

**Point-of-Care EID/VL Support supervision and Mentorship**

**Activity Report Template**

**Funder: Global Fund**

**Dates: 9th to 28th Jan 2023**

Table of Contents

Contents

[1.0. Introduction 3](#_Toc130291033)

[1.1 Key Objectives 3](#_Toc130291034)

[2.0 Methodology 3](#_Toc130291035)

[3.2 Location of POC Device and Accessibility 6](#_Toc130291036)

[3.3 POC Device functionality 8](#_Toc130291037)

[3.4 POC Stock Management and availability 10](#_Toc130291038)

[3.4.1 Missing and/or expired POC supplies 11](#_Toc130291039)

[3.5 EID/VL camps 13](#_Toc130291040)

[3.5 EID/VL Results dispatch 14](#_Toc130291041)

[3.6 GenXpert Implementation and Performance 15](#_Toc130291042)

List of Figures

[Figure 1. Health facility by level 5](#_Toc130291044)

[Figure 2. Location of POC devices 6](#_Toc130291045)

[Figure 3. POC device error rate. 8](#_Toc130291046)

[Figure 4. Availability of Procedures to handle POC device breakdown 10](#_Toc130291047)

[Figure 5. Responsibility of fixing device breakdown 10](#_Toc130291048)

[Figure 6. Results dispatch 14](#_Toc130291049)

[Figure 7. Use of GeneXpert Platform 15](#_Toc130291050)

[Figure 8. Impact of introduction of HPV testing on EID testing services Using GeneXpert Platform 16](#_Toc130291051)

List of Tables

[Table 1. Implementing partners supporting Point-of-care 6](#_Toc130291068)

[Table 2. Accessibility of POC devices described 8](#_Toc130291069)

[Table 3. Device breakdown rate 10](#_Toc130291070)

[Table 4. The primary causes of device breakdown or downtime 10](#_Toc130291071)

[Table 5. Stock card availability and update status 12](#_Toc130291072)

[Table 6. Stock level 12](#_Toc130291073)

[Table 7. Expiry Dates for POC EID/VL Cartridges 12](#_Toc130291074)

[Table 8. List of missing supplies by health facility 13](#_Toc130291075)

[Table 9. List of expired supplies by health facility 13](#_Toc130291076)

[Table 10. Description of EID.VL camps 15](#_Toc130291077)

[Table 11. Number of infants tested in the camps 15](#_Toc130291078)

[Table 12. Number of sample types run on GeneXpert Platform 16](#_Toc130291079)

[Table 13. Sample Type name 17](#_Toc130291080)

[Table 14. Samples prioritized for testing on GeneXpert machine 18](#_Toc130291081)

# Introduction

The PMTCT program in Uganda has made significant progress towards attaining elimination of Mother to Child Transmission of HIV with marked improvement in access to critical diagnostics.

Uganda has made significant progress towards achievement of the UNAIDS 95:95:95 target for HIV case identification, care and treatment. According to the UNAIDS, the country's progress against the 95:95:95 targets for the general population was 98:95:92 by September 2021. The cascade for women was 93:91:83 with 93% pregnant women living with HIV on ART while men were at 86:77:68. Children were lagging at 64:98:74. VL coverage and suppression for the financial year 2021 was reported at 94% and 96% respectively.

Despite these achievements, challenges persisted; access to viral load testing is not uniform across sub populations, long turnaround time and delayed receipt of results by facilities leading to delayed identification and management of virally non-suppressed clients.

Findings from the PMTCT impact evaluation 2017- 2019 showed that most pregnant women had a suppressed viral load when tested (at 90% suppression). However only 56.2% of pregnant and BF women accessed a viral load. This was worse among pregnant and Breastfeeding Adolescent and Young Women with only 23.2% of those aged 15-19 years and 42.1% of those aged 20-24 years accessing viral load testing.. HIV program data 2021 shows that only 50% of pregnant women already on ART access a viral load at first antenatal visit as recommended by the 2020 MOH Consolidated guidelines with viral suppression among these of 85% which therefore increases likelihood of MTCT. Pregnant and breastfeeding mothers are unique in that gestation & breastfeeding are time-limited for interventions especially if the VL is high and the daily risk of HIV transmission is high. This is a special population where viral load suppression is critical for the triple impact of protecting women’s health, preventing MTCT throughout pregnancy and breastfeeding, and preventing sexual transmission to husbands or other sexual partners.

MOH ACP/UNHLDS with support from PEPFAR and partners rolled out VL POC testing in July 2022 starting with pregnant and breastfeeding mothers on the currently available platforms including GeneXpert and m-Pima. Facilities were selected to POC EID and VL testing services depending on the numbers of women and babies they serve. This was to further improve EID and VL service delivery and to complement the centralized system. This started with a Training of trainers to create a pool of 60 trainers, however MOH did not have enough funds to conduct the roll out trainings and these were supported by Implementing partners with little/no oversight from MOH to ensure quality.

MOH/ACP with support from Global fund (GF) conducted an onsite training and/or support supervision and mentorship in 49 districts to facilities where POC VL had been rolled out, between 9th to 18th March 2023. The activity had 9 teams consisting of a program officer, laboratory, data/connectivity technical officer and machine/supplier technical person to deal with machine issues. This was the first onsite support done to the sites. This was the first phase of onsite support covering 80/300 POC sites, other sites to be covered in subsequent onsite/mentorship activities.

Objectives were as below:

## 1.1 Key Objectives

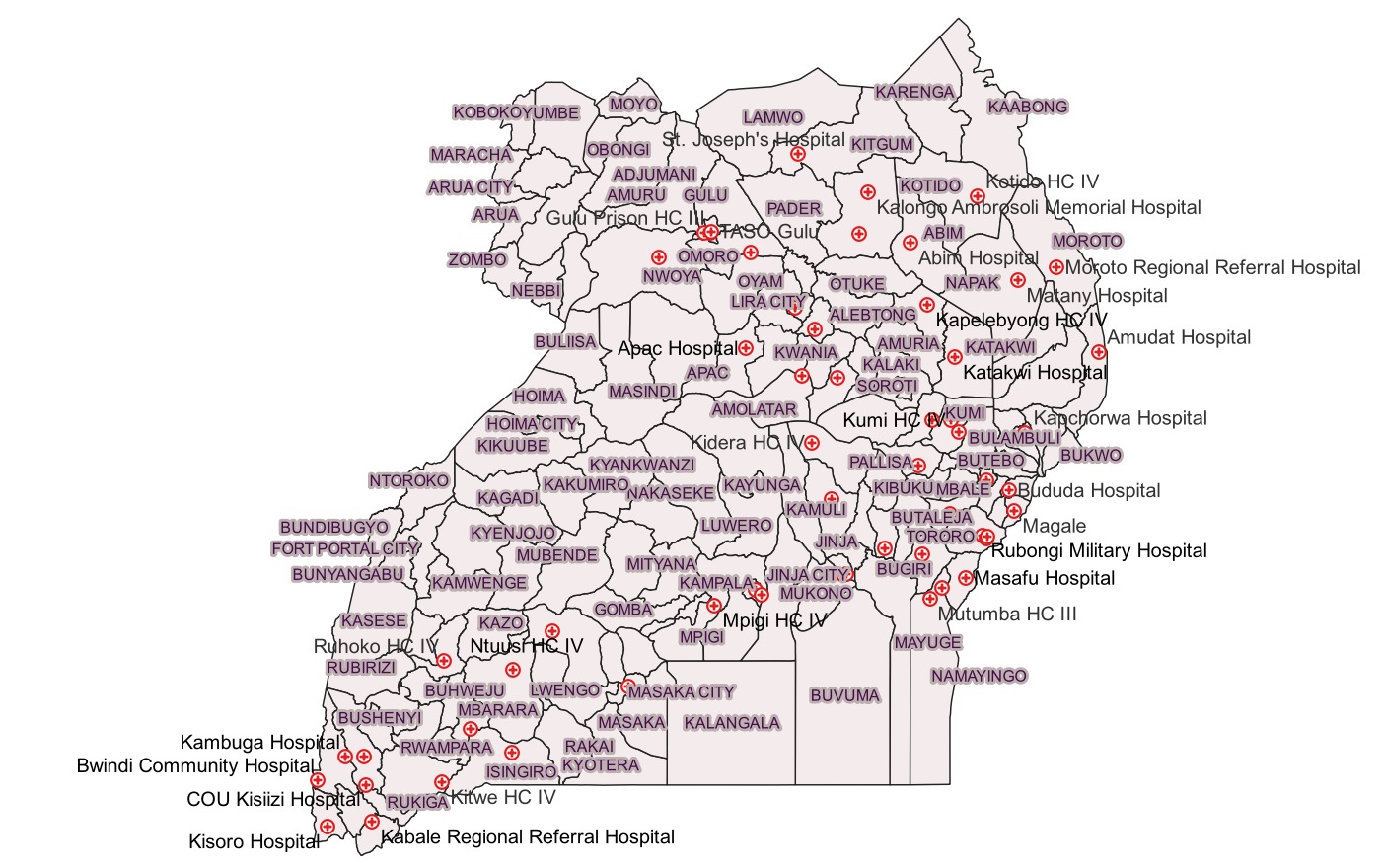
* To establish if services for POC VL were being implemented and for those sites with challenges conduct onsite training , troubleshoot any issues and provide mentorship as per gaps identified
* To establish the number of VL/EID tests done at all sites since the roll out
* To establish time between testing and results feedback to mothers (both the baby's results and the mother's VL results) and whether POC is really making a difference in TAT
* To establish what activities are being done to ensure the machines are being fully utilized (both Surge and any other innovations)
* To find out the number of sites using the mother-Infant audit tool to anticipate and plan for babies/mothers due for testing. And this will help us establish if all mothers have been covered so as to plan for the next population (children, adolescents and non-suppressed)

# 2.0 Methodology

* A team with representation from ACP, UNHLS, Life-care diagnostics and National mentors
* The selected mentors consisted of technical officers that had attended the TOT
* Average of 8 facilities implementing POC VL or both EID/VL were selected to participate in the support supervision and mentorship
* A tool was developed to capture findings as well as data to be collected. This was both electronic and hard copy
* The teams paid a courtesy call to the district officers to introduce the objectives of the activity to the DHO and to request to work with representatives from the health department at the district
* The teams worked with the respective district particularly the ADHO-MCH/PMTCT/POC Focal Persons and the DLFPs
* Staff engaged at a facility self-registered their attendance and acknowledge receipt of a refreshment in cash
* A standardized support supervision tool was used.

# 3.0. Findings

## 3.1 Demographic



**Phase 1 POC Health Facilities visited**

A total of nine (9) teams (Lira, Bugiri, Mbale, Masak, Kabale, Mbarara, Karamoja and Soroti) teams allocated to 49 districts (See list of districts in appendix 1) across the country participated in the POC support supervision and mentorship.

Close to half (36(48%) of the total 75 health facilities visited were at the level of a district general. These were closely followed by health centre IV 24(32%), Regional referral hospital 11(15%) and Health centre III at 4(5%) as presented in figure 1 below. (See list of health facilities in appendix 2)

Figure 1. Health facility by level

*Source: (Support supervision and mentorship data)*

Fifty-eight accounting for 73% of the health facilities were government and 17(23%) where private-not-for-profit.

Table 1. Implementing partners supporting Point-of-care

|  |  |  |
| --- | --- | --- |
| Name of Implementing Partner | Frequency | Percentage |
| LPS TASO | 14 | 21% |
| LPS UPMB | 10 | 15% |
| MJAP | 9 | 14% |
| Rakai Health Science Program | 7 | 11% |
| Baylor | 5 | 8% |
| G2G | 4 | 6% |
| JCRC | 5 | 8% |
| ANECCA and CUAMM | 2 | 3% |
| EGPAF & JCRC | 2 | 3% |
| Baylor and Rhites E | 1 | 2% |
| G2G, RHITES E | 1 | 2% |
| G2G, RHITES-N | 1 | 2% |
| Prison services | 1 | 2% |
| UCMB | 1 | 2% |
| Uganda Care | 1 | 2% |
| UPMB, RHITES-N ACHOLI | 1 | 2% |
| URC/IDI | 1 | 2% |

*Source: (Support supervision and mentorship data)*

# Section1: POC EID/VL Device Operators at the Testing Point

## 3.2 Location of POC Device and Accessibility

The POC devices were majorly 63(84%) the POC machines were located in the Laboratory, 7(9%) in the mother baby care point and 5(7%) in the ART clinic as demonstrated in figure 2 below

Figure 2. Location of POC devices

*Source: (Support supervision and mentorship data)*

Regarding accessibility of the POC device, Majority (88%) of the health facilities indicated that the POC devices were accessible.

They (50%) cited that the mothers are bled from different units e.g., MBCP, ANC, Maternity, then the samples are sent/transferred to the lab for testing and results dispatched to the unit on same day or subsequent days. Fourteen percent (14%) mentioned that the mothers and HEI identified from MBCP are sent with the request forms to the Lab for sample collection *(first before other services are given*) then they come back to the clinic for the other routine services as they await their results. The results are sent back to the MBCP by the peer mother on the same day or next day depending on work load

However, 9% indicated that the machine restricted/accessible to only lab staff, 2% mentioned that the device is located in the main laboratory and the ART laboratory can't access it easily and 2% had not sent any samples for testing as presented in table 2 below

Table 2. Accessibility of POC devices described

|  |  |  |
| --- | --- | --- |
| **How the POC device is accessible to other areas *(Responses)*** | **Themes (Count)** | **%** |
| Mothers are bled from different units e.g., MBCP, ANC, Maternity, then the samples are sent/transferred to the lab for testing and results dispatched to the unit on same day or subsequent days | 33 | 50% |
| The mothers and HEI identified from MBCP are sent with the request forms to the Lab for sample collection *(first before other services are given*) then they come back to the clinic for the other routine services as they await their results. The results are sent back to the MBCP by the peer mother on the same day or next day depending on work load | 9 | 14% |
| Machine restricted/accessible to only lab staff | 6 | 9% |
| The lab/POC site is open (24hrs/7days) and operational throughout the week. So, all samples are tested any time they're sent to lab. The POC FP coordinates sample testing from AEPs. | 6 | 9% |
| m-Pima devices are located in the ART Clinic/MBCP. Gene-Xpert Machine in the main Lab. Other entry points move samples to the testing points. Others send clients to the MBCP using Linkage facilitators/Mentor mothers/Counselors | 4 | 6% |
| The device is located in the main laboratory and the ART laboratory can't access it easily | 1 | 2% |
| PIMA CD4 is located in the ART lab and MPIMA in the main laboratory | 1 | 2% |
| Minilab at MBCP is open and operational from Monday - Friday. | 1 | 2% |
| MBCP collects and sends samples to Lab. Their main clinic days were Wednesday and Friday. However, Friday was tricky as results would be dispatched later the following week | 1 | 2% |
| Accessible to lab staff and midwife who were trained on POC machine. | 1 | 2% |
| There is a designated lab personal who is attached to Eid lab who conducts the tests. | 1 | 2% |
| Lab is accessible to everyone. | 1 | 2% |
| The facility had not sent any samples for testing | 1 | 2% |

## 3.3 POC Device functionality

Figure 3. POC device error rate.

|  |  |
| --- | --- |
| *Source: (Support supervision and mentorship data)* | Results from the support supervision showed that 95% of facilities reported having machines that test for both VL and EID as presented  Regarding frequency of error occurrences 28% of users of GeneXpert machines cited that errors occur often for 3-4 times a week compared to 5% using PIMA machines. 30% users of GeneXpert machines and 45% of PIMA machines indicated that it happens once 3-4 times a month. |
| The respondents further mentioned that the errors sometimes occur 1-2X a month for GeneXpert (22%) and 24 % for Pima to 1-2 times a month as presented in figure 3 and 4 above.  However, 25% and 20% indicated that there had been no device breakdowns in the last three months on PIMA machines and GeneXpert machines respectively. For those that experienced some equipment breakdowns, on average these happened 3 times in the last 3 times in the last three months lasting approximately 18 days as depicted in table 3 below. | |

Table 3. Device breakdown rate

|  |  |  |
| --- | --- | --- |
|  | Yes (count) | % |
| Staff knowledgeable and able to rectify/prevent errors? | 70 | 93% |
| There been any device breakdowns in the last three months prior to this visit | 14 | 19% |
|  | Average | Max |
| Approximately how many times in –in the last three months was there device breakdown | 3 Times | 30 Times |
| On average, for how many days/ months did the device downtime last | 18 days | 60 days |

*Source: (Support supervision and mentorship data)*

According to table 3 above, ninety-three (93%) of the health facilities indicated that the staff were knowledgeable and able to rectify and prevent the errors.

The primary causes of the device breakdowns were majorly (23%) due technical problems, internal malfunctioning of some parts or failure to read the cartridges as well as temperature related issues/factors (23%). Other causes cited by the health facilities visited included inadequate services of the machines (15%), too much dust due to the absence of AC in the labs (15%), unknown causes (15%) and misuse/mishandling of the machine (8%).

Table 4. The primary causes of device breakdown or downtime

|  |  |
| --- | --- |
| **Primary causes of device breakdowns or downtime** | **%** |
| Temperature issues/Temperature/temperature factors | 23% |
| Technical problem in the machine/Internal misfunctioning of some parts/Failure to read cartridge for VL | 23% |
| Unknown/ The staff failed to know the cause even after trouble shooting | 15% |
| Inadequate servicing of the machine/ Long time without serving and yet it’s over utilized/Computers broke down its overdue period of service | 15% |
| The AC in the lab does not work/Too much dust that affected the place where the cartridge was is inserted. Whenever the cartridge was inserted, it could not run a sample, but it was rectified by the distributor | 15% |
| Mishandling/The plug was forced into the machine and it broke down | 8% |

|  |  |  |
| --- | --- | --- |
| Figure . Availability of Procedures to handle POC device breakdown | Figure . Responsibility of fixing device breakdown | There were clear procedure, known to all staff operating the machines in 97% in the health facilities visited about the actions to take and who to contact in the event of a breakdown of a POC device. 91% indicate that it was the responsibility of |

The device distributor to fix the faulty equipment. However, 9% cited it being the responsibility of the implementing partner as demonstrated in figure 5 above.

## 3.4 POC Stock Management and availability

According to the results from the support supervision and mentorship in the 69 health facilities visited, only 77% and 83% indicated availability of stock cards for POC VL and EID cartridges respectively. Of these, 98% for the VL and 95% for the EID were up-to-date at the time of visit.

On average, the facilities had 132 cartridges for EID and 161 for Viral load as indicated in table 5 and 6 below.

It should be noted, however, that close to half (44% for EID & 47% for VL) of the cartridges will expire by the end of March 2023 as presented in table 7 below.

Table 5. Stock card availability and update status

|  |  |  |
| --- | --- | --- |
| **Data Element** | **Response** | |
| *Yes* | *No* |
| Stock card available for POC EID cartridge | 83% | 17% |
| Stock card available for POC VL cartridge | 77% | 23% |
| Stock card for POC EID cartridges up to date | 95% | 5% |
| Stock card for POC VL cartridges up to date | 98% | 2% |

Table 6. Stock level

|  |  |  |
| --- | --- | --- |
| **Data Element** | **Average count** | **Max** |
| Stock level for POC EID cartridges | 132 | 650 |
| Stock level for POC VL cartridge | 161 | 700 |

Table . Expiry Dates for POC EID/VL Cartridges

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Expiry date for the POC EID cartridges | | | Expiry date for the POC VL cartridges | | |
| Expiry dates | Count of expiry date | % | **Expiry dates** | Count of expiry date | % |
| March-2023 | 18 | 32% | **Aug-2023** | 10 | 19% |
| Oct-2023 | 10 | 18% | **Jan-2023** | 9 | 17% |
| Aug-2023 | 7 | 12% | **March-2023** | 9 | 17% |
| Dec-2022 | 7 | 12% | **Feb-2023** | 7 | 13% |
| Jan-2023 | 5 | 9% | **Dec-2022** | 6 | 11% |
| April-2023 | 3 | 5% | **Oct-2023** | 6 | 11% |
| May-2023 | 3 | 5% | **April-2023** | 3 | 6% |
| Feb-2023 | 2 | 4% | **Jul-2023** | 1 | 2% |
| Aug-2022 | 1 | 2% | **June-2023** | 1 | 2% |
| June-2023 | 1 | 2% | **May-2023** | 1 | 2% |
| Grand Total | 57 | 100% | **Grand Total** | 53 | 100% |

### 3.4.1 Missing and/or expired POC supplies

On average, 139 EID and 100 VL cartridges were reported to have expired at the time of the assessment. 71% (12/17) and 64% (9/14) EID and Viral load cartridges respectively expired in the month of December 2022 in the health facilities that reported expiries therein.

The average monthly consumption was 79 cartridges for EID and 50 cartridges for VL.

Table 8. List of missing supplies by health facility

|  |  |  |
| --- | --- | --- |
| **District** | **Health Facility** | **Stocked-out** |
| Napak District | Matany Hospital | Genexpert cartridges have a short expiry |
| Buyende District | Kidera HC IV | HIV 1/2 VL CARTRIDGES |
| Omoro District | Lalogi HC IV | m-Pima EID cartridges missing. No expiries |
| Namisindwa District | Magale (UCMB) HC IV | No expired items. |
| Tororo District | Rubongi Military Hospital | Stock out of VL and EID cartridges. |
| Katakwi District | Katakwi Hospital | Stock Out of VL Cartridges. |
| Namayingo District | Buyinja HC IV | THERE IS NO MACHINE (MPIMA) CURRENTLY AT THE FACILITY |
| Butaleja District | Busolwe Hospital | VL and EID cartridges are out of stock |

Table 9. List of expired supplies by health facility

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **District** | **Health Facility** | **A4c1\_Name of Item expired** | **A4c1\_No. Number expired** | **A4c1\_Date expired** | **A4c1\_AMC for the facility** |
| Lira District | Lira Regional Referral Hospital | EID cartridges | 173 | Na |  |
| Alebtong District | Alebtong HC IV | EID cartridges | 53 | Na | 50 |
| Moroto District | Moroto Regional Referral Hospital | EID cartridges | 33 | 22/12/2022 |  |
| Butambala District | Gombe (Butambala) Hospital | EID cartridges |  | NA | 61 |
| Kalungu District | Bukulula HC IV | EID cartridges | 40 | 23/11/2022 | 73 |
| Kazo District | Kazo HC IV | EID cartridges | 135 | 25/10/2022 and 1/12/2022 | 400 |
| Amolatar District | Amai Community Hospital | EID cartridges | 200 | 27/12/2022 | 30 |
| Bududa District | Bududa Hospital | EID cartridges | 150 | 26/12/2022 | 50 |
| Kalangala District | Kalangala HC IV | EID cartridges | 78 | 23/22/2022 | 59 |
| Masaka District | Kitovu Hospital | EID cartridges | 100 | 27/12/2023 | 13 |
| Moroto District | Moroto Regional Referral Hospital | EID cartridges | 6 | 25/12/2022 |  |
| Moroto District | Moroto Regional Referral Hospital | EID cartridges | 300 | 23/12/2022 | 50 |
| Kalangala District | Bukasa HC IV | EID cartridges |  | 23/12/2022 | 2 |
| Kitgum District | St. Joseph's Hospital | EID cartridges | 600 | 16/12/2022 | 100 |
| Kotido District | Kotido HC IV | EID cartridges | 50 | 15/12/2022 |  |
| Nwoya District | Anaka Hospital | EID cartridges | 66 | 20/01/2023 | 56 |
| Kamuli District | Kamuli Hospital | EID cartridges | 100 | 27/12/2022 |  |
| *Average (expired/AMC) EID cartridges* | | | **139** |  | **79** |
| **District** | **Health Facility** | **A4c1\_Name of Item expired** | **A4c1\_No. Number expired** | **A4c1\_Date expired** | **A4c1\_AMC for the facility** |
| Amolatar District | Amai Community Hospital | VL cartridges | 100 | 18/12/2022 | 42 |
| Abim District | Abim Hospital | VL cartridges | 0 | 28/12/2022 | 17 |
| Butambala District | Gombe (Butambala) Hospital | VL cartridges | 90 | NA | 30 |
| Moroto District | Moroto Regional Referral Hospital | VL cartridges | 100 | Vl 18/12/2022, EID 23/12/2022 | 50 |
| Lira District | Lira Regional Referral Hospital | VL cartridges | 100 | Na | Na |
| Moroto District | Moroto Regional Referral Hospital | VL cartridges | 100 | 18/12/2022 | 50 |
| Alebtong District | Alebtong HC IV | VL cartridges | 100 | Na | 100 |
| Bududa District | Bududa Hospital | VL cartridges | 250 | 23/12/2022 | 50 |
| Kampala District | China Uganda Friendship (Naguru) Regional Referral Hospital | VL cartridges | 50 | November 2022 | 30 |
| Busia District | Masafu Hospital | VL cartridges | 43 | 16/12/2022 | 50 |
| Abim District | Abim Hospital | VL cartridges | 0 | 28/12/2022 | 17 |
| Abim District | Abim Hospital | VL cartridges | 0 | 28/12/2022 | 17 |
| Gulu District | Gulu Regional Referral Hospital | VL cartridges | 250 | 17/9/2022 | 90 |
| Kazo District | Kazo HC IV | VL MPima cartridges | 275 | 15/10/2022 | 100 |
| Kabale District | Kabale Regional Referral Hospital | VL MPima cartridges | 43 | 3/12/2022 | 55 |
| *Average (expired/AMC) VL cartridges* | | | 100 |  | 50 |

## 3.5 EID/VL camps

Only 8 (*Moroto RRH, Kabale RRH, Kotido hospital, Tororo Hospital, Kapchorwa Hospital and Kamuli Hospital*) out of 69 health facilities responded in affirmative to conducting EID/VL camps during the support supervision and mentorship *(see table 10 below).*

On, averages, these tested 109 infants, with the highest (128) test conducted by Kamuli General Hospital *(See table 11 below).*

Table 10. Description of EID.VL camps

|  |
| --- |
| EID surge was conducted with help from IP where samples were collected from peripheral sites to the hub for testing. |
| It was not facilitated hence it did not happen |
| One camp was conducted in Oct 2022 where EID HIV VL samples were collected from nearby referring HC IIIs which had invited clients. It was a 5 days camp. |
| Outreaches and samples referral from lower health facilities |
| Physical follow ups and community sample collection |
| Samples are picked from lower facilities and sent to the hub for testing. |
| The IPs pick different staffs from different units from different facilities meet in a central point and start testing |
| They line list, mobilize, then do sample collection in both communities and at facility, test samples, document and give results back to facility. |

Table . Number of infants tested in the camps

|  |  |
| --- | --- |
| Statistic | Number of infants tested in the camps n (8) |
| Average | 109 |
| Min | 1 |
| Max | 228 |

## 3.5 EID/VL Results dispatch

Figure 6 below shows that, only 52(75%) of the health facilities indicated that results are dispatched from the testing point on the same day the test result is available from the device.

Figure . Results dispatch

## 3.6 GeneXpert Implementation and Performance

According to figure 7 below, thirty-Nine health facilities accounting for 56% were using GeneXpert machines/platforms.

On average, these were running three (3) samples on this platform. Majority (24%) were running one sample, 21% three and five samples respectively, 18% Two-samples and 13% were running four (4) samples on the GeneXpert Platform. The machines were majorly used to test sputum samples for TB/MTB (32%), followed by EID 25%, and Viral load 17% as presented in table 12 and 13 below.

Figure . Use of GeneXpert Platform

Table . Number of sample types run on GeneXpert Platform

|  |  |  |
| --- | --- | --- |
| **No. Samples** | **Count of No. Count** | **%** |
| One-sample | 9 | 24% |
| Five-Samples | 8 | 21% |
| Three-Samples | 8 | 21% |
| Two-Samples | 7 | 18% |
| Four-Samples | 5 | 13% |
| **Average** | 3 |  |
| **Mode** | 1 |  |

Table . Sample Type name

|  |  |  |
| --- | --- | --- |
| Sample Types | Count of Samples | % |
| Sputum/MTB/TB samples | 36 | 32% |
| Plasma/Whole blood for EID test/DBS PCR | 28 | 25% |
| Viral load samples | 19 | 17% |
| HPV samples | 14 | 12% |
| COVID-19 samples | 9 | 8% |
| Aspirates/Swabs | 3 | 3% |
| Cervical cells/Fluids/Samples | 2 | 2% |
| Urine samples/other body fluids | 2 | 2% |
| Grand Total | 113 | 100% |

The introduction of HPV testing increased the Turn-Around-Time for results and workload (24%) for EID testing services using GeneXpert Platform. The data however, revealed that 18% of the facilities did not feel any impact of the introduction of the HPV testing on the GeneXpert machine, 18% were using the M-Pima other than the GeneXpert to test EID samples, 15% were not testing/had not started testing for HPV, 12% had two/high module GeneXpert machines thus the workload was spread-out amongst them. -out spread-out to smoothen the process and 12% felt that the introduction of HPV had actually led to improved utilization of the GeneXpert

Figure . Impact of introduction of HPV testing on EID testing services Using GeneXpert Platform

According to table 14 below, EID samples (32%) are prioritized a head of the TB samples (29%) followed by Viral load samples at 27%.

Table . Samples prioritized for testing on GeneXpert machine

|  |  |  |
| --- | --- | --- |
| Sample Type | Count of Samples | % |
| EID samples | 19 | 32% |
| TB samples | 17 | 29% |
| VL samples | 16 | 27% |
| HPV | 3 | 5% |
| None | 3 | 5% |
| Covid tests | 1 | 2% |
| Grand Total | 59 | 100% |

Regarding the number of modules on the GeneXpert machines, majority 18(49%) had the 4-Module platform machine, 13(35%) with the 16-module platform machine and 6(16%) with the 8-module platform GeneXpert machine.

Table . Number of GeneXpert Modules

|  |  |  |
| --- | --- | --- |
| GeneXpert Platform | Count of Number of GeneXpert modules | % |
| 4 Module | 18 | 49% |
| 16 Module | 13 | 35% |
| 8 Module | 6 | 16% |
| Grand Total | 37 | 100% |

Over quarter (29%) of the facilities indicated that samples are stored in appropriate temperature and are tested the following day in cases where the samples to be tested for TB, EID, VL and HPV are many, 17% would prioritize EID samples, 20% would prioritize EID and VL samples, 10 would adjust on the working hours (work extra times) to reduce on the turn around time. 7% of the facilities visited with GeneXpert machines were prioritize TB samples, 7% indicated that they would refer the extra samples to other health facilities.

It should be noted that 10% of the facilities visited had not experienced such a scenario. The cited that all the samples received are manageable due to availability of adequate machines and/or the machines have high number of modules with capacity to handle the volumes received.

Table : Response to high receipt of samples

|  |  |
| --- | --- |
| Response | % |
| Samples are stored in appropriate temperature and are tested the following day. | 29% |
| EID and VL prioritized | 20% |
| Eid sample are prioritised. | 17% |
| Lab hasn't experienced such a scenario/Manages all samples at the lab/adequate machines/modules available | 10% |
| Adjustments are made on working hours, to reduce on the TAT | 10% |
| Facility refers samples to other facilities through the hub system. | 7% |
| TB samples are prioritized. | 7% |

# Section B: Alternative Entry Point Ward HCWs

This sub sections presents availability of screening for HIV status at Nutrition, Pediatric, In-patient, YCC, Maternity and TB clinics/departments; availability tools and adherence to processes.

Figure : HIV screening at Nutrition/In-Patient/YCC/TB clinic

According to results from the assessment as presented in figure 9 above, 75% of the health facilities confirmed that Infants admitted or seen in the Nutrition units, pediatric wards, in-patient wards, YCC, maternity and TB clinics are screened for HIV status. Seventy-six percent (76%) indicated laxity of staff to test asymptomatic infants has the major hindrance to infant screening, 10% cited inadequate or incomplete documentation of screening done, 10% mentioned knowledge gaps and 3% cited low staffing.

In regards to use of standard tools, only 80% of those that were screening were using a standard tool to screen the infants and further drop (66%) was noted among those using a standard process to screen the infants for HIV status other than using a screening tool.

Figure : HIV screening at Pediatric ward

HIV Screening for symptomatic infants in pediatric ward was done in nine (9) in every ten (91%) health facilities visited. All infants without HIV status of their mother on the child health card are screened for exposure status by either doing a rapid test to the mother or to the infant if biological mother can't be accessed.

Seventy-seven percent (77%) of them indicated that were using a standard tool to screen the infants which are embedded in HTS screening tool in the consolidated guideline for 2020. Fifty-four (54% were using a standard process to screen infants for HIV status other than using a screening tool. It should be noted that 72% were using both the standard tool and process to screen infants.

# Section C: Data Management and Reporting.

According to the table 17 below; Eighty-eight percent (88%) of the health facilities visited had a functional computer for lab data management. In turn 88% reported having an electronic LMIS installed to capture POC EID/VL data, however only 73% had eLIMS/ALIS up to date with the POC EID processes, consequently only 72% of the health facilities were using the electronic LIMS to report POC EID data. Among the 12% that indicated that they the computer was unfunctional or was missing included; Kumi HC IV, Buyinja HC IV, Walukuba HC IV, Cou Kisiizi Hospital, Bukasa HC IV, Amudat Hospital, Kamuli Hospital, Ober HC III, Patongo HC III. This was majorly (67%) due to ALIS not installed or it not being function as reported by Staff in Kapelebyong HC IV, Kabale Regional Referral Hospital, Apac Hospital, Rubongi Military Hospital, Ngora HC IV, Kitovu Hospital, TASO Gulu Special Clinic and Kumi HC IV. Other reasons for reporting included laxity of staff (25%) and lack of internet connectivity (8%).

Eighty-five percent (85%) reported having reliable internet connection to support data management and reporting. 82% were affirmative in regards to reporting on POC EID/VL. Eighty-three (83%) and 81% of EID and VL respectively is entered into Uganda EMR. Though, only 76% of the health facilities visited had a data officer or any other staff assigned responsible for data capture and reporting.

Regarding availability of HMIS tools, all facilities (100%) had the HIV Exposed Infant Register, EID dispatch form, HIV/ART care card and ART register available. There were slight shortages of with 99% of the health facilities having the Unsuppressed Register, Daily Activity Register for Viral Load and CD4 available (99%), HIV Exposed Clinical chart available (97%), Revised HMIS 105 available (96%) and POC EID Register available (91%)

Table : Data Management and Reporting

|  |  |  |
| --- | --- | --- |
| Data Element | Yes | No |
| **%** | **%** |
| Have a functional computer for lab data management | 88% | 12% |
| Health facility have an electronic LIMS installation for capture of POC EID/VL Data | 88% | 12% |
| Health facility have reliable internet connection | 85% | 15% |
| Health Facility have a data officer / any other staff assigned responsible for data capture and reporting | 76% | 24% |
| eLIMS/ALIS up to date with the POC EID processes | 73% | 27% |
| Reporting on POC EID/VL | 82% | 18% |
| Facility using the electronic LIMS to report POC EID data | 72% | 28% |
| EID data entered into Uganda EMR | 83% | 17% |
| VL data entered into Uganda EMR | 81% | 19% |
| HIV Exposed Infant Register available | 100% | 0% |
| HIV Exposed Clinical chart available | 97% | 3% |
| EID dispatch form available | 100% | 0% |
| POC EID Register available | 91% | 9% |
| Revised HMIS 105 available | 96% | 4% |
| Daily Activity Register for Viral Load and CD4 available | 99% | 1% |
| HIV/ART care card Available | 100% | 0% |
| ART register Available | 100% | 0% |
| Unsuppressed Register available | 99% | 1% |

# Section D: Appointment giving for ANC1 at MBCP

|  |  |
| --- | --- |
| **Documentation of EDD cohort** | |
| EDD Cohort Book/Register | 22(61%) |
| Improvised counter book | 7(10%) |
| Appointment register/book | 4(5%) |
| ANC register | 4(8%) |

|  |  |
| --- | --- |
| Total Number of women EDD cohorts in the appointment Register | **1964** |
| Total Number that came back for their appointments | **1788** |
| % of women in the EDD cohorts in the appointment that came back | **91%** |
| Total Number of women in the EDD cohorts expected for the 1st DNA-PCR appointment Register | **1538** |
| Total Number of women in the EDD cohorts expected for the 1st DNA-PCR appointment in who came back | **1233** |
| % of women in the EDD cohorts in the appointment that came back | **80%** |

# Section E: Use of the client audit tools

|  |  |  |
| --- | --- | --- |
| Data Element | Response | |
| No | Yes |
| *N (%)* | *N (%)* |
| Staff able to describe the use of the client audit tool –for Mother-Baby | 15(20%) | 60(80%) |
| The staff implementing the mother-Baby audit tool | 18(24%) | 57(76%) |
| All mothers and babies entered into the tool (Tool up-to-date) | 8(14%) | 49(86%) |
| Client audit tool integrated in EMR | 18(32%) | 39(68%) |
| Staff able to describe the reporting process | 2(4%) | 55(96%) |

Results from Eighty percent 60(80%) of the POC health facilities visited showed that the staff were able to describe the use of the client audit tool.

Seventy-six percent 57(76%) were implementing the mother-baby audit tool. These cited that the tool is utilized to identify services access needs for clients or those that missed a service to enable implementation of follow up and action. However, they cited inadequate training/orientation of staff on how to use the audit tool, absence of a computer, power and in stances the tool is not available at the health facility as the major hindrances to its utilization

# 4.0 Conclusions

Despite the challenges, POC VL and EID services are being implemented. Facility staff used the skills built for EID to support POC VL implementation. A number of gaps were identified due to the way the training was done, which needed the team to re-conduct onsite trainings if services are to be well established and for others mentorship was provided to better improve service provision.

# 5.0 Recommendations

* There is a need to cover all the 300 facilities implementing POC
* There is a need to have more regular support to the sites implementing POC so as to provide timely support and trouble shooting.
* Commodity challenges still remain and these need to be sorted both nationally but by also providing support to health facility staff on inventory management
* Data and connectivity challenges are still are big issues, these will need all stakeholders including IPs and MOH to be overcome by both providing computers as well as automating data from the devises into the CPHL VL and EID dashboard .

Appendix 1.

List of districts

|  |  |  |
| --- | --- | --- |
| **District Name** | **No. Health facilities** | **Percentage** |
| Kanungu District | 3 | 4.55 |
| Lira District | 3 | 4.55 |
| Gulu District | 3 | 4.55 |
| Kalangala District | 2 | 3.03 |
| Masaka District | 2 | 3.03 |
| Moroto District | 2 | 3.03 |
| Rukungiri District | 2 | 3.03 |
| Namayingo District | 2 | 3.03 |
| Jinja District | 2 | 3.03 |
| Buyende District | 2 | 3.03 |
| Agago District | 2 | 3.03 |
| Kampala District | 2 | 3.03 |
| Tororo District | 2 | 3.03 |
| Mbarara District | 2 | 3.03 |
| Bukomansimbi District | 1 | 1.52 |
| Kalungu District | 1 | 1.52 |
| Abim District | 1 | 1.52 |
| Kabale District | 1 | 1.52 |
| Kisoro District | 1 | 1.52 |
| Kotido District | 1 | 1.52 |
| Oyam District | 1 | 1.52 |
| Alebtong District | 1 | 1.52 |
| Apac District | 1 | 1.52 |
| Butambala District | 1 | 1.52 |
| Napak District | 1 | 1.52 |
| Amudat District | 1 | 1.52 |
| Amolatar District | 1 | 1.52 |
| Bugiri District | 1 | 1.52 |
| Iganga District | 1 | 1.52 |
| Kitgum District | 1 | 1.52 |
| Omoro District | 1 | 1.52 |
| Nwoya District | 1 | 1.52 |
| Mbale District | 1 | 1.52 |
| Busia District | 1 | 1.52 |
| Butaleja District | 1 | 1.52 |
| Bududa District | 1 | 1.52 |
| Kapchorwa District | 1 | 1.52 |
| Namisindwa District | 1 | 1.52 |
| Pallisa District | 1 | 1.52 |
| Kamuli District | 1 | 1.52 |
| Ibanda District | 1 | 1.52 |
| Isingiro District | 1 | 1.52 |
| Kapelebyong District | 1 | 1.52 |
| Kazo District | 1 | 1.52 |
| Kaberamaido District | 1 | 1.52 |
| Bushenyi District | 1 | 1.52 |
| Katakwi District | 1 | 1.52 |
| Serere District | 1 | 1.52 |
| Sheema District | 1 | 1.52 |

Health facility List

|  |
| --- |
| **Health facility list** |
| Moroto Regional Referral Hospital |
| Ober HC III |
| Buyinja HC IV |
| Kidera HC IV |
| Kalangala HC IV |
| Butenga HC IV |
| Kitovu Hospital |
| Bukulula HC IV |
| Abim Hospital |
| Kabale Regional Referral Hospital |
| Masaka Regional Referral Hospital |
| Kisoro Hospital |
| Kotido HC IV |
| Bwindi Community Hospital |
| Bukasa HC IV |
| Aber Hospital |
| Lira Regional Referral Hospital |
| Kambuga Hospital |
| Alebtong HC IV |
| Apac Hospital |
| Gombe (Butambala) Hospital |
| Matany Hospital |
| Karoli Lwanga (Nyakibale) Hospital |
| Amudat Hospital |
| Cou Kisiizi Hospital |
| Amai Community Hospital |
| Rushaka HC II |
| TASO Gulu Special Clinic |
| Jinja Regional Referral Hospital |
| Walukuba HC IV |
| Bugiri Hospital |
| Iganga Hospital |
| Gulu Regional Referral Hospital |
| St. Joseph's Hospital |
| Lalogi HC IV |
| Patongo HC III |
| China Uganda Friendship (Naguru) Regional Referral Hospital |
| St. Mary's Lacor Hospital |
| Anaka Hospital |
| Mbale Regional Referral Hospital |
| Masafu Hospital |
| Tororo Hospital |
| Rubongi Military Hospital |
| Kalongo Ambrosoli Memorial Hospital |
| Busolwe Hospital |
| Bududa Hospital |
| Kapchorwa Hospital |
| Magale (UCMB) HC IV |
| Pallisa Hospital |
| Murchision Bay Hospital |
| Kamuli Hospital |
| Mbarara Regional Referral Hospital |
| Bwizibwera HC IV |
| Ruhoko HC IV |
| Nakivale HC III |
| Kapelebyong HC IV |
| Kazo HC IV |
| Kaberamaido Hospital |
| Ishaka Adventist Hospital |
| Katakwi Hospital |
| Serere HC IV |
| Kabwohe HC IV |