.

Finally, are the Data Quality Assessments that were conducted in the year. The DQAs have had a significant impact on the quality data that is reported over time. The DQAs are followed up with mentorship and coaching visits and a review of action plans developed. These targeted actions have had facility teams and implementing partners strive to ensure that the quality of data improves and is sustained.

We could not have done this alone and I thank the Ministry of Health, Implementing Partners, facility/district/ regional teams, CDC, USAID and SITES/USAID. We
appreciate the collaboration that we have, and we look forward to doing bigger, better, and amazing things with you all.

I would also like to express my gratitude to the METS team for the hard work and commitment. I believe that this report accurately reflects the impact of our program and I look forward to continuing our important work in the year to come.

Evelyn Akello

WORD FROM THE MANAGER FINANCE AND ADMINISTRATION

As the MakSPH-METS Program's Manager of Finance and Administration, it is an honor for me to share our accomplishments and the enormous effect we have had via our programs in the annual report.

In this issue, you will find inspiring stories of our team members' dedication and resilience and the communities we serve. Despite the obstacles presented by the epidemic, we have stayed committed to making a positive difference and fulfilling our mandate.

Collaboration and appropriate financial management are priorities in the MakSPH-METS Program. Because of our commitment to transparency and accountability, the resources entrusted to us are used efficiently and effectively.

Due to tremendous support of our donors and partners, we have been able to launch new programs that address the momentous requirements of our stakeholders. These programs have had tangible results, allowing people to overcome difficulties and reach their full potential.

I want to thank our shareholders and partners for their unwavering support and belief in METS. With our strong financial foundation, excellent personnel, and devotion to quality, we will continue to create value and influence lives.

I would also like to recognize the hard work of the METS team, who work relentlessly to ensure the success of our programs. Their enthusiasm and knowledge are crucial to our success.

Let us look forward with assurance as we celebrate our achievements. We remain dedicated to our long-term strategic goals, including innovation and developing a robust health system.

Thank you for joining us on this adventure and for your continuous support. We will continue to make a positive difference in the lives of those we serve if we work together.

Shamim Kuteesa Namale

ACRONYMS

AGYW	Adolescent Girls and Young Women
CBS	Case Based Surveillance
CDC	Centers for Disease control and Prevention
CPHL	Central Public Health Laboratories
CQI	Continuous Quality Improvement
DHI	Division of Health Information
DHIS2	District Health Information Software
DOD	Department of Defense
DQA	Data Quality Assessment
DREAMS	Determined Resilient Empowered AIDS free Mentored Safe
DSI	Data Science and Informatics
DSR	Disease Surveillance and Response
EID	Early Infant Diagnosis
EMR	Electronic Medical Records
GLM	Governance, Leadership and Management
HIE	Health Information Exchange
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HSS	Health Systems Strengthening
HTS	HIV Testing Services
ICT	Information and Communication Technologies
KP/PP	Key Populations / Priority Populations
MakSPH	Makerere University School of Public Health
METS	Monitoring and Evaluation Technical Support Program
MoH	Ministry of Health
NCD	Non-Communicable Diseases
NIS	National Integrated Surveillance

NTLP	National Tuberculosis and Leprosy Program
OVC	Orphans and Vulnerable Children
PEPFAR	President's Emergency Plan for AIDS Relief
PMTCT	Prevention of Mother to Child Transmission
PrEP	Pre-exposure Prophylaxis
QI	Quality Improvement
RASS	Real-Time ARV Stock Status
RRH	Regional Referral Hospital
SGBV	Sexual and Gender Based Violence
SCAPP	Standards, Compliance, Accreditation and Patient Protection
SITES	Strategic Information Technical Support
SQA	Service Quality Assessment
TWG	Technical Working Group
USAID	United States Agency for International Development
VL	Viral Load

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1.0 INTRODUCTION

Makerere University School of Public Health (MakSPH) through the Monitoring and Evaluation Technical Support (METS) Program is implementing a 5-year (2020-2025) grant with funding from PEPFAR through the United States Centres for Disease Control and Prevention (CDC). The overall purpose of the METS program is to strengthen the Government of Uganda's capacity for regionally centred and district-implemented HIV and TB programming through Health Information Systems, Case Based Surveillance, Monitoring, Evaluation and Quality Improvement support.

Vision

Resilient health systems in Africa and beyond

Mission

To strengthen health systems through development and implementation of innovative and impactful evidence-based solutions

Core values

Professionalism, Integrity, Innovativeness, Responsiveness, Accountability, Teamwork.

Partners

Ministry of Health, Makerere University, University of California San Francisco (UCSF) and Health Information Systems Program (HISP)

The Program provides national support to several Ministry of Health departments and divisions including the AIDS Control Program (ACP); Division of Health Information (DHI); Standards, Compliance, Accreditation and Patient Protection (SCAPP); National TB and Leprosy Program (NTLP); Pharmacy; Information, Communication and Technology (ICT); and the Central Public Health Laboratory (CPHL). Furthermore, we work with all 71 CDC supported districts and 8 Regional Referral Hospitals (RRH). Additional support is given to implementing partners through streamlining national and PEPFAR reporting, technical assistance to Health Management Information System (HMIS), support to DREAMS and KP/PrEP programs, conducting data and service quality assessments as well as Recency infection surveillance.

1.1 GEOGRAPHICAL COVERAGE

The map below shows the CDC-supported regions (and Regional Referral Hospitals) where METS is operational (Figure 1). Beyond the CDC regions, the program supports the following: (i) printing and distribution of HMIS tools; (ii) Health Information Systems (HIS), (iii) Monitoring and Evaluation (M&E) and Quality Improvement (QI) support to priority programs.

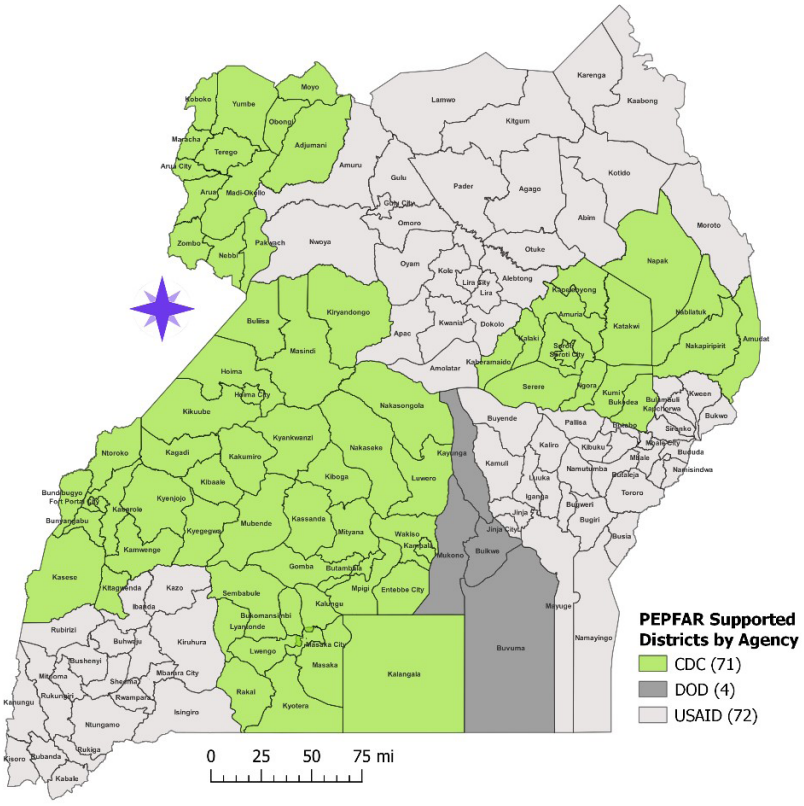


Figure 1: Map of Uganda showing METS Program coverage

1.2 OBJECTIVES

Using a technical assistance model, the Program has the following strategic objectives;

01 To increase enterprise-wide data utilization through Government-owned and supported implementation of interconnected Health Information Systems (HIS).

02 To scale-up sustainable national coverage of unique identifier (UID)-linked patient data across health domains enabled through standards-based health information exchanges (HIEs).

03 To improve operationalization of HIV/TB Case Based Surveillance (CBS) at a national scale.

04 To improve data use by the Government of Uganda (GoU) and PEPFAR through automated reporting from routine HIS

05 To improve the ability of Regional Referral Hospital (RRH) leadership to mobilize additional resources for a sustained response to the HIV epidemic, TB control and other disease outbreaks.

06 To sustain enterprise-wide implementation of continuous quality improvement (CQI) for all HIV and TB services

To achieve these objectives, the MakSPH-METS Program is implemented through three technical departments, namely: a) Health Systems Strengthening (HSS); b) Disease Surveillance and Response (DSR); and c) Data Science and Informatics (DSI). These departments operate towards aligning services with the PEPFAR principles of enhancing local ownership and integration for sustainability.

1.3 KEY HIGHLIGHTS

ELECTRONIC MEDICAL RECORDS (EMR)

Increase EMR coverage from 50% in September 2021 to 74% as at September 2022.

UGANDAEMR BOOTCAMPS

The UgandaEMR development team conducted three bootcamps to build capacity within the Stakeholder /collaborator community.

TRACKERS AND DASHBOARDS

SEVERAL TRACKERS AND DASHBOARDS HAVE BEEN DESIGNED AND DEVELOPED BY METS

Key/Priority Populations (KP/PP) Combination Tracker.

Real Time ARV Stock Status System (RASS)

EID Dashboard TB Dashboard CQI Database DREAMS / OVC Tracker

HIV RECENCY SURVEILLANCE

Scaled up HIV Recency infection surveillance

VIRAL LOAD LABORATORY SUPPORT

Nationally, of the 1,366,491 individuals on ART, 1,247,606 (91.3%) received a viral load (VL) test and 1,178,988 (94.5%) were virally suppressed.

CASE BASED SURVEILLANCE (CBS)

The Program is currently supporting MoH to develop CBS guidelines that will guide implementation and scale up.

NATIONAL AND PEPFAR QUARTERLY REPORTS

Effective October 1, 2021, METS took lead of the interagency PEPFAR reporting function. The program developed a PEPFAR In-country Reporting System (PIRS) which enables generation of additional PEPFAR data that is not captured within the National HMIS.

BASELINE RRH CAPACITY ASSESSMENT

To link the Health System Strengthening (HSS) efforts to outcomes and impact of interventions, METS in partnership with MoH designed an M&E framework for measuring capacity of RRH health systems at the sub-national level to implement programs.

TRAINING OF RRH TEAMS IN GOVERNANCE, LEADERSHIP & MANAGEMENT (GLM)

To address some of the capacity gaps in governance and leadership identified during the RRH capacity assessment, METS in collaboration with MoH conducted a training in Governance, Leadership and Management (GLM) for 42 staff from the 8 RRHs.

QI COLLABORATIVES

METS supported the design and implementation of four national QI collaboratives CPMTCS, TB/HIV, PREP and DREAMS

VMMC SERVICES ON-SITE QI MENTORSHIPS

There was marked improvement in the proportion of sites that met MoH VMMC service quality standards from less than 4% in August 2016 to 46% by the end of September 2022

CERVICAL CANCER SCREENING BY DISTRICT

Nationally, a total of 300,406 HIV positive women were screened for cervical cancer (CxCa). Of these, 19,105 (6.4%) tested positive and 15,850 (83.0%) received treatment.

2.0 PROGRESS

We have made significant strides in execution of our mandate as we strive to attain our mission and vision. This report highlights the achievements under each objective and sheds light on the challenges encountered and the plans for improvement. These milestones are showcased in 5 thematic areas: Data digitalization, Surveillance, Automated Reporting, Strengthening the Regional Referral Hospital (RRH) mechanism and Continuous Quality Improvement (CQI).

2.1 DIGITALIZATION STRATEGY

The Ministry of Health (MoH) has a plan to move from paper-based records at health facilities to electronic systems to ease data management, program reporting, and patient care.

To support this vision, METS is supporting the development of electronic health information standards, scale up use of electronic medical records, procurement and distribution of ICT hardware and linking various information systems.

Key Achievements

Expanding the scope of UgandaEMR

In 2022, a maternal and child health module was piloted at 40 sites, focusing on antenatal, maternal, postnatal, and exposed infant services. METS trained regional partners on data entry, retrospective entry, and automated reporting with UgandaEMR and provided supervision and mentorship to ensure optimal use.

METS supported procurement and distribution of ICT hardware to expand UgandaEMR coverage, distributing networking hardware to 200 facilities through USAID, CDC, DOD, State, and G2G

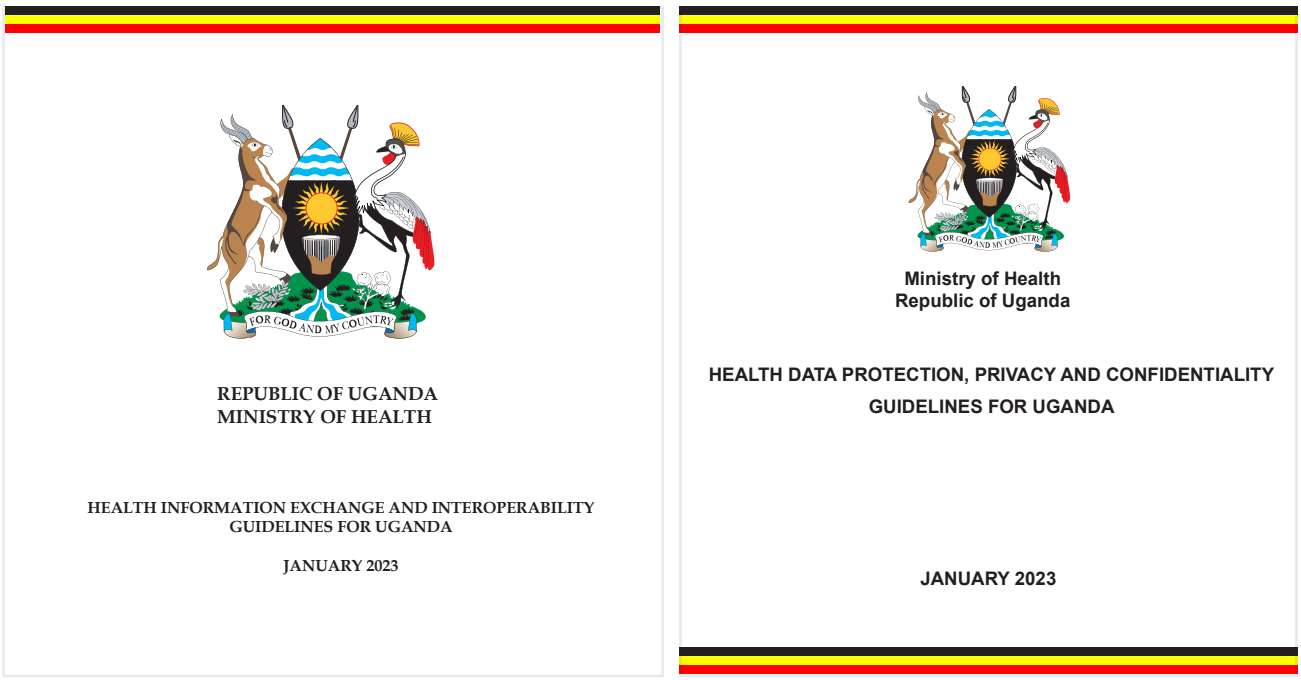


Figure 2: Standards and guidelines developed by METS

mechanisms. This improved EMR functionality at ART sites, increasing coverage from 50% in September 2021 to 74% in September 2022.

Sustaining the UgandaEMR community of practice.

UgandaEMR has a growing community of practice supporting its wider rollout and use in facilities across the country. METS created an online platform for collaboration between METS developers and the EMR community, providing real-time troubleshooting and archiving solutions for future reference. The platform has over 2,000 subscribers.

Coordinating the development of Health Information Standards and Guidelines

METS supports the MOH to develop standards and guidelines for national health enterprise architecture, including EMR, HIS strategy, HIE standards, health facility registry, client registry, and health worker registry. METS also created a health information infrastructure spec document to guide procurement and outlined minimum software/hardware requirements for facility based HIS solutions.

A recommended HIE guideline structure was developed, and health information security guidelines were reviewed with a focus on confidentiality, integrity, and availability. METS supports MoH by operationalizing the HIE technical working group, which meets quarterly.

Strengthening the MoH Health Information Systems (HIS) governance framework

METS provided technical support for the development of the National HIS strategy and ICT infrastructure specs guidance. The document outlines minimum software and hardware requirements for facility-based HIS solutions.

Health Information Standards and Guidelines
The standards and guidelines are critical for harmonized implementation of programs. Some of the documents METS supported include (i) Health Information and Digital Health Strategic Plan 2020/21 – 2024/25.

(ii) Health Information Exchange and Interoperability Guidelines for Uganda, and (iii) Health Data Protection, Privacy and Confidentiality Guidelines for Uganda (figure 2). Once finalized, these guidelines will be disseminated by MoH to stakeholders.

To facilitate Health Information Exchange (HIE), METS supported MoH in the development of registries for clients, facilities, and health care workers. These registries are central sources of information.

Electronic Medical Records (EMR)

Working with CDC-Uganda and MoH, METS procured hardware to strengthen the Information, Communication and Technologies (ICT) infrastructure, distributed the equipment to partners to set up at all health facilities providing HIV/TB care and services. The equipment consisting of data capture devices, networking hardware, and power solutions was distributed to all PEPFAR implementing partners.

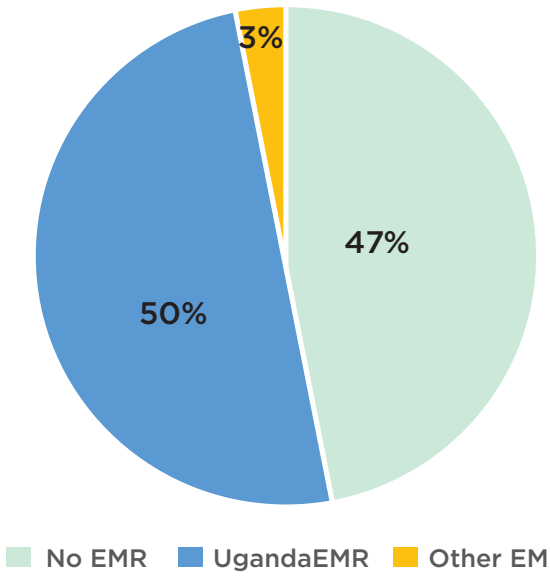
To guide facility based HIS solutions, METS supported MoH in development of ICT infrastructure specifications. The document outlines minimum software and hardware requirements by health facility level.

In addition, METS supported development of new features within UgandaEMR such as Maternal and Child Health (MCH) and Community Mobile to improve its functionality.

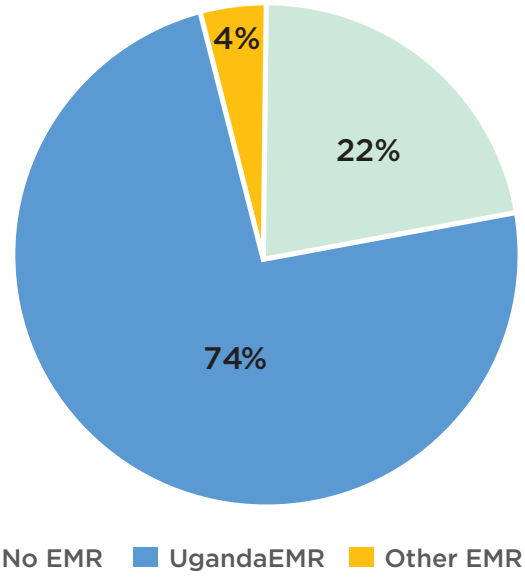
Justin Kaleebi receiving MUWRP's equipment from Abert Mugisha, the Systems Administrator at METS

This support has contributed to increase of the EMR coverage from 50% in September 2021 to 74% as of September 2022.

UgandaEMR Coverage in 1,965 ART Facilities (September 2021)



UgandaEMR Coverage in 1,965 ART Facilities (September 2022)



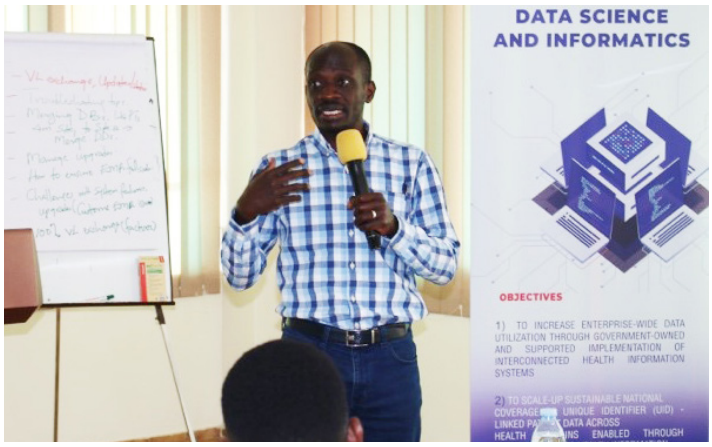
2.2 ANNUAL UGANDAEMR STAKEHOLDERS' MEETING

METS in collaboration with MoH held the annual UgandaEMR stakeholder's meeting in June 2022. The meeting attracted participants representing development and implementing partners as well as MoH. The conference showcased new features in the latest version of UgandaEMR (SMS patient reminders, Surge reporting, TB integration, HIV Testing Services, clinic dashboards, NextGen reporting, partner innovations on top of UgandaEMR (e.g., HealthStat).

By end of September 2022, METS had supported partners to upgrade UgandaEMR to the latest version (3.3.7). Participants shared EMR best practices to improve Continuity of Treatment.

METS presented UgandaEMR (4.x), a version under development that is more comprehensive and will have improved capabilities to support seamless data exchange, clinical decision support and machine learning, among others.

Moments from the UgandaEMR stakeholders' meeting in Mbarara



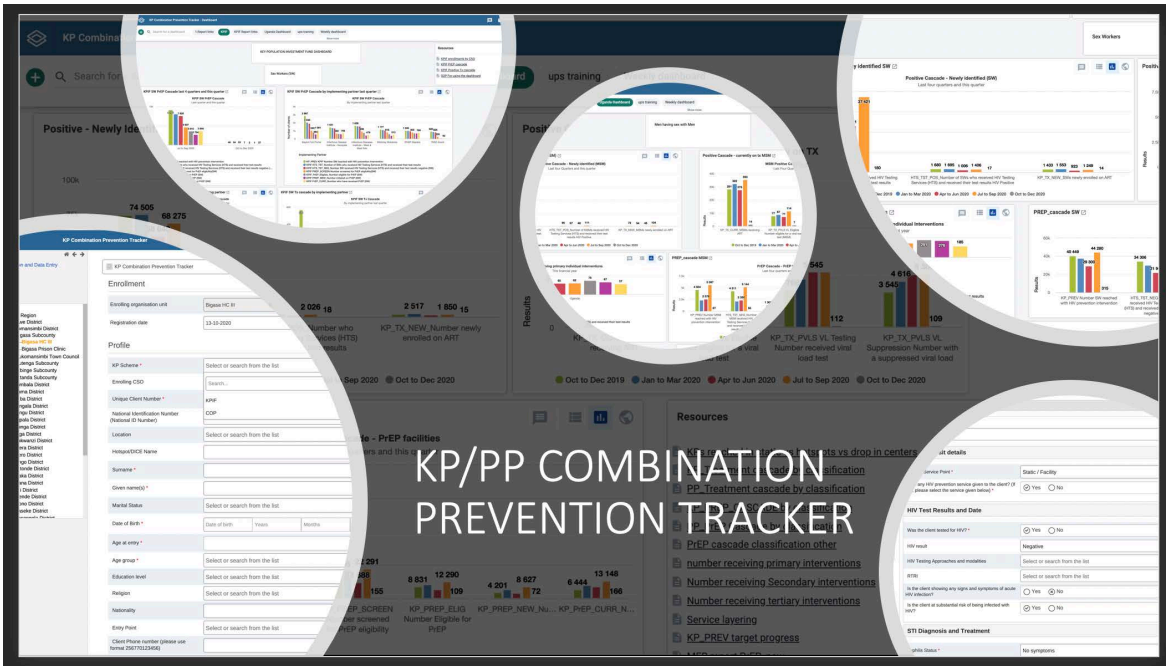
3.0 TRACKERS AND INTERACTIVE DASHBOARDS

Trackers and interactive dashboards play a critical role in improving quality of care and patient outcomes during care. These provide users with access to real time data and insights to enable them to make more informed decisions while improving client experience at the health facility. METS has designed and developed a number of trackers and dashboards.

Key/Priority Populations (KP/PP) Combination Tracker

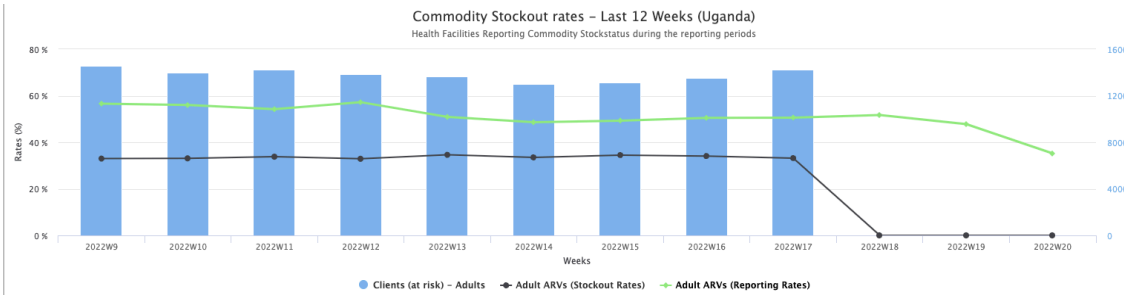
Key/Priority Populations (KP/PP) face a higher risk of HIV infection. The Ministry of Health is implementing targeted services and innovations to increase access and reduce stigma for these populations.

METS developed the KP/PP Combination Prevention Tracker to monitor prevention and treatment progress among KP/PP populations and improve programs. Implemented at 865 sites, the tracker was initially piloted in 2016. In 2022, METS trained 66 health workers on data entry, analysis, and reporting and rolled out a flexible, interactive dashboard with UCSF to optimize program monitoring and decision-making.



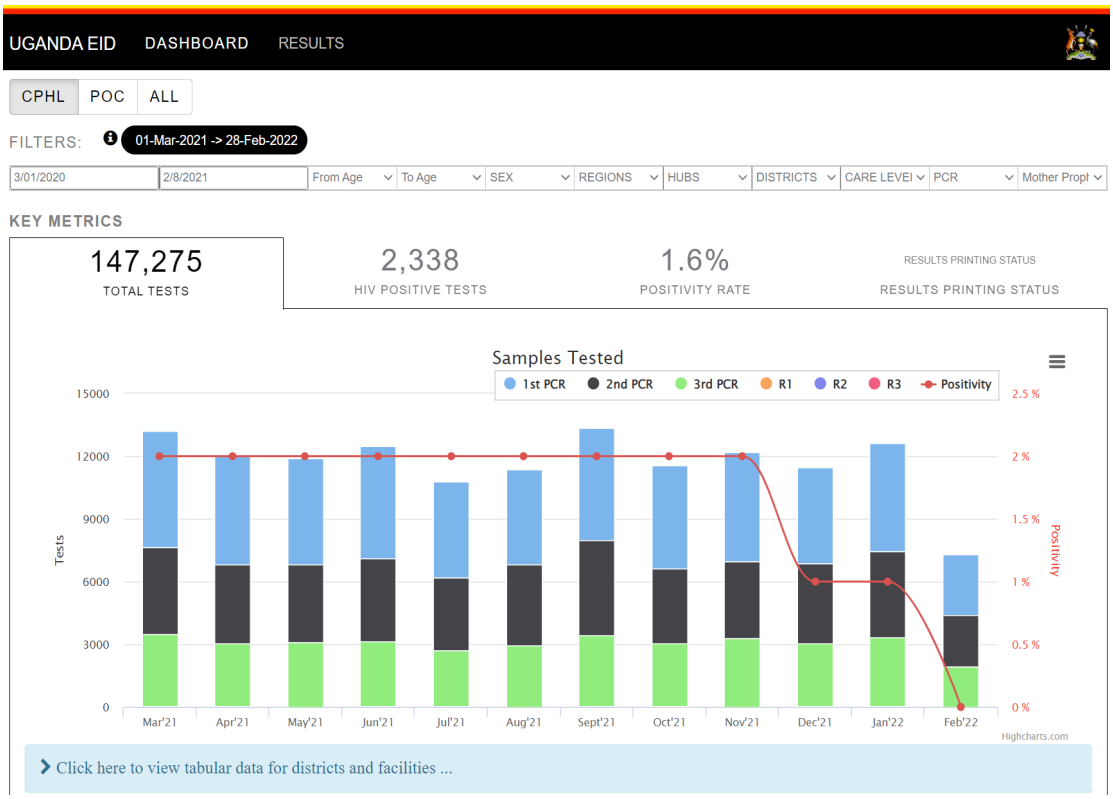
Real Time ARV Stock Status (RASS) System

Real-Time ARV Stock Status (RASS) system is a national early warning mechanism for reporting and tracking the use of health commodities. The RASS reporting system and mobile app enable district and health facility staff to anticipate stockouts and make decisions. In the past year, METS continued to strengthen RASS through supporting reporting, supervision, and mentorship. Moving forward, the system will transition to MoH for sustainability.



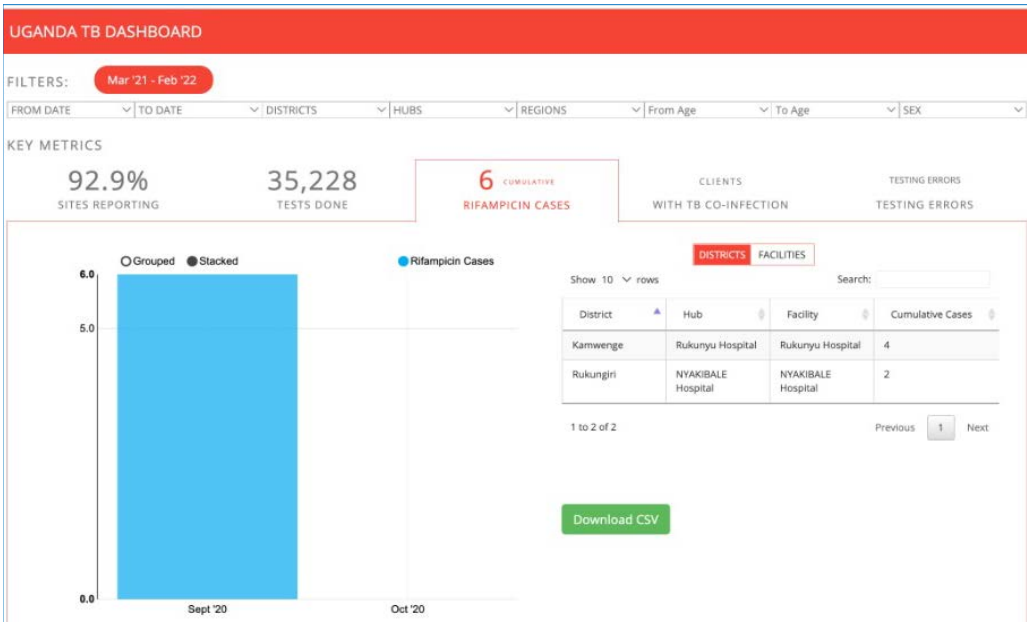
EID Dashboard

The EID dashboard helps to monitor HIV transmission from mother to child. The dashboard includes data of tests performed and proportion of positive cases identified at facility, district and regional levels. During the period, METS supported the maintenance of the dashboard and performed analytics to monitor program performance.



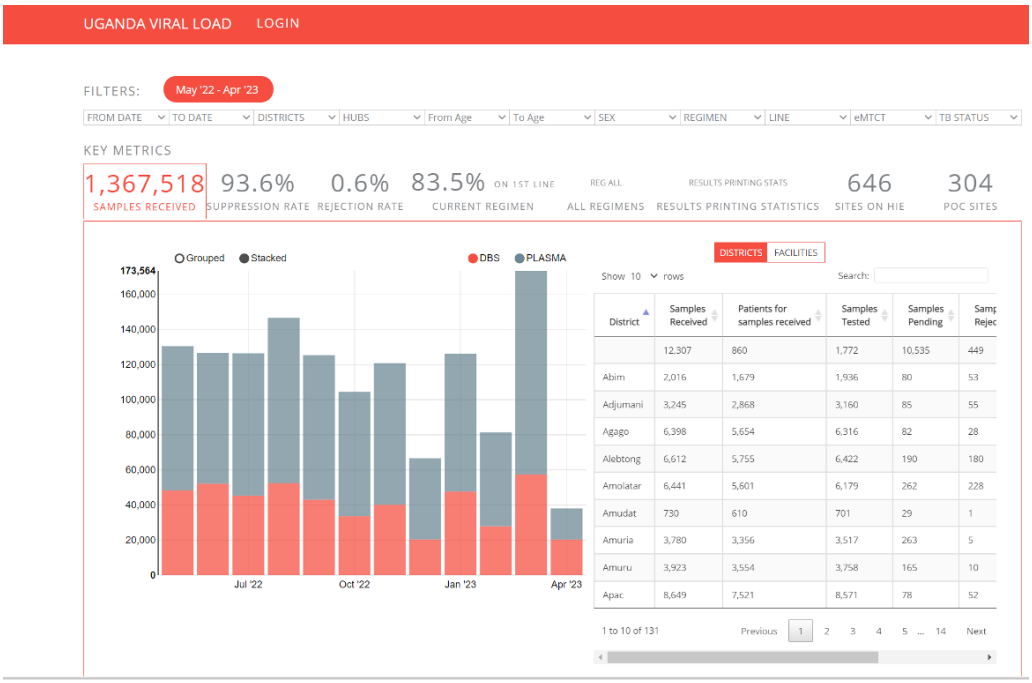
TB Dashboard

Also known as the electronic case based surveillance (eCBSS) database, the dashboard tracks patients receiving TB or Leprosy treatment from time of diagnosis, follows up their contacts while reporting all events until they complete treatment. METS coordinated the roll out of eCBSS in over 80 districts and as of December 2022, 447 health facilities had been enrolled. The goal for 2023 is to have 800 health facilities enrolled onto the eCBSS database



Viral Load Dashboard

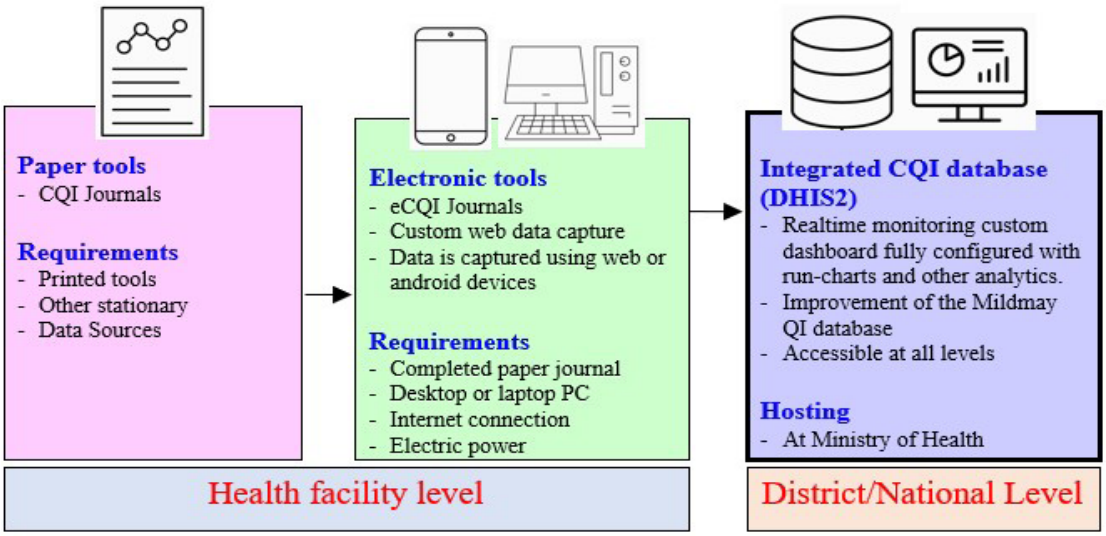
This dashboard enables visualization of Viral Load data in terms of total samples tested per month at facility and district level. It highlights Key Performance Indicators like samples rejected, number of samples that are virally suppressed, by age and sex. From the facility end, health workers can print results. The central testing lab at CPHL uses it as a portal to return results to health facilities.



CQI Database

METS and partners helped the MOH develop a National Continuous quality improvement database to improve reporting and access to quality improvement data for informed decision-making. The database tracks CQI

projects from initiation, improvement changes, indicator progress / performance measurement and summary of observations prior to project closure. The database was commissioned at a stakeholder meeting in May 2022, the roll out plans were developed, and a national training of trainers was conducted, spearheaded by METS.



DREAMS / OVC Tracker

This tracks services offered to adolescent girls and young women as well as orphans and vulnerable children. The tracker shows number of clients enrolled on the different services and the progress of their enrolment. This data informs programmatic decisions by the implementing partners as well as the Ministry of Health. In the review period, METS continued to maintain the tracker and trained users from various Implementing partners.

Over the past year, METS continued to provide routine M&E and programmatic support to all DREAMS partners and to monitor the quality-of-service delivery.

Special to note, a new service layering for DREAMS to show the combination of services received by an individual was rolled out. The new DREAMS layering table incorporates minimum standards for all services provided to DREAMS beneficiaries.

UgandaEMR

This is an electronic record that is used to capture medical records of patients. It is hosted at the facility and has capability to exchange data with other systems at national and facility level.

3.1 SURVEILLANCE

Case Based Surveillance (CBS)

This is a useful approach to monitor trends of new HIV infection; characterizing affected populations; estimating the disease burden and resource requirements; measuring HIV linkage, retention, and clinical outcomes; targeting and evaluating HIV prevention interventions; and providing data for monitoring and evaluation. The program is currently supporting MoH to develop CBS guidelines that will inform national roll out.

Makerere University School of Public Health (MakSPH) - METS program was part of a 5-day (25-29 October 2022) learning visit organized by the Kenyan National AIDS & STI Control Program (NASCOP) with 38 participating delegates from 3 countries of Uganda, Kenya, and Zambia. The main objective of the learning visit was to bench-mark the Kenyan CBS program with the aim of harnessing the implementation modalities, lessons learned, and best practices that will guide program improvements in Uganda.

HIV recency Surveillance

Testing for recent HIV infection helps to differentiate between recent infection (acquired under 12 months) and long-term HIV infections. HIV recency surveillance helps to monitor epidemiological trends of newly diagnosed HIV cases by demographics, behavior, mode of transmission, and recent HIV infections; as well as linkage to treatment at the time of diagnosis. Scaling up of recency surveillance has been achieved through training and site activation: The target was to reach a total of 1,029 high volume sites nationally. By the end of December 2022, 956 (93%) of the targeted sites had been trained and activated to provide recency testing surveillance

Figure 3: Recent HIV coverage by district

Recent HIV infections by district

In 2021, most of the recent HIV infections were identified in Kampala (12.3%), Wakiso (7.7%).

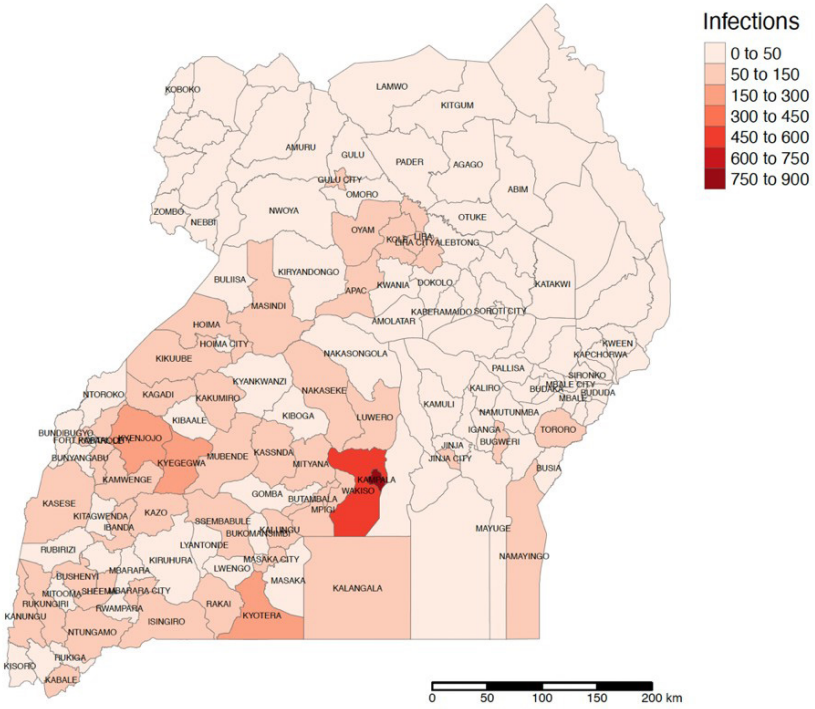


Figure 4: Map of Uganda showing recent infections

Recent HIV infections

11.1%	12.3%	7.7%
Nationally	Kampala	Wakiso

The recent infection numbers show that the South-Central region has the highest count with 1,310 cases; Kampala with 833, Tooro with 763, and Ankole with 716.

Figure 5: Recent HIV infections by region

Recent infections by age and gender

The majority of the cases were found among females aged 20-29 and males aged 30-39. Additionally, it is notable that the recent infection rate among females is consistently higher than that of males for all age groups except 40-49 and 50+. This means there are more recent infections in older men than their female counterparts. This data will be used to inform public health response.

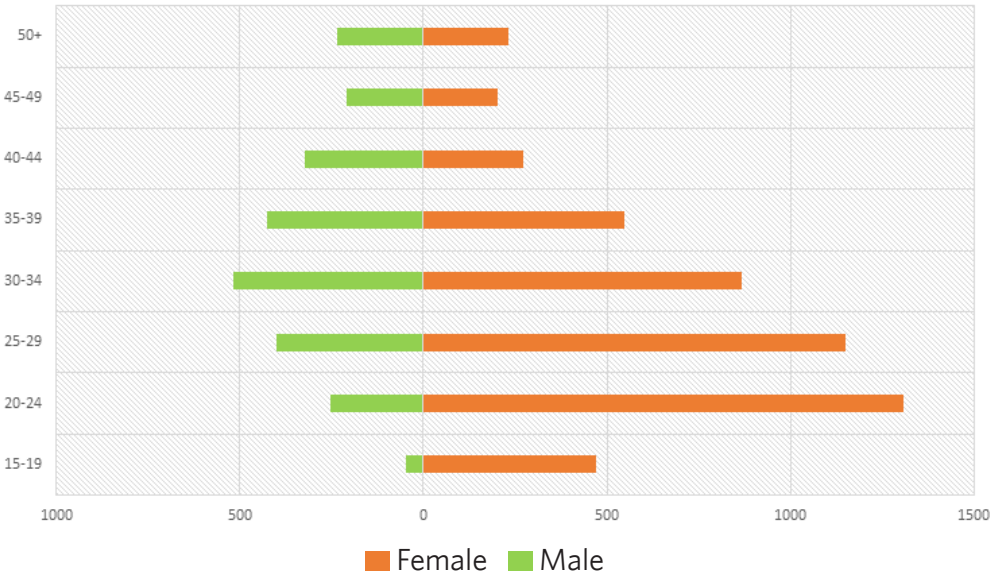


Figure 6: Recent infections disaggregated by age and gender

Recency Data quality Assessment (DQA)

METS in collaboration with MoH, USAID/SITES, UCSF and IPs conducted a recency DQA at 170 selected health facilities that had reported recency data in DATIM for the period October 2021 to March 2022. The purpose of the DQA was to determine the quality of recency data with an aim of designing interventions for improving data quality for public health action. Overall, most sites had HMIS tools to collect data and the staff understood the indicators and reporting guidelines. However, there are gaps in the use of data for decision making.

KEY FINDINGS OF THE DQA

01 Overall, the M&E systems were inadequate with only 'availability of HMIS tools' and 'understanding of the indicators and reporting guidelines' meeting the standards. There were gaps in the 'use of data for decision making' across all sites.

02 With respect to data validation of recent and long-term results across different tools, there were discrepancies between long term and recent results in the HTS register and other data capture and reporting tools (HMIS 105, EMR, HTS Card, recency addendum and recency logbook).

03 Of the 9,375 HIV newly identified HIV positive clients that were entered in HTS register, only 2,979 (32%) and 2,914 (31%) could be accounted for in the HTS cards and EMR respectively. The findings highlight the challenge of using multiple data collection tools and the need to support the data management and reporting systems for Recency through training, on- site mentorships, and coaching.

Viral load Laboratory support

Nationally, of the 1,366,491 individuals on ART, 1,247,606 (91.3%) received a viral load (VL) test and 1,178,988 (94.5%) were virally suppressed. Viral load coverage varied across districts and ranged from 72% to 100% in some districts. Out of 146 districts, 14 (9.6%) districts had a low VL coverage of ≤ 80%. VL suppression was high across all districts and ranged from 83% in Kween to 96% in some districts. Figure 7 shows Viral load coverage and suppression by end of December 2022.

Whereas some districts such as Karamoja and Mbale continue to have suboptimal VL coverage of less than 80%, there was a general improvement in coverage across most districts. The program continued to support efforts aimed at management of HIV drug resistance through provision of technical assistance for regional capacity building through training of health workers across the country using the weekly online case review meetings.

1,366,491
Individuals on ART

1,247,606
(91.3%) received a viral load (VL) test

1,178,988
(94.5%) were virally Suppressed

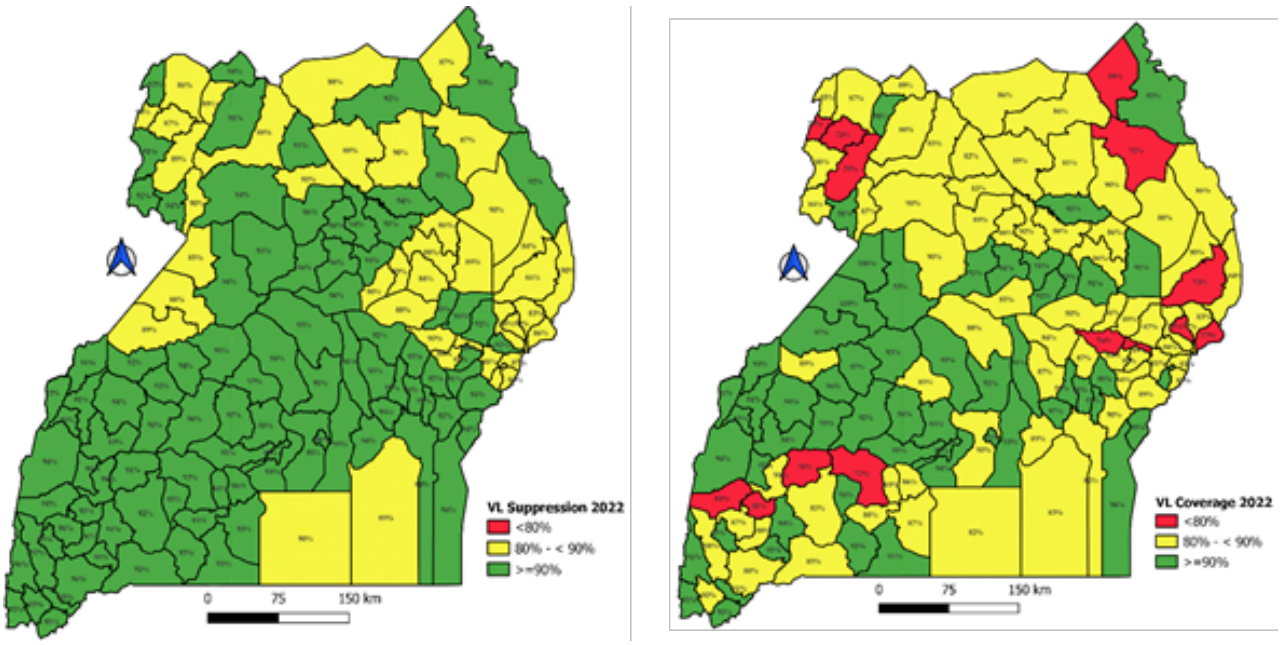


Figure 7: Viral load coverage and suppression by December 2022

3.2 AUTOMATED REPORTING

METS supports generation of National and PEPFAR reports, provides leadership roles and solutions in HIS and data analytics and strengthens data use capabilities for routine monitoring of programs in support of evidence-based decision making for attaining and sustaining epidemic control. In addition, the program builds the capacity of RRHs to be able to submit complete, accurate, and timely data through National and PEPFAR systems as detailed below.

National and PEPFAR quarterly reports

Effective October 1, 2021, METS took lead of the interagency PEPFAR reporting function. The program developed a PEPFAR In-country Reporting System (PIRS) which enables generation of additional PEPFAR data that is not captured within the National HMIS. In addition, METS developed an automated online weekly surge report where over 2,450 health facilities nationally report on key indicators for HTS, VMMC, CxCa, PMTCT, TB, ART and viral load on a weekly basis.

Furthermore, METS supports generation of weekly reports on continuity of treatment (CoT) and VMMC outputs. The program closely worked with PEPFAR Strategic Information (SI) TWG, Strategic Information Technical Support (SITES) project, CDC and Implementing Partners (IPs) to generate the quarterly and weekly National and PEPFAR reports. Overall, 4 quarterly National and PEPFAR reports, and 52 weekly surge reports were generated. Surge reports are weekly reports on key HIV indicators that provide real time monitoring for corrective action for all PEPFAR implementing partners. These are submitted through the PEPFAR in- Country reporting system that was designed and developed by METS in 2020.

The key indicators include HIV Testing and linkages to treatment; TB case detection; Voluntary Medical Male Circumcision (VMMC); Cervical Cancer; Early Infant Diagnosis tests; Viral Load Monitoring and Uptake.

The summaries below highlight the HIV and TB Implementing Partner Performance for FY2023 COP-2022week52. The performance period of December 2022 week 52 starts from 5th to 11th December 2022 of FY22, while the cumulative COP2022week 40-2022 week 52 performance period for the FY22 runs from 3rd October 2022 – 11th December 2022. This performance is based on the weekly data submitted through PEPFAR In-country Reporting System (PIRS).

Reporting Timeliness

In December 2022 week 52, 167 health facilities reported on the HIV indicators through the PEPFAR In-country Reporting System (PIRS) compared to 1,202 health facilities that reported FY2023 COP-2022 week 52. This represents 49% (1,202/2,450) of the targeted health facilities.

HTS_TST_POS and ART linkage

A total of 35 HIV positive individuals (HTS_TST_POS) were identified during December 2022 week 52 and of these 37 were initiated on ART. Cumulatively, 27,359 individuals have tested HIV positive (HTS_TST_POS) and of these 85.0% (23,517/27,359) were linked to ART. There has been an increase in linkage to ART from 85.0% FY2022 2022 week 51 to 85.9% for FY2023 COP-2022week52.

HTS by Modality

Overall yield for December 2022 week52 was 3.2% compared to 2.3% for week 51. Index Community Client Testing (7.1%), Index Facility Client Testing (4.9%) & Other PITC (3.4%) had the highest yield by modality for December 2022 week52. Cumulatively, Index Facility Client Testing (11.0%), Network Strategy Social (8.8%), Index Community Client Testing (6.9%) & TB (6.3%) have the highest yield by modality.

TB case Detection

A total of 57 TB cases were identified during December 2022 week52 compared to 411 TB cases for December 2022 week51.There was 4.6% achievement on the weekly target (57/1,235). Cumulatively, 16,835 TB cases have been identified.

IPT Initiation

Overall, 15 individuals were initiated on IPT during December 2022 week52 compared to 342 individuals for week51. This represents 0.6% of the weekly target (15/3,311). Cumulatively, 21,297 individuals have been initiated on IPT by December 2022 week52 representing 12.4% (21,297/172,170) of the annual target.

Uptake of TLD

In December 2022 week52, 71 clients received TLD compared to 543 at week51. Cumulatively, 22,539 clients had received TLD by FY2022 2022week52. In FY2022 2022week52 0 clients were transitioned to ABC/3TC/DTG compared to 24 for week51 (TX_PRO).

VMMC

A total of 333 males were circumcised as part of voluntary medical male circumcision (VMMC) for HIV prevention program within December 2022 week52 compared to 2,760 at week51. This represents 3.3% (333/10,074) of the weekly target. Cumulatively, 111,549 males were circumcised as part of VMMC representing 21.3% (111,549/523,827) of the annual target.

Cervical Cancer

In December 2022 week52, total of 47,458 women were screened for Cervical Cancer (CXCA_SCRN) which represents 26% (47,458/185,420) of the target. Of those screened for Cervical Cancer, 7.1% (3,358/47,458) tested positive to pre-cancer of cervix. Over eighty percent (2,760/3,358) of women who tested positive for Cancer of the Cervix were treated for Cervical Cancer.

EIDTests

In FY2023 COP-2022week52, 10 First DNA PCR tests were conducted compared to 294 at week51. The proportion of initial DNA PCR1 tests conducted within 0-2 months of birth was 100% in FY2022 2022week52 compared to 92.5%for. Cumulatively, 11,591 DNA PCR1 tests have been conducted by FY2023 COP-2022week52 of which 92.6% (10,738/11,591) were conducted within 0-2 months of birth.

Viral Load Monitoring:

In December 2022 week52, 46 individuals had a Viral load test within December 2022 week52 compared to 573 at week51. Of those tested for Viral Load, 97.8% were virally suppressed within December 2022 week52 compared to 95.6% at week51. Cumulatively, 20,325 individuals tested in the last 12 months prior to month at the end of the quarter by FY2023 COP-2022week52 compared to 20,147 at week51. The viral load coverage among individuals tested in the last 12 months prior to month at the end of the quarter was 53.8% by December 2022 week52 compared to 67.4% at week51.

3.3 TOOLS DISTRIBUTION

During the period, METS continued to support the joint quantification, printing, and distribution of the approved Country Operational Plan (COP)21 HIV/TB priority HMIS tools. In addition, the program supported two meetings for the mid-term review of the HMIS tools.

The purpose of the mid-term review of the HMIS tools was to update and incorporate new programs in the HIV-TB HMIS tools and to ensure inclusion of all HIV-TB related data elements in the revised HMIS summary reports. METS provided both financial and technical support for the HMIS tools review. The tools are currently being finalized into camera-ready printable version for pilot testing.

During the period, the program provided technical support for the roll-out of the revised standard operating procedures (SOPs) for HMIS report compilation through a National ToT and regional trainings. The program supported dissemination of the revised SOPs in 8 CDC-supported regions.

IPs staff loading tools for Mubende hospital

Monitoring Continuity of Treatment (CoT)

METS generates and shares weekly reports with stakeholders on CoT to support monitoring of retention in care and adherence to treatment. This involves tracking clients who miss appointments and those who return for treatment. Below is an example of a CoT report for week 47 2022 which shows the performance of implementing partners. UPMB, Fort Portal, Hoima and KCCA had the highest proportion of clients returning to care (Figure 8).

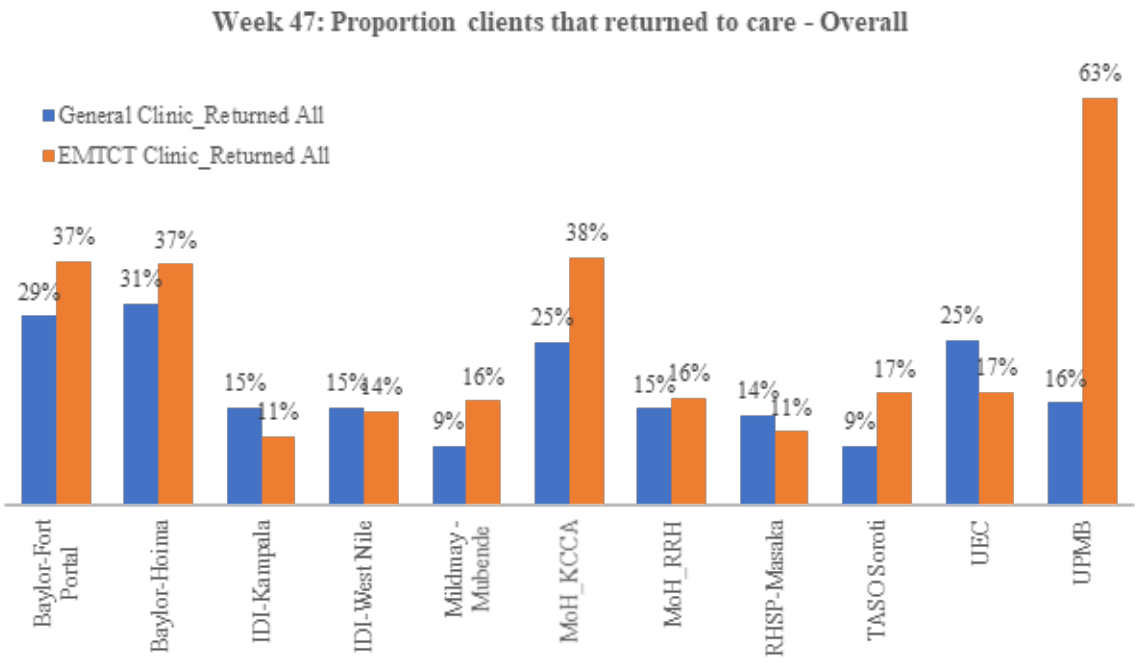


Figure 8. Proportion clients that returned to care

3.4 STRENGTHENING THE REGIONAL REFERRAL HOSPITAL (RRH) MECHANISM

The Ministry of Health adopted a regional approach to improve quality of health services using the RHHs as the coordinating centers. In this model, the RRHs have an expanded mandate for planning, coordination, capacity building, quality assurance and supervision. METS works collaboratively with MoH to enhance the capacity of RRHs to perform the above functions as indicated below.

Strategic Planning

METS supported eight RRHs to develop 5-year HIV and TB strategic plans and integrated annual workplans; trained in governance, leadership, and management; enhanced capacity for reginal coordination, data analysis, and performance review meetings; and trained RRH teams to implement PEPFAR priority programs. The RRHs include Arua, Entebbe, Fort-Portal, Hoima, Masaka, Mubende, Naguru and Soroti.

Training of RRH teams in Governance, Leadership and Management (GLM)

To address some of the capacity gaps in governance and leadership identified during the RRH capacity assessment, METS in collaboration with MoH conducted a training in Governance, Leadership and Management (GLM) for 42 staff from the 8 RRHs. The overall goal of the training was to impart practical skills in GLM as a precursor for effective planning, coordination, and monitoring delivery of quality health services. The training targeted decision makers at the RRHs including Directors and Heads of departments and program focal persons. The 5-day training covered a wide range of topics including but not limited to critical leadership skills that enhance personal effectiveness; planning, coordination and partnerships building; conflict management/managing people; creating high performance teams; managing change; gender dimensions in the health sector and Health financing. The participants also developed RRH-specific action plans to address the regional GLM issues.

Dr. Sarah Byakika (MoH) facilitating the GLM training

Development of guidelines for implementation of the MoH regional support strategy

During the period, METS supported MoH to develop and finalize the national guidelines on the RRH support strategy. The process brought together various stakeholders including Local Governments represented by DHOs and Chief Administrative Officers (CAOs), RRHs (Hospital Director, community health department), PEPFAR Implementing Partners and Program managers (Pharmacy, TB, UNEPI, CPHL,). The process was guided by the Directorate of Governance and Regulation. The approach is intended to strengthen the capacity of the regional referral hospitals (RRH) to build capacity as a way of creating sustainability of programs at regional level.

Figure 9 shows the envisaged coordination framework for the MoH RRH support approach.

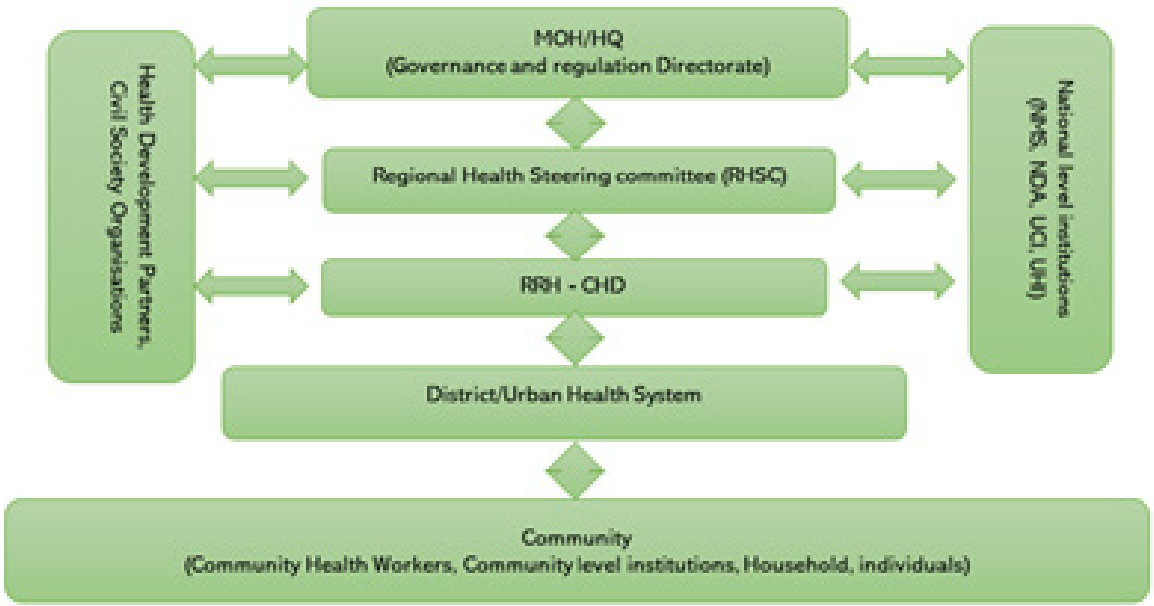


Figure 9: Framework for the MoH RRH support approach

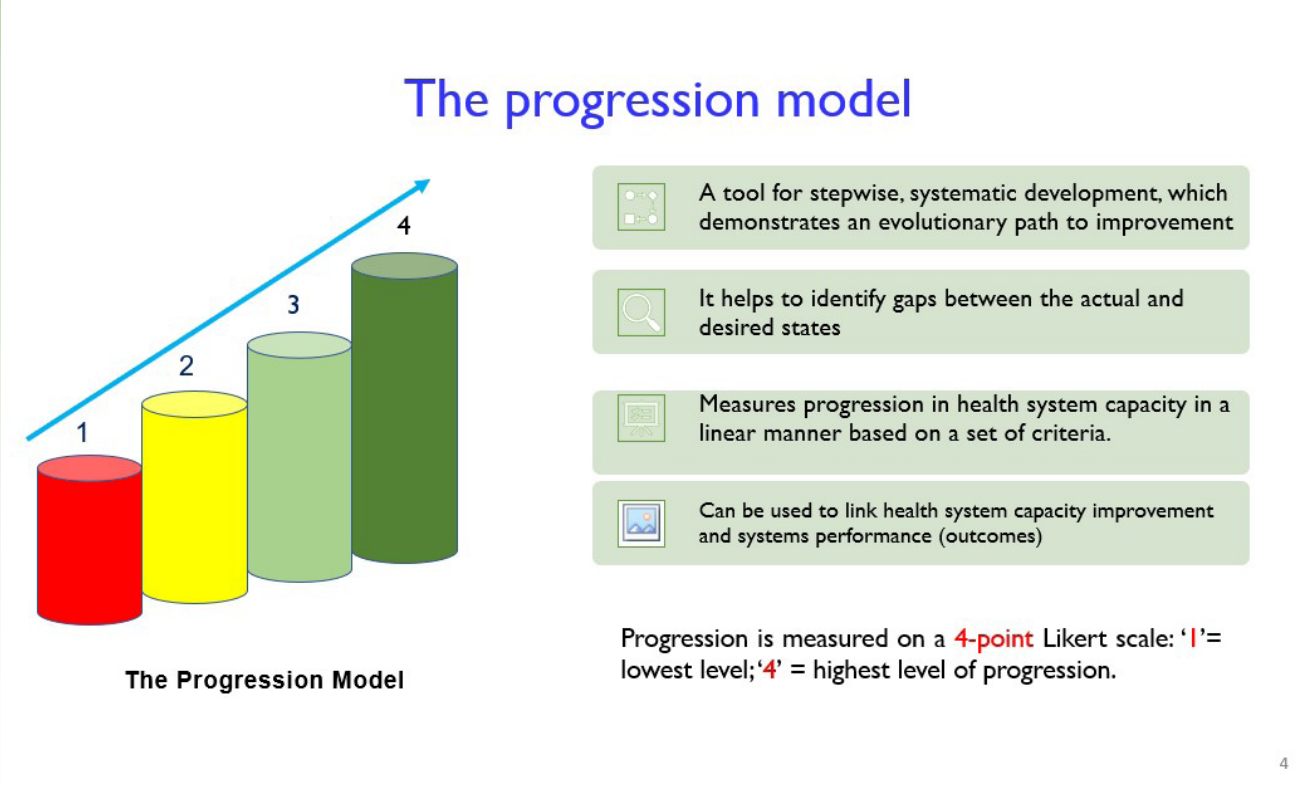
3.5 BASELINE RRH CAPACITY ASSESSMENT

To be able to link the Health System Strengthening (HSS) efforts to outcomes and impact of interventions, METS in partnership with MoH designed an M&E framework for measuring capacity of the Regional Referral Hospital (RRH) health systems at the sub-national level. The M&E framework builds on the six World Health Organization HSS building blocks and uses a Progression Model to measure HSS improvements using a set of indicators and benchmarks.

The model was designed (i) to identify gaps between the actual and desired states across a range of health systems as defined by pre-specified performance indicators and (ii) to demonstrate an evolutionary path (progression) to improvements

in each health system component based on a set of criteria. According to the model, the RRH health system capacity is measured on a four-point Likert scale with '1' representing the lowest level and '4' representing the highest level of progression. For each of the health system components assessed, the model generates scores with colour codes of dark green for level 4 of progression (>90% scores, surpasses basic expectations), light green for level 3 (70%-90% scores, meets basic expectations), yellow for level 2 (50%-<70% scores, needs improvement) and red for level 1 progression (<50% scores, needs urgent attention).

The model was used to conduct a baseline assessment in March 2022 at the 8 RRHs



The Progression Model

The results of the assessment showed gaps in leadership and governance, supply chain, health information systems and health workforce at some hospitals. METS continued to collaborate with MoH to support the RRHs to address the identified gaps. Annual assessments will be conducted to monitor improvements in health system capacity at the RRHs

3.6 CONTINUOUS QUALITY IMPROVEMENT

METS supported CQI activities at national and regional level. At national level, the program supports MoH to establish standards, guidelines, and reporting systems. In addition, the Program supported various MoH Quality Improvement Technical Working Groups and Implementing Partner CQI coordination.

National-level QI support

Development and launch of the National QI database

To streamline reporting of QI investments nationally, METS, in collaboration with MoH supported the development of the National integrated CQI database. In May 2022, METS hosted a breakfast meeting at the Kampala Sheraton Hotel to commission the QI database under the theme "Optimizing access to quality improvement data and information for evidence-based decision making in health service delivery".

The meeting was graced by the Minister of Health represented by the Commissioner, Standard Compliance Accreditation and Patient Protection (SCAPP) Department, the CDC Director and the Dean, Makerere University School of Public Health, among others. Several key partners including WHO, UNICEF, CDC, USAID, DOD, Directors of Regional Referral Hospitals, District Health Officers, Academia, Implementing Partners (IPs) and Mulago National Referral Hospital attended the meeting.

The hybrid meeting involved both in person and virtual attendance. All speakers highlighted the importance of the database in streamlining reporting of QI investments at national, district, and health facility levels. It was also emphasized that the database will promote access to QI data by all key stakeholders.

This will not only contribute to improvements in the quality of healthcare but will also augment the field of implementation science in Uganda and beyond. During the meeting, a demonstration of the National QI database was made by METS, guiding access the database, reporting on the various QI projects at different levels, monitoring project implementation, and generating performance dashboards for use at district, regional and national levels. METS has planned to support a national Training of Trainers for roll-out of the database nationally.

Dr. Ssendyona commissioning the QI Database

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Designing national QI collaboratives

In collaboration with MoH, METS conducted analysis of program data to identify improvement priorities which are used to inform design of national QI collaboratives.

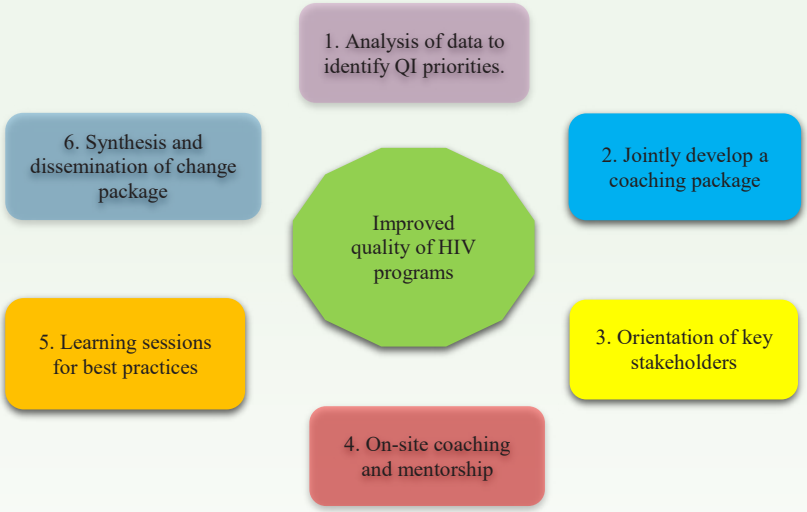


Figure 10: Capacity building model for QI collaboratives

Regional-level QI support

At regional level, the program supports design and implementation of national QI collaboratives in CDC-supported regions. Furthermore, the Program conducted on-site QI assessments and mentorships for various programs including VMMC, PMTCT, CxCa, DREAMS, KP/PrEP, GBV, and OVC and supported implementation of QI collaboratives.

QI collaboratives implemented at regional level

During the year, the program supported MoH to design, implement and monitor four QI collaboratives for TB/HIV, PMTCT, DREAMS and PrEP programs. Each of the 4 collaboratives are briefly described below.

TB/HIV QI collaborative: Throughout the year, the program continued to support implementation of the National QI collaborative for the TB/HIV clinical cascade. In collaboration with MoH, IPs and regional QI coaches, METS conducted targeted onsite mentorships at randomly selected sites to assess progress of implementation of the collaborative.

The mentorship visits were also used to support site teams to document the tested changes and QI journals for monitoring areas that were not performing well. Analysis of facility data showed improvement in performance on selected indicators as follows; screening OPD attendees for TB from 56% to 74%; expected TB clients who kept their refill appointment during the week (last 6 weeks) from 81% to 87%; active TB patients that received a TB medicine refill during the month from 81% to 92%; and TB patients that started TB treatment 6 months ago with a documented treatment outcome from 60% to 88%. Below is an illustration on performance in selected TB

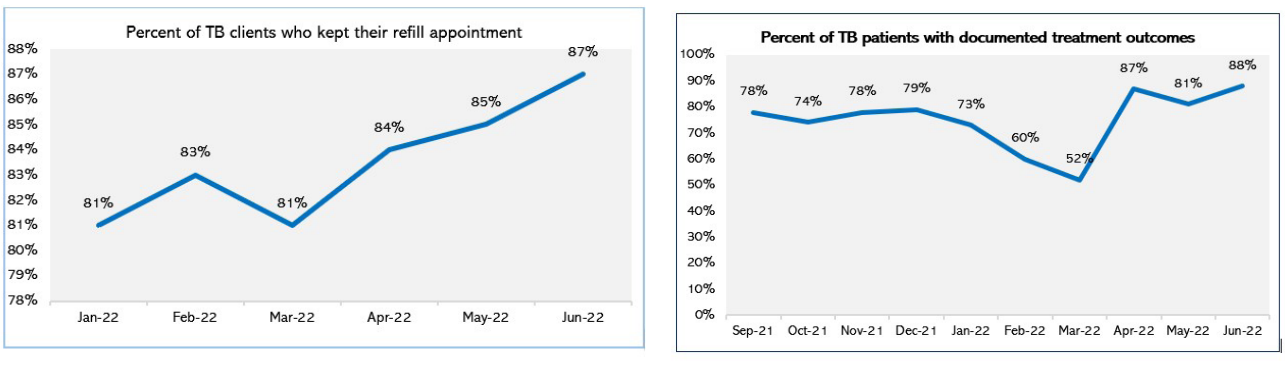


Figure 11: Graphs showing performance in selected TB QI indicators

PrEP QI collaborative: In collaboration with MoH and IPs, METS conducted targeted on-site mentorship visits at randomly selected sites across the country to assess progress of implementation and coach the site staff on overall PrEP programming. During the mentorships, the teams reviewed data on PrEP eligibility screening, PrEP initiation for eligible clients, appointment keeping and documentation of client follow-up outcome among others (Figure 12). Several challenges that hinder the collaboratives were identified including failure by some sites to adhere to the agreed upon roadmap, limited/ no improvement on some indicators and inadequate knowledge about QI approaches among CSOs who are at the fore front of key population service delivery. Some of the suggested solutions to address the gaps identified include but are not limited to: (i) IPs to implement the regional action plans and follow up with the sites to implement specific action plans and (ii) METS to conduct analysis of data collected and share performance dashboard and continue to liaise with partners to plan for subsequent onsite mentorships and learning sessions.

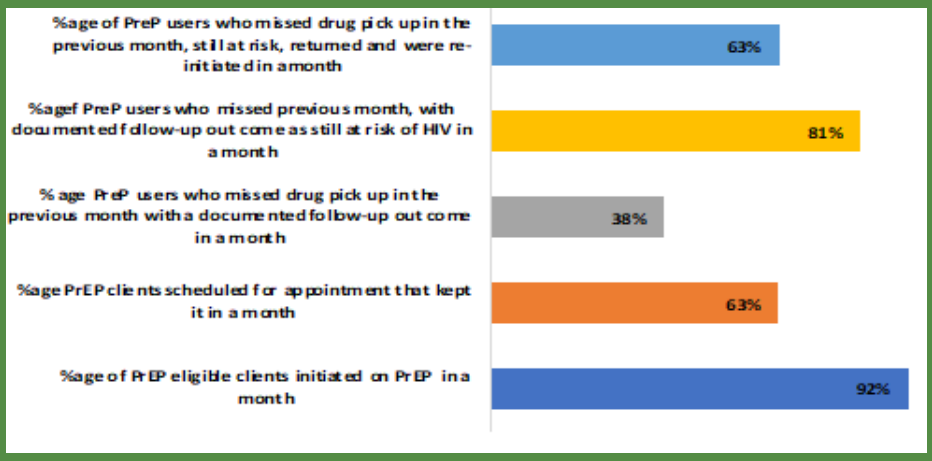


Figure 12: Performance in some of the PrEP QI indicators

DREAMS QI collaborative: During the reporting period, METS conducted mentorship visits to the DREAMS safe spaces in Masaka and Mubende districts. The overall purpose was to assess progress of the DREAMS QI collaborative and to work with IPs, district and CSO staff to address gaps in implementation. The collaborative leverages on interventions in the DREAMS minimum package to enhance prevention of HIV and unwanted pregnancies. It aims at increasing circumcision of male partners of AGYWs, screening of AGYWs for PrEP eligibility, PrEP initiation among eligible Adolescent Girls and Young Women (AGYWs) and access to family planning method of choice for AGYWs (15-24 years).

Analysis of data from the safe space indicate that the collaborative has had a positive impact on PrEP and Family Planning uptake among AGYWs as demonstrated by an upward trend on the 2 indicators in both districts. The enrolment on PrEP among AGYWs significantly increased from 35% to 55% in five months because of the mentorships and coaching of site teams implementing the collaborative.

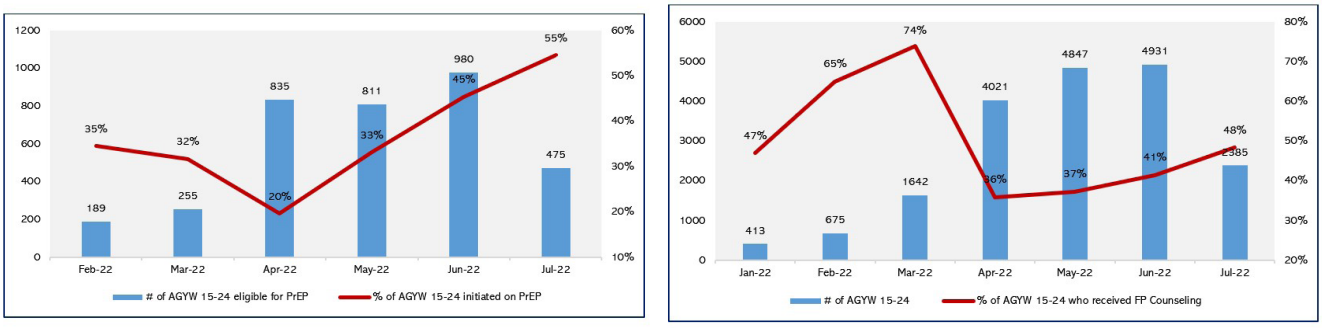


Figure 13: Impact of PrEP and Family Planning uptake among AGYWs

PMTCT QI collaborative: METS together with MoH conducted quarterly onsite QI mentorships for the PMTCT collaborative at health facilities across different parts of the country. The mentorships were aimed at assessing utility of the audit tools to ensure all HIV positive pregnant women and mother-infant pairs have been accounted for and their status updated. The on-site visits were also used to established completeness of the group antenatal registers during pregnancy and lactation periods. Findings showed low utilization of the PMTCT audit tool, low reporting rates (at 0% for Baylor Rwenzori; 7% for IDI- Kampala; 4% for Mildmay Mubende; 28% for RHSP-Masaka and 23% for UEC).

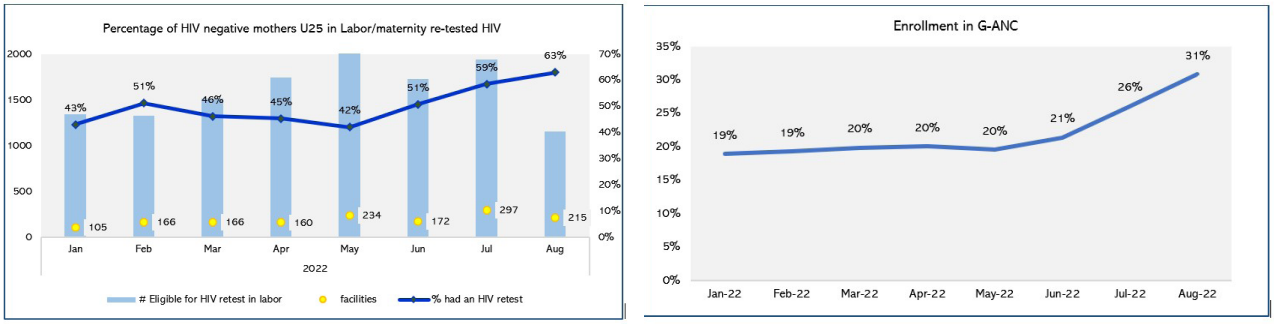


Figure 14: Performance of selected indicators for the PMTCT collaborative

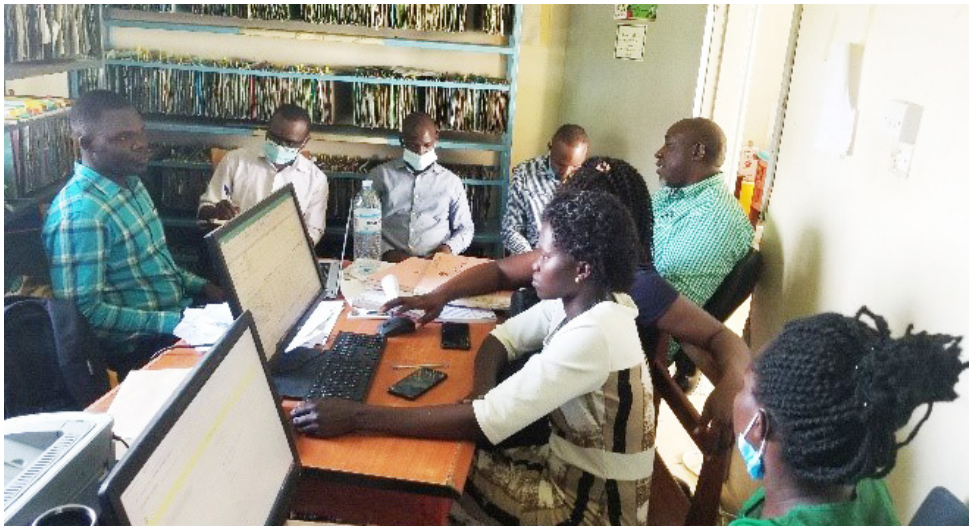
The proportion of U-25 pregnant mothers enrolled in GANC was at 31%, retesting of mothers was low across the board: 53% during pregnancy, 63% in maternity, and 52% at postnatal. PrEP screening and initiation of eligible mothers U-25 was also low at 30% and 3% respectively. HIV positive mothers and mother-baby pairs that receive all services is at 65% .

3.7 SUPPORT TO PEPFAR PRIORITY TECHNICAL PROGRAMS

METS provides technical support in M&E and QI for priority programs including HTS, VMMC, NCD integration, PMTCT, DREAMS, KP/PrEP and GBV.

HIV Testing Services (HTS)

HTS solution in UgandaEMR: During the period, METS supported scale-up and functionalization of the HIV Testing Services (HTS) module of the UgandaEMR to enable generation of high quality HTS data. The METS team worked with the MoH-ACP and SITES to conduct district entry meetings and site-level piloting of the HTS solution at a total of 143 health facilities in the CDC regions (70 health facilities) and in the USAID and DOD regions (73 health facilities). During the pilot, the health facility staff were oriented in the upgraded HTS Solution. The central teams worked with the site teams to enter some HTS cards into the Upgraded HTS Solution. This exercise helped to identify the system and operational gaps that may affect data entry into the HTS Solution. The feedback obtained during the on-site pilot testing was documented and discussed with the central core team to inform improvement of the Upgraded HTS Solution.



Testing HTS Solution in UgandaEMR at Adjumani HC IV

Some of the key recommendations for modifications of the HTS solution included the following

01 Alignment of all the data elements in the system to match with the ones on the HTS card e.g., Occupation, common name etc. are on the system tool but not the HTS card

02 The need to customize HTS patient dashboard so that it does not show fields related to ART patients,

03 Inclusion of an option for the months/ years other than the dates only to enable capture the data for the clients who don't remember the exact dates when they last tested but can remember how many months/years ago

04 Hide fields that are not related to HTS negative patients e.g., ART Client number; Add ANC Visit Number on the HTS Client Card (as it is in the electronic system); Add "Test Location or HF Name" field for "Known Previous HIV Test Results" and Cater for tracking of Males who test through the MCH Clinics,

In addition, the program supported other HTS activities during the review period which include the following

01 Provision of technical assistance for HMIS Mid-Term Review, focusing on inclusion of additional HTS MER Indicators and data elements into the HMIS tools

02 Supported generation of National & PEPFAR HTS Quarterly Reports (HTS_ INDEX, HTS_SELF, HTS_RECENT & HTS_TST

03 Maintenance of the HTS Index Testing Assessment System (enable IPs enter Index Testing Assessment results), monthly data extracts & analysis, shared progress achieved with MoH-HTS and USG Teams

4.0 VMMC SERVICES ON-SITE QI MENTORSHIPS

The program continued to support quality improvement for VMMC services through onsite QI mentorship at CDC-supported VMMC. Two onsite QI mentorships were conducted during the period. The specific objectives of the mentorships were to: i) conduct service quality assessment for VMMC services and develop action plans for continuous quality improvement; ii) collect data on adverse events occurrence and reporting and iv) troubleshoot and support site teams on the utilization of the Nerve Centre module in PIRS for reporting the daily VMMC outputs in real time.

Overall, there was a marked improvement in the proportion of sites that met MoH VMMC service quality standards in all the 7 thematic areas from less than 4% in August 2016 to 46% by the end of September 2022 as shown below (figure 15)

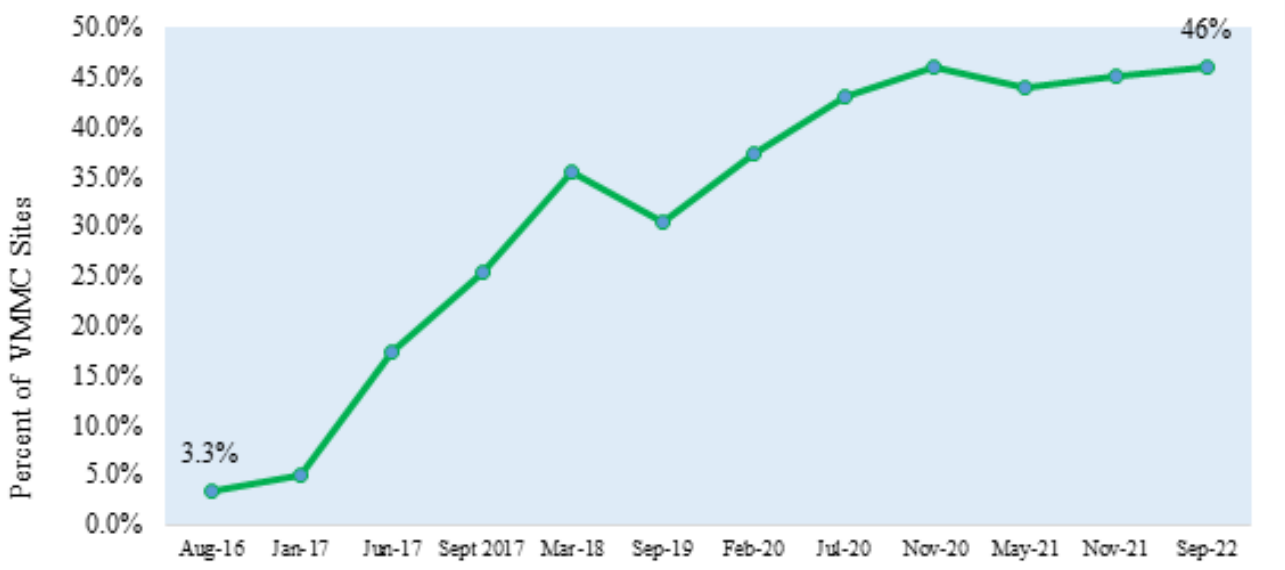


Figure 15: Percent of VMMC sites that meet MoH standards

VMMC sites that meet MoH Quality of Care increased from 3.3% in 2016 to 46% by Sept 2022 (Table 2).

Table 1: VMMC data validation results January-June 2022

	Number of males circumcised									Follow up within 14 days						
		REGISTER		HMIS105		DHIS2		DATIM			HMIS105		DHIS2		DATIM	
	FORM	Number	VF(%)	Number	VF(%)	Number	VF(%)	Number	VF(%)	REGISTER	Number	VF(%)	Number	VF(%)	Number	VF(%)
Over all	118,870	119,720	0.5	118,458	-0.3	118,927	0.0	119,395	0.4	115,487	118,691	2.8	51,779	-55.2	116,627	1.0
Baylor Rwenzori	12497	13341	6.8	12863	2.9	12793	2.4	12789	2.3	13070	12566	0.6	6487	-48.1	12604	0.9
Baylor Uganda	23045	23052	0.0	22079	-4.2	22923	-0.5	22938	-0.5	19226	22819	-1.0	9683	-58.0	22682	-1.6
IDI-Kampala	9850	9505	-3.5	9849	0.0	9992	1.4	9848	0.0	9505	9939	0.9	4424	-55.1	9848	0.0
IDI-West Nile	16857	16857	0.0	16849	0.0	16977	0.7	16857	0.0	16844	16848	-0.1	7035	-58.3	16783	-0.4
Mildmay Mubende	8363	8364	0.0	8365	0.0	8354	-0.1	8354	-0.1	8328	7499	-10.3	2929	-65.0	8354	-0.1
MoH RRH Strategy	2270	2298	1.2	2298	1.2	2303	1.5	2303	1.5	2298	2298	1.2	1488	-34.4	2298	1.2
RHSP-Masaka	18780	19052	1.4	19459	3.6	19400	3.3	19445	3.5	18965	18701	-0.4	6454	-65.6	18092	-3.7
TASO SOROTI	26234	26277	0.2	25943	-1.1	25331	-3.4	26007	-0.9	26277	27268	3.9	13035	-50.3	25491	-2.8
UPS	974	974	0.0	753	-22.7	854	-12.3	854	-12.3	974	753	-22.7	244	-74.9	475	-51.2

VMMC nerve center: METS developed a new module in PIRS in DHIS2 in which VMMC sites report their aggregated outputs on a daily basis. The system is web-based but can also be accessed using a mobile application which enables data entry offline, and data can be uploaded later in the system when internet is accessed. The system is connected to the VMMC dashboard that enables health facilities and stakeholders to access VMMC outputs for a specific period in real-time. The new system was successfully piloted at 8 IDI-supported sites in Kampala (4 sites) and West Nile (4 sites) regions and found to satisfactorily serve the intended purpose.

NCD integration

This was an interagency activity supported by MakSPH-METS in collaboration with USAID_SITES and MoH. A total of 108 facilities were assessed during this activity and the validation results informed nation-wide roll out.

a) M&E support for NCD integration:

METS supported the development of M&E tools and framework for NCD integration into HIV care and piloted the tools and framework in selected health facilities. The data elements for NCD integration were included in the revised HMIS tools during the mid-term review of the HMIS tools. In addition, the program supported development of NCD integration guidelines.

b) Weekly NCD integration coordination meetings

During the period, METS continued to participate in the weekly NCD integration meetings. During the meetings, METS provided technical support to the NCD pilot implementing IPs, particularly on data extraction along each NCD cascade indicators.

c) NCD TDY visit

METS worked with the CDC TDY team to assess the levels of NCD integration, data capturing systems, and to determine pilot program performance along the cascade indicators and derive recommendations to inform the National NCD program roll out. During the visit, METS presented the NCD M&E system developed including data capturing elements, tools, and reporting indicators. Additionally, METS supported tools development for facility level assessment, data compilation, data analysis and report compilation for feedback to stakeholders. A total of 5 facilities (Kiswa HCIII, Kitebi HC111, Namayumba HC111, Entebbe Hospital, Kisenyi HCIV) were assessed.

A pilot assessment conducted in the three regions of Kampala, greater Mukono and southwest region showed high prevalence of NCDs (Figure 16).

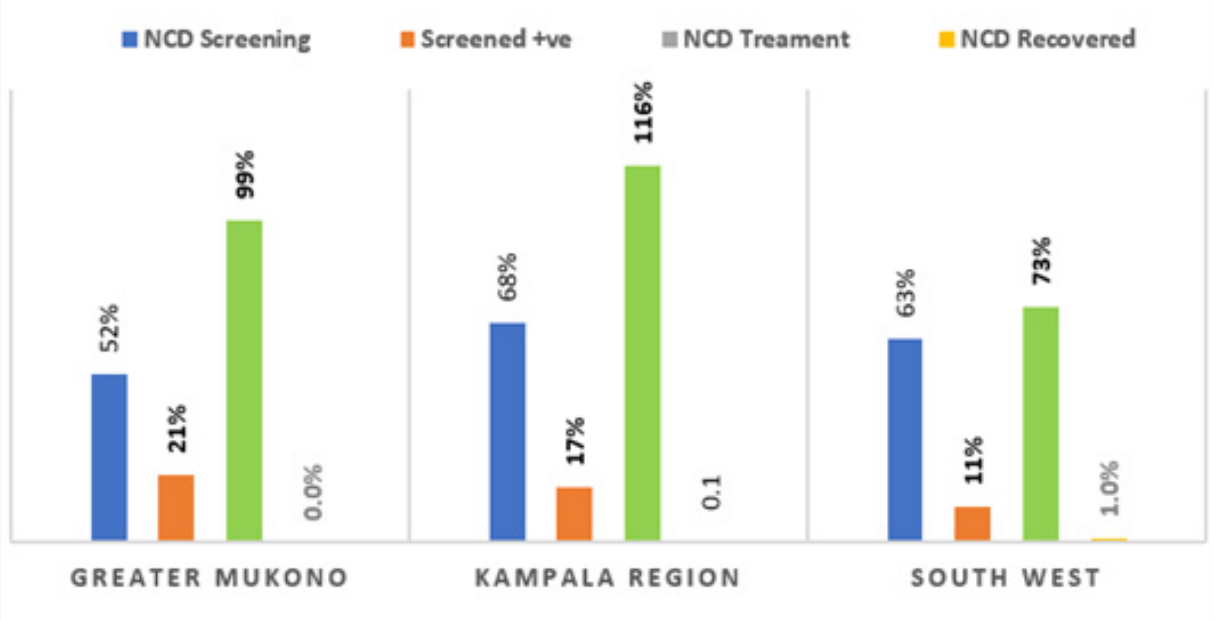


Figure 16: NCD cascade indicator by region

INTER-AGENCY CERVICAL CANCER SERVICE AND DATA QUALITY ASSESSMENTS (S/DQAS).

During the period, METS in collaboration with MoH and USAID-SITES conducted 2 inter-agency cervical cancer service and data quality assessments (S/DQAs) in January and September 2022 at 165 health facilities across the country.

Inter-Agency Cancer SQA at Mukono Church of Uganda Hospital

The follow-on SQA showed a notable improvement in the overall service quality scores sites increasing from 59% in January to 73% in September 2022. Similarly, the percent scores obtained in each thematic area across the health facilities showed marked improvement across most regions

Table 2: SQA results showing a comparison of site performance between January to September 2022

Agency	Implementing Mechanism	January 2022								September 2022							
		Management Systems	Supplies, Equipment and Environment	Registration, Group/Indiv. Educ and IEC	Cervical Cancer Screening and Pre-Cancer Treatment	Lab HPV Testing	Monitoring & Evaluation	Infection Prevention	Over all	Management Systems	Supplies, Equipment and Environment	Registration, Group/Indiv. Educ and IEC	Cervical Cancer Screening and Pre-Cancer Treatment	Lab HPV Testing	Monitoring & Evaluation	Infection Prevention	Over all
Grand Total		50.5	53.7	61.0	49.5	78.5	45.1	76.4	58.8	74.6	72.4	73.0	67.2	83.3	69.8	79.5	73.3
CDC	Baylor_Fort Portal Region	67.5	77.5	96.0	96.3	100.0	16.7	98.1	84.8	100.0	100.0	96.2	91.0	100.0	33.3	100.0	97.2
	Baylor_Hoima Region	17.5	55.0	64.0	38.1	64.7	46.7	65.8	49.6	90.0	85.0	91.0	84.6	92.9	90.0	92.5	88.9
	G2G_MoH KCCA Urban Strategy	27.7	62.5	37.5	16.0		33.3	66.7	39.4	62.5	25.0	50.0	15.6	57.1	33.3	66.7	46.5
	G2G_MoH RRH Strategy	37.5	25.0	32.1	21.4	100.0	55.6	68.4	49.6	60.7	58.3	83.3	61.2	76.2	66.7	68.9	70.2
	IDI_Kampala Region	51.3	62.5	65.3	59.8	57.1	43.3	72.8	60.2	86.4	93.2	92.5	91.9	81.0	69.7	91.4	88.5
	IDI_West Nile Region	68.7	36.1	51.6	39.6	77.1	81.5	82.3	59.0	80.0	86.1	97.2	94.4	71.4	85.2	88.7	89.8
	Mildmay_Mubende Region	76.3	75.0	91.5	53.1	86.6	56.7	85.1	75.1	64.0	71.2	79.8	71.8	76.2	33.3	72.0	68.7
	RHSP_Masaka Region	41.7	58.3	70.2	55.5	71.4	40.7	56.9	57.4	69.4	63.9	68.3	47.5	67.9	74.1	72.9	64.9
	STATE_UNHCR	12.5	37.5	10.7	22.5		33.3	83.3	33.6	81.3	100.0	92.9	83.3		50.0	100.0	88.4
	TASO_Soroti Region	34.7	50.0	34.3	22.9		48.1	71.7	42.0	83.3	55.6	67.5	23.8	74.3	63.0	78.3	57.7
	UPMB	62.5	50.0	58.9	63.3		33.3	95.5	68.8	55.4	87.5	75.0	71.5		66.7	95.9	77.1
	UPS	37.5	50.0	20.7	50.0	100.0	0.0	61.6	43.6	26.8	37.5	50.0	25.0	57.1	33.3	58.3	42.2
	UEC-UCMB	54.1	57.5	37.9	23.6	75.0	83.3	76.3	52.6	69.3	56.8	50.1	40.3		66.7	55.3	59.7
DoD	URC_DOD_UPDF	62.5	62.5	45.8	40.0	85.7	0.0	74.0	53.9	54.2	66.7	78.9	71.7	100.0	55.6	76.5	71.4
	WALTER REED_MUWRP	73.6	61.1	70.8	70.4	89.7	63.0	77.3	72.0	65.9	75.0	69.8	70.2	78.6	75.8	78.8	72.7
STATE	STATE_UNHCR	28.6	37.5	5.0	10.0		33.3	75.0	29.8	64.6	75.0	68.3	88.9		66.7	80.6	75.3
USAID	Baylor_Eastern Region	32.5	27.5	79.2	40.0	57.1	26.7	51.6	47.7	86.3	80.0	65.5	49.2	92.9	64.3	67.6	70.2
	G2G Jinja	37.5	50.0	35.7	26.3	100.0	33.3	91.7	50.7	75.0	100.0	50.0	100.0	100.0	33.3	91.7	83.6
	G2G Lira	62.5	75.0	80.0	80.0	85.7	33.3	100.0	79.6	62.5	75.0	100.0	60.0	100.0	66.7	91.7	82.2
	G2G Mbarara	71.4	50.0	57.1	75.0	85.7	33.3	91.7	71.6	75.0	75.0	78.6	74.1	100.0	66.7	50.0	73.3
	JCRC-Kigezi Lango Region	58.8	50.0	84.9	72.2	42.9	23.3	96.7	73.3	35.1	18.2	46.2	47.9	95.2	36.4	69.3	46.2
	MJAP_East Central Region	36.1	44.4	37.9	52.6	67.9	46.3	66.7	49.3	90.0	82.5	57.3	69.9	100.0	90.0	89.7	77.4
	TASO_Ankole Acholi Region	47.2	33.3	57.1	51.9	77.4	29.6	75.8	55.2	80.0	75.0	66.3	62.1	92.9	96.7	84.5	76.3
	UPMB_LSDA	67.9	78.6	54.1	36.4	100.0	61.9	92.1	61.2	87.5	87.5	72.2	78.4	85.7	87.5	80.1	80.4

4.1 CERVICAL CANCER SCREENING BY DISTRICT

Nationally, a total of 300,406 HIV positive women were screened for cervical cancer (CxCa). Of these, 19,105 (6.4%) tested positive and 15,850 (83.0%) received treatment. The red colour code implies that <50% of the CxCa targets were reached; yellow colour implies that 50-74% of the CxCa targets were reached and the green colour code implies that U75% of the CxCa targets were achieved. Figure 17 below shows performance of districts in provision of CxCa services based on their annual targets.

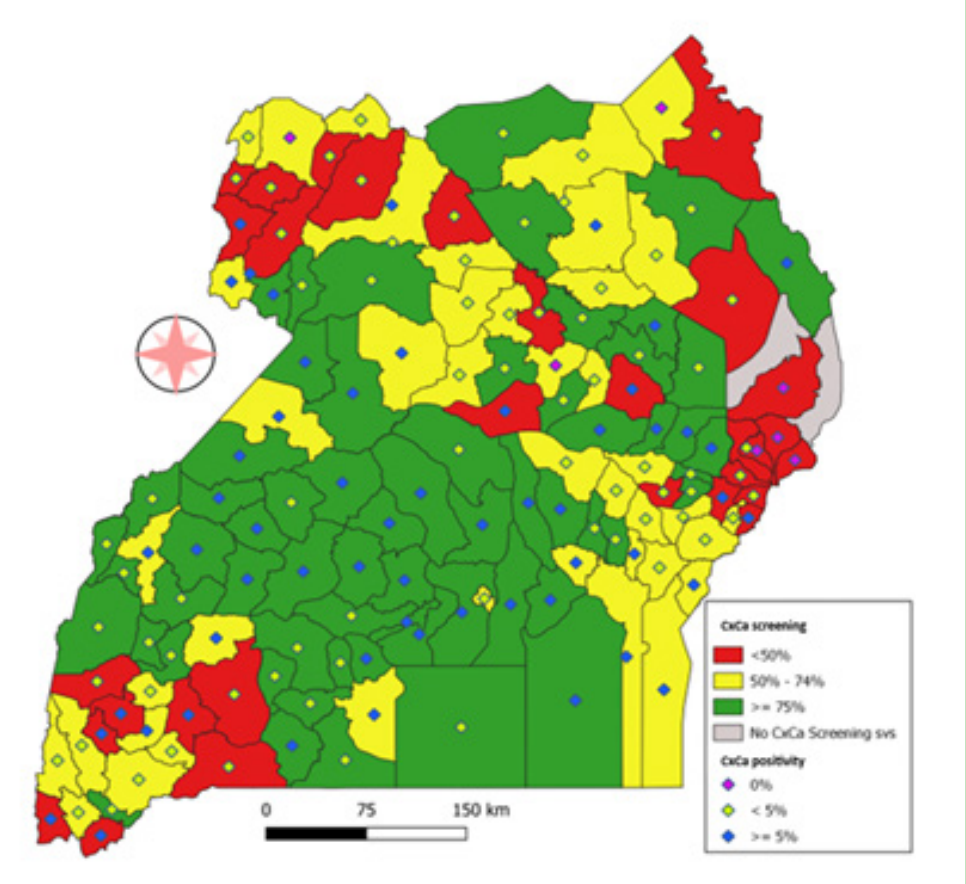


Figure 17: Performance of districts in provision of Cervical Cancer services

4.2 NATIONAL PMTCT PROGRAM

Support to the national Prevention of Mother To Child Transmission (PMTCT) Technical Working Group (TWG): METS provided technical support to the National PMTCT TWG through participation in the monthly TWG meetings. During these meetings, METS provided M&E support through review, analysis, and presentation of FY22 data.

Inter-agency Health Centre II assessment and onsite mentorship

The 2019 PMTCT impact evaluation showed that 46% of mother-infant pairs receive MCH services at HCIIs, most of which are not accredited for PMTCT implementation. This undermines the efforts to achieve eMTCT of HIV. To address this, PEPFAR in collaboration with the national PMTCT program planned to strengthen health systems at HCIIs for delivery of quality MCH and HIV care for mother-infant pairs.

The objective of the assessment was to determine the capacity of HC IIs to deliver PMTCT services. The results will be used to inform capacity enhancement for PMTCT & EID services at HC IIs prioritized for AP3 funding in FY2023. The assessment was conducted at 538 HC IIs across 114 districts.

The preliminary findings showed that majority of HC IIs provide ANC services (99%); immunization services (92%); postnatal (85%); syphilis testing (75%), labour and delivery (75%) and nutrition assessment and support services (70%)

The quality of PMTCT service at HCII is suboptimal and yet most mothers (46%) seek HIV services from them. Below is an illustration of the percentage of HC IIs which provide HIV/PMTCT Services (Figure 18).

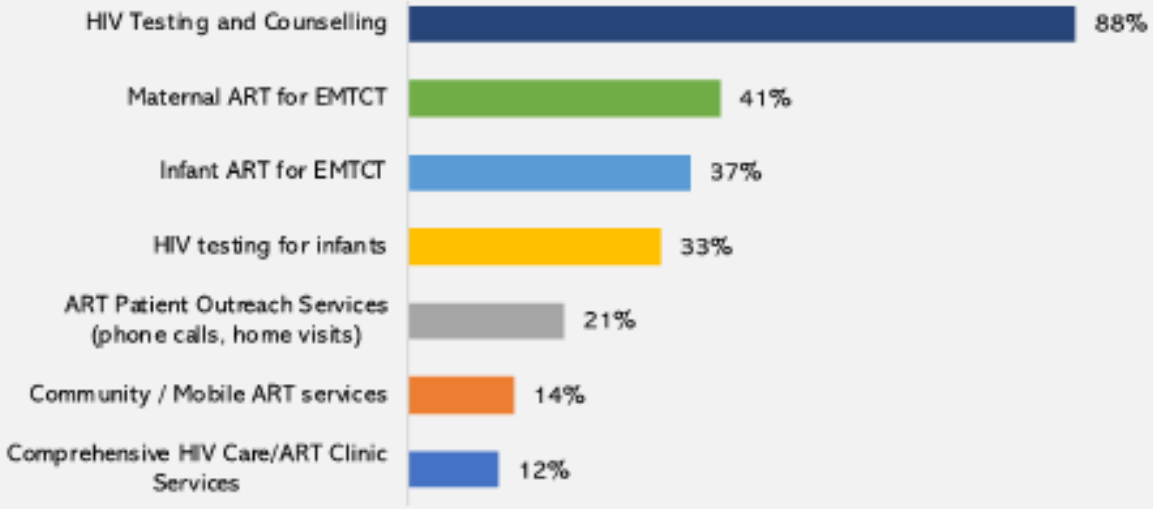


Figure 18: Percent of HCII providing PMTCT services

4.3 PMTCT_EID DATA QUALITY ASSESSMENT

In collaboration with MoH, METS conducted a PMTCT DQA at 165 health facilities across 57 CDCs-supported districts. The specific objectives of the DQA were to; (i) verifying availability, accuracy, completeness, consistency and sources of PMTCT data reported in DHIS; (ii) assess the data management system and methodology of data/report compilation; (iii) assess progress in implementation of the previous action plans; (iv) understand and identify solutions to challenges of recording and counting of PMTCT data; and (v) assess viral load monitoring and suppression in PMTCT clinics.

The findings showed that although the data management systems for reporting have improved across majority of the sites, data variations were still evident in PMTCT data at some sites (Table 3)

Table 3: Results from the PMTCT_EID DQA

Implementing Mechanism	PMTCT_EID_All					PMTCT_EID_less than 2 Months					PMTCT_EID_POS		
	Verified	DHIS2		PEPFAR		Verified	DHIS2		PEPFAR		Verified	DHIS2	
	N	N	VF	N	VF	N	N	VF	N	VF	N	N	VF
Over all	2,630	2,635	0.2%	2,656	1.0%	2,469	2,459	-0.4%	2,466	-0.1%	23	32	39.1%
Baylor_Fort Portal Region	368	361	-1.9%	371	0.8%	342	351	2.6%	348	1.8%	3	6	100.0%
Baylor_Holma Region	317	304	-4.1%	317	0.0%	305	284	-6.9%	291	-4.6%	7	9	28.6%
IDI_Kampala Region	942	949	0.7%	957	1.6%	891	883	-0.9%	899	0.9%	4	13	225.0%
IDI_West Nile Region	73	79	8.2%	80	9.6%	59	73	23.7%	73	23.7%	0	0	0.0%
Mildmay_Mubende Region	550	538	-2.2%	536	-2.5%	514	505	-1.8%	503	-2.1%	6	4	-33.3%
RHSP_Masaka Region	241	261	8.3%	258	7.1%	222	225	1.4%	219	-1.4%	3	0	-100.0%
TASO_Soroti Region	139	143	2.9%	137	-1.4%	136	138	1.5%	133	-2.2%	0	0	0.0%
G2G_MoH KCCA Urban Strategy	129	115	-10.9%	115	-10.9%	123	104	-15.4%	104	-15.4%	1	1	0.0%
G2G_MoH RRH Strategy	216	200	-7.4%	200	-7.4%	183	168	-8.2%	168	-8.2%	1	0	-100.0%

5.0 DREAMS PROGRAM

During the period, METS continued to provide routine M&E and programmatic support to all DREAMS partners across agencies and monitoring quality of service delivery.
Special to note, a new service layering for DREAMS to show the combination of services received by an individual was rolled out. The new DREAMS layering table incorporates minimum standards for all services provided to DREAMS beneficiaries.

COP 22 Uganda DREAMS Layering Table			
	Population age bands		
	10-14	15-19	20-24
Primary Individual Interventions	Screening for HTS eligibility Community Based HIV & Violence Prevention (No Means No Worldwide and Journeys Plus) Parenting Social Asset Building Basic socio-economic approaches (Financial literacy) Mental health screening and Psycho education	Screening for HTS eligibility Community Based HIV & Violence Prevention (Steppingstones and No Means No Worldwide) Social Asset Building STI screening Basic socio-economic approaches (financial literacy for all and short-term trade skilling for out of school) PrEP Screening Mental health screening and Psycho education	Screening for HTS eligibility Community Based HIV & Violence Prevention (Steppingstones) Social Asset Building STI screening Basic socio Basic social economic approaches (financial literacy and short-term trade skilling) PrEP screening Mental health screening and Psycho education
Secondary Individual Interventions	Risk based HTS.STI Screening GBV screening (Routine Enquiry) Post-violence care Education subsidy Linkage for ART (for HIV-positive AGYW) Basic socio-economic approaches- short-term trade skilling (for the out of school and emancipated minors) Group-ANC differentiated service delivery model (for pregnant and BF adolescents)	Risk Based HTS Condoms Contraceptive mix GBV screening (Routine Enquiry) Post-violence care Parenting SINOVUYO (for those 15-17 in school) Education Subsidy PrEP ART (for HIV-positive AGYW) Group-ANC differentiated service delivery model (for pregnant and BF adolescents) VSLA Matching grants (for AGYW aged 18 years and above).	Risk based HTS Condoms Contraceptive Mix GBV screening (Routine Enquiry) Post-violence care PrEP ART (for HIV-positive AGYW) Group-ANC-differentiated service delivery model (for pregnant and BF young women) VSLA Matching grants (Ref. to program guidance) Education Subsidy Asset financing: Start up kits for moderately vulnerable AGYW,
	Early warning systems to prevent school dropout (Only for in-school) STI treatment Psychotherapy, and referral (For AGYW identified with anxiety and depression	Asset financing: Startup kit for moderately vulnerable AGYW, linkage to micro finance, Linkage to IGA support Enhanced SES: (only those who meet eligibility criteria as critically vulnerable) STI treatment Psychotherapy, and referral (For AGYW identified with anxiety and depression)	linkage to micro finance, Linkage to IGA support Enhanced SES (only those who meet eligibility criteria, as critically vulnerable) STI treatment Psychotherapy, and referral (For AGYW identified with anxiety and depression)

Contextual	Reducing risk in sexual partners (HTS, PrEP, VMMC, ART) (to be provided through linkage with the broader PEPFAR program) Community mobilization & Norms Change (SASA) Condom promotion campaign/demand creation PMTCT Group-ANC model or longitudinal follow-up through 2yr post-partum in mother-baby care point for pregnant and breastfeeding AGYW (10-19)		

In addition, the elibility screening and enrollment tool was revised and shared with Implementing Partners. A data verification exercise conducted 18th March to 2nd April 2022 revealed that most indicators were accurately reported (Figure 19)

The DREAMS data verifcation showed that most indicators were accurately reported (Figure 19)

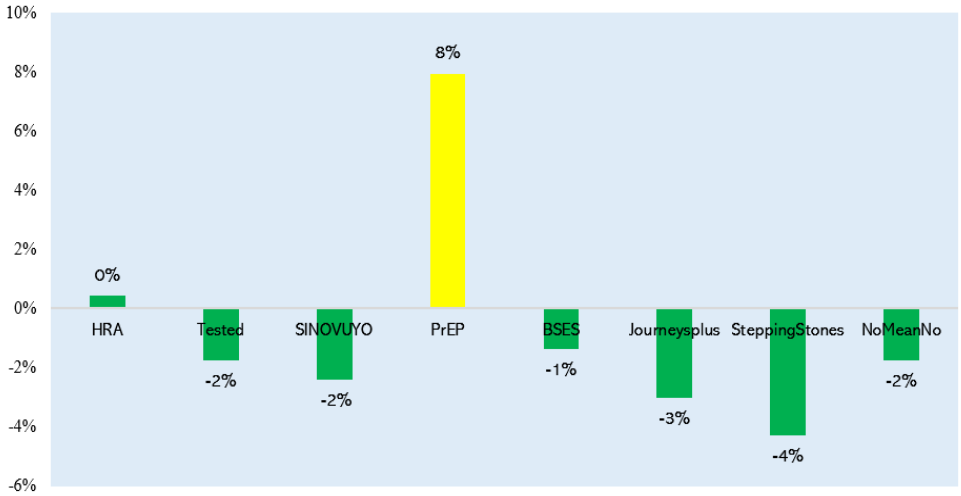


Figure 19: Results of the DREAMS data verifications

The DREAMS program focuses on Adolescent Girls and Young Women (AGYW) aged 10-24 years. The AGYWs are provided with service packages according to predefined age bands of 10-14, 15-19 and 20-24 years as well as education status of the beneficiary. The program has both community and health facility - based interventions aimed at building capacity of AGYWs to make informed reproductive health choices.

Community interventions address social cultural factors that increase vulnerability of AGYW to HIV infections at individual, family, and community levels.

The program also aims to improve access to sexual and reproductive health services, HIV care and treatment services for those testing positive at entry or having seroconverted after enrolment into the program.

Key Population and PrEP Program

Pre-Exposure Prophylaxis (PrEP) is one of the key HIV prevention interventions provided to key and priority populations (KPs/PPs). METS provided M&E support for KP/PrEP programs across the country and results of the data verification exercise are shown below (Figure 20. During the period, METS supported maintenance of the KP/PrEP Tracker and analytics for services uptake were monitored on a weekly basis. Additionally, METS supported revision of the KP and PrEP tools.

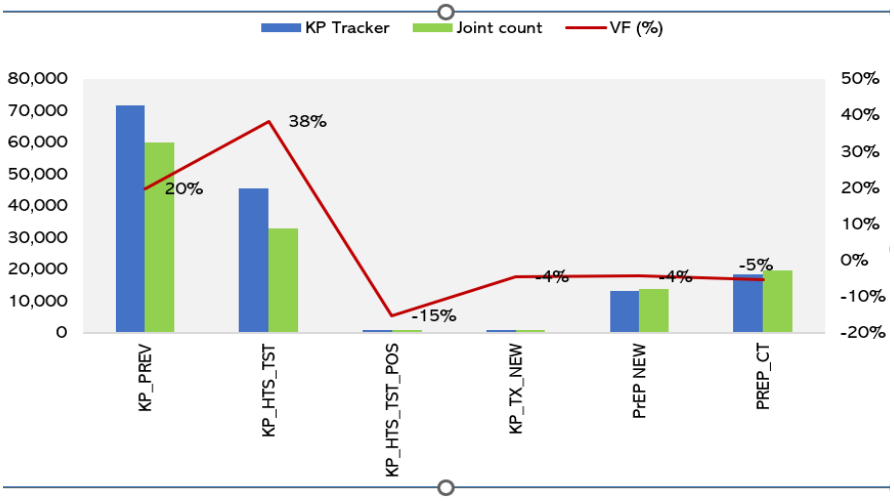


Figure 20: PrEP verification data

Gender-Based Violence (GBV) program

During the period under review, METS provided support to the GBV technical working group (TWG) to conduct quarterly supervision and mentorship in 35 health facilities from different regions of the country. METS further conducted a M&E capacity assessment of District Action Centers to establish the support received, access to data from the helpline and data analysis capacity. The COVID-19 pandemic resulted in increased GBV cases especially among AGYW. Consequently, there was a lot of effort to ensure that survivors had access to quality services.

6.0 KEY CHALLENGES EXPERIENCED DURING THE PERIOD

The major challenges experienced by the program during the period under review included:

01 Delays in development and approval of MoH policy guidance to support program implementation affecting implementation of some activities, particularly under Surveillance and Health Information Exchange. The program is actively engaging MoH to expedite the approvals.

02 Delayed protocol approval for National Integrated Surveillance (NIS) implementation. Several activities in the NIS work plan were not implemented during the budget period because of the delays in protocol approval. Work on the Acute Febrile Illness (AFI) has begun.

03 Due to the COVID-19 pandemic, there have been global challenges in the supply chain and access to chips required for manufacturing. This contributed to delays in delivery of information system hardware.

04 Streamlining facilitation of Government of Uganda (GoU) officials has been challenging. METS is continuously engaging the GoU staff to work within the standardized guidelines.

05 Inadequate Regional Referral Hospital (RRH) capacity to implement the regionalization strategy: METS is working with MoH to address these gaps through the Governance Leadership and Management (GLM) and M&E trainings for the RRH teams.

06 The lack of reliable sources of internet at health facility level limits data exchange and transmission to the central databases. To mitigate this, METS has provided internet to some health facilities with critical needs and will continue to work with regional IPs to support internet provision at facilities.

07 Due to organizational restructuring and delay in recruitment, the HIS team has been understaffed. As a result, some of the HIS activities were not implemented in time. The program expedited the recruitment of HIS staff in the months of February and March 2022 and all vacant positions are now filled.

08 Quality remains a key challenge to the use of data for program improvement. METS will continue to provide follow-on support through on-site coaching, mentorship, and supervision. The program has developed a follow-on schedule as an integral part of its capacity building strategy.

7.0 APPENDIX


Uganda Youth and Adolescents Health Forum
EVERY
HOUR
72
MATTERS
Speed is of the essence

7.1 SUCCESS STORY ON EVERY HOUR MATTERS CAMPAIGN

Sexual violence is a major public health problem in Uganda with a prevalence rate of 59% in women and 6% in men with 22% of female in the country having experienced this scourge between the age of 15-49 years. The COVID-19 pandemic saw an increase in exposure to HIV among women and girls and yet services for sexual based violence were not prioritized at the time.

Uganda Youth and Adolescent Health Forum partnered with METS to pilot "Every Hour Matters" (EHM) campaign. This campaign was aimed at increasing awareness of the importance of rapid access to post-rape care and services at all levels.

The campaign was piloted in 7 sub-regions of Uganda: Karamoja, Teso, West Nile, Rwenzori, Masaka, Mubende and Kampala. The focus of the campaign is to provide Post Exposure Prophylaxis to curb HIV transmission emergency contraception to prevent unwanted pregnancies as well as provision of psychosocial support to survivors and victims of sexual and gender based violence (SGBV). During the training, the participants revealed that many people in the community fear to report rape incidents due to a fear of stigma, shame, and harm by the perpetrators.

A section of Students of Kamengo Secondary School in Fort Portal city (Rwenzori region) pose for a group photo shortly after the EHM training at the school

EHM Youth Champions trained over 225 students and community members on post rape care services in Nebbi district.

Following the training, the youth advocates have been able to hold outreaches, where they met with pupils, out of school children, youth, local leaders, and parents, to share knowledge and equipped them with information on the provision of post-rape care services. The meetings emphasized the importance of quick response to rape incidences and highlighted the individual roles in the prevention of SGBV.

7.2 OUR STORIES

"Our interaction was engaging across all the outreaches, and the participants were extremely open and excited to learn, despite the fact that they had little knowledge, especially on the referral pathways." **Akethowanga said.**

"At the schools, the administration pledged to organize regular sessions and invite them to speak to the pupils about issues around SGBV and HIV, while the pupils committed to sharing the knowledge with their fellow students in the lower classes," **Karmu Mystical, trainer.**

"As a youth advocate, it is unfortunate that I had previously never had the opportunity to access such crucial information like post-rape care services and referral pathways. These will go a long way in impacting my community and I am grateful for this detailed workshop," **Akuma Richard, youth champion.**

"Ever since Every Hour Matters campaign training of trainers (ToT) workshop on the youth engagement toolkit, we have been able to carry out trainings and community sensitizations about the campaign to over 225 students, community members, and youths in Nebbi district," **Denis Cwinyi happily stated.**

8.0 METS CONTRIBUTION

8.1 CONFERENCE PRESENTATIONS

Improving client satisfaction in Uganda's health sector: Serial application of the ServQual model" by Dr. Simon Muhumuza at the 9th Annual Healthcare Quality Improvement Conference Speke Resort Munyonyo 13th – 15th December 2022

Mothers' Experiences of Receiving Male Midwives During Birth" by Wilfred Soyekwo at the 9th Annual Healthcare Quality Improvement Conference Speke Resort Munyonyo 13th – 15th December 2022

Quality of PMTCT and EID Services at Health Centre II Countrywide" by Julius Sendiwala at the 9th Annual Healthcare Quality Improvement Conference Speke Resort Munyonyo 13th – 15th December 2022.

How IPs are impacting QI Implementation at Delivery Level" by Dr. Alice Namale at the 9th Annual Healthcare Quality Improvement Conference Speke Resort Munyonyo 13th – 15th December 2022.

9.0 STEERING COMMITTEE

DR. SARAH BYAKIKA
CHAIR

PROF. RHODA WANYENZE
MEMBER

PROF. DAVID SERWADDA
MEMBER

PROF. FREDRICK MAKUMBI
MEMBER

RAY RANSOM
MEMBER

DR. ALLAN MURUTA
MEMBER

PAUL MBAKA
MEMBER

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