TLC for your VLC: Clever ways to improve viral load testing coverage

Denis Mali, USAID, Moderator
Thomas Minior, USAID, Moderator
Kasakaire Joel, Makerere University Joint AIDS Program, Uganda
Blessing Osazee Airiagbonbu, Heartland Alliance, Nigeria
Jesca Basiima, Joint Clinical Research Centre, Uganda
Modifying Community Drug Distribution Points to Improve Viral Load Testing Coverage and Enhance Access to HIV Services in the Hard-to-Reach Areas of Mayuge District, Uganda

By: Kasakaire Joel
Medical Clinical Officer
Mayuge HClV
Mayuge District, Uganda

Local Partner Health Service
East Central Uganda,
Implemented by Makerere University
Joint AIDS Program (MJAP)
Introduction

➢ To achieve HIV/AIDS epidemic control by 2030, 95% of PLHIV in care must be virally suppressed (UNAIDS)

➢ Mayuge HCIV, Mayuge district in East Central (EC) Uganda aimed to achieve this for all PLHIVs who accessed care at the facility.

➢ This required scaling up viral load testing for all eligible PLHIVs in care

➢ By January 2022, only 78% (1053/1355) of the PLHIV in care had accessed a timely VL test
Challenges limiting timely access to VL testing included:

- 35% (447/1474) of Mayuge HC IV Tx-Curr comes from hard-to-reach areas (Islands, forest reserves)
- Mobility challenges for clients living in hard-to-reach areas to access ART services at Mayuge HCIV, a distant inland facility.
- High transport costs.
- Covid-19 travel restrictions.
- Missed clinic appointments by PLHIVs due for viral load testing.
**Interventions implemented**

- **Profiled and mapped clients** without an up-to-date VL test. These were **clustered** based on their locations.

- Majority were from forest reserves and Namugongo Island

- **Modified Community Drug Distribution Points (CDDPs)** in these localities to include unstable clients (New on ART, CALHIV, Non-suppressing, clients experiencing Interruption in Treatment)

- A modified CDDP established at Namugongo Island
Interventions implemented

- Multi-disciplinary teams conducted monthly visits to the modified CDDP sites to provide comprehensive HIV prevention, care, and treatment services, including VL testing.

- The team included a clinician, counselor, laboratory, and records staff.

- Health education, HTS to children/siblings/sexual partners, ART refills, IACs, VL bleeding, and HIV/TB prevention services.

Health worker serves clients at Namugongo Island CDDP.
Interventions implemented

- About 75 clients served per CDDP monthly
- Tracked clients eligible, and receiving a VL test at CDDPs on a monthly basis.
- CDDP peer leaders mobilized members to attend the clinic and follow up on clients that missed services including VL bleeding.
- CDDP leaders trained to conduct DBS for Viral load. These supported bleeding clients in the community that had missed an appointment.
- CDDP leader facilitated to transport DBS samples to the inland hub facility. This was done weekly, whenever a client was bled/other samples were available for testing.
<table>
<thead>
<tr>
<th>Category of clients served in the mCDDPs by Mayuge HC IV by June 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
</tr>
<tr>
<td>Males 147</td>
</tr>
<tr>
<td>Females 300</td>
</tr>
<tr>
<td><strong>Age</strong></td>
</tr>
<tr>
<td>0-19yrs 36</td>
</tr>
<tr>
<td>20+ yrs 411</td>
</tr>
<tr>
<td><strong>Suppression status</strong></td>
</tr>
<tr>
<td>Suppressed 429</td>
</tr>
<tr>
<td>Non-Suppressed 18</td>
</tr>
<tr>
<td><strong>Duration on ART</strong></td>
</tr>
<tr>
<td>New on ART (0-6mths) 48</td>
</tr>
<tr>
<td>6+mths 402</td>
</tr>
</tbody>
</table>
Results: VL testing coverage improved from 78% in Jan 22 to 95% by June 2022

<table>
<thead>
<tr>
<th>Months</th>
<th>Jan-22</th>
<th>Feb-22</th>
<th>Mar-22</th>
<th>Apr-22</th>
<th>May-22</th>
<th>Jun-22</th>
</tr>
</thead>
<tbody>
<tr>
<td>#Clients with up to date VL result</td>
<td>1053</td>
<td>918</td>
<td>1115</td>
<td>1203</td>
<td>1281</td>
<td>1336</td>
</tr>
<tr>
<td># Clients eligible for VL testing</td>
<td>1355</td>
<td>1353</td>
<td>1353</td>
<td>1352</td>
<td>1370</td>
<td>1390</td>
</tr>
<tr>
<td>% VL coverage</td>
<td>78%</td>
<td>68%</td>
<td>82%</td>
<td>89%</td>
<td>94%</td>
<td>96%</td>
</tr>
</tbody>
</table>
### Other indicators impacted by the intervention - Mayuge HC IV

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Jan 2022</th>
<th>June 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>VLC for children 0-19yrs</td>
<td>72% (70/97)</td>
<td>100% (110/110)</td>
</tr>
<tr>
<td>Overall Viral load Suppression</td>
<td>93% (1271/1367)</td>
<td>96% (1306/1366)</td>
</tr>
<tr>
<td>VLS for children 0-19yrs</td>
<td>73.5% 970/95</td>
<td>90.7% (88/97)</td>
</tr>
<tr>
<td>12 months retention</td>
<td>69% (31/45)</td>
<td>95% (57/60)</td>
</tr>
<tr>
<td>TX-MMD (3+ mths) overall</td>
<td>90% (1227/1370)</td>
<td>95% (1398/1472)</td>
</tr>
</tbody>
</table>
Modifying service delivery to hard-to-reach areas through a modified CDDP approach improves access to timely VL bleeding and other services among PLHIVs in care.
Discussion

- Identifying PLHIV challenges affecting access to care and adapting interventions to address them significantly improves access to services for clients in care in hard-to-reach areas.
Recommendations

✔ Profile and map clients missing services to understand barriers to service delivery.

✔ Modify CDDP service delivery model to include unstable clients, children, and adolescents

✔ Support multidisciplinary service delivery to modified CDDPs
Acknowledgements

- PEPFAR
- USAID
- Uganda Ministry of Health
- Mayuge District Local government
- Health Workers of Mayuge HC IV
- Makerere University Joint AIDS program (MJAP)
- USAID LPHS-EC, Uganda, staff
- Other USAID Partners in East Central Uganda

Contact:
Dr Moses Arinaitwe
Chief of party
USAID LPHS-EC/MJAP
marinaitwe@mjap.mak.ac.ug
ADDRESSING PROLONGED HIV VIRAL LOAD TURN AROUND TIME THROUGH PARTICIPATORY STAKEHOLDERS’ ENGAGEMENT; A CASE STUDY OF ACE 6 PROJECT INTERVENTION AT NIMR MEGA PCR LABORATORY LAGOS STATE NIGERIA

By: Blessing Osazee Airiagbonbu
Associate Director, Laboratory Services
### Nigeria has an estimated 1.9 million people living with HIV (PLHIV), 1.7 million of which are on ART. Viral Load (VL) is the gold standard for monitoring PLHIVs on treatment. In Nigeria, optimal Sample-Result Turn-around Time (TAT) is defined as 14 days or less. The Nigerian Institute for Medical Research (NIMR), a Mega PCR lab located in Lagos, Nigeria, functioned at a fraction of installed capacity due to several factors with resultant long Turn Around Time.

The PEPFAR/USAID-funded Accelerating Epidemic Control of HIV/AIDS cluster 6 (ACE 6) which is implemented by Heartland Alliance LTD/GTE commenced support for the facility’s PCR lab in January 2022. This study aims to demonstrate the program’s experience in addressing mitigating issues at NIMR and improving TAT at the lab through sustained support and periodic review of progress including proactively troubleshooting.

### Method
Between January and April 2022, 5 stakeholder engagement meetings were held with both the labor and administrative staff of NIMR, including the Director General’s Office. During these meetings, discussions focused on unveiling the challenges that hindered full capacity utilization of the lab. Interventions included provision of alternative power supply, improved communication among lab personnel and between the equipment supplier. Commodities were supplied as at when due.

Key performance indicators were jointly developed and tracked daily by both management of HALG and NIMR. Human Resource for Health was improved through recruitment and relevant trainings.

### Result

<table>
<thead>
<tr>
<th></th>
<th>Feb to July</th>
<th>Oct to Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samples Tested</td>
<td>45,846</td>
<td>119,631</td>
</tr>
<tr>
<td>Turn Around Time (Days)</td>
<td>63, 21</td>
<td>7, 7</td>
</tr>
</tbody>
</table>

In the four months pre-intervention, 45,946 samples were received and analyzed with an average turnaround time of 21 days. Between February and July 2022 (6 months time), 119,631 samples were received and analyzed with an average TAT that dropped from 12 days and steadied at 7 days for the last three-month post intervention.

The national TAT standard was achieved and surpassed despite the increased number of samples received in the Laboratory.

### Conclusion
Participatory engagement with stakeholders at PCR labs provides a sustainable means of improving lab functionality and reducing TAT. Relationship matters in getting desired results from laboratory personnel.  

---

**4th Annual Global Health Local Partner Meeting**
USAID Local Partner Health Services-Kigezi & Lango

Panel Presentation.

Title: Use of Quality improvement collaborative approaches to reduce treatment interruption for Facilities in Lango subregion

Presenter: Jesca Basiima
Quality Improvement Specialist
Background:

- **Interruption in treatment (IIT):** PLHIV make 28 days or more after missing an appointment for drug pick up.
- **IIT** is a major barrier to attaining clinical outcomes.
- Lango sub region has historically reported high numbers of client losses.
- In July-September quarter 2021, 4034 (7%) of the clients experienced IIT higher than the national target of <1%.

Objectives:

To reduce interruption in treatment from 5.7% as of Qtr. 4 2021 to < 1% by Q4 2022.

To reduce the cycle of interruption (CIRA) and Return to ART from 9.7% as of Q4 2021 to 2.0% by Q4 2022.

- 30 of the 59 supported sites that contribute 80% the TX _Cur were prioritised for intervention.
- Availed the sites with necessary registers to support data completeness, analysis and utilization.
- Supported WITS, indicator definition. Tools, clear roles, Sops, IIT improvement process.
- Daily client appointment monitoring & tracking for their clients.
- Strengthened referral systems: Facility Directorates, stakeholder contacts.
Client attachment to CHW for accountability and follow up.

- trainings to empower them, shared age specific messages Client literacy

Active missed appointment tracking:
- Line lists of clients who missed
- Daily register in missed appointment register
- Immediate phone follow up
- Home visit

- Assigning Clients to preferred DSD model
- Improving clinic processes like clear client flow charts,
- Role clarity.
- DSD color stickers.
- Clear data tracking & reporting
- Updating EMR daily.

Weekly review to fast track documentation and reports by the WITs were done by the facility team.

Health facility staffs auditing client files and updating the necessary registers.
**Results:**

- Client on preferred DSD Model improved 40% to 92%.
- Reduction in CIRA 9.6% to 3.3%.
- TX Cur improved as well.

**Lessons Learnt:**
- Collaborative efforts that support health care process analysis and regular data reviews promote favorable technical competencies and smoothens operations thus leading to improved patient care.
- Therefore, efforts to optimize their implementation should be supported.
- Improving processes for one area led to improvement in other areas.

**Additional results:**
- Missed appointment trends reduced from 28% in Jan 2022 to 8% by September 2022.
- Receiving services indicators improved from 80% Dec 2021 to 90% September 2022.
- Community attachment's improved (Jan- Sept 2022)
  - HEI 56% to 90%
  - CALHIV 86% to 98%
  - PLHIV 86% to 99%
Thank You

USAID’s Local Partner Health Services-Kigezi and Lango Activity is made possible by the support of the American people through the United States Agency for International Development (USAID) and is implemented by Joint Clinical Research Centre (JCRC)
Discussion and Q&A