



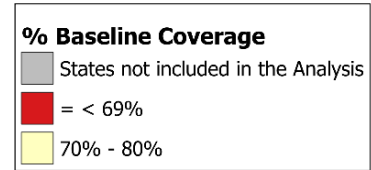
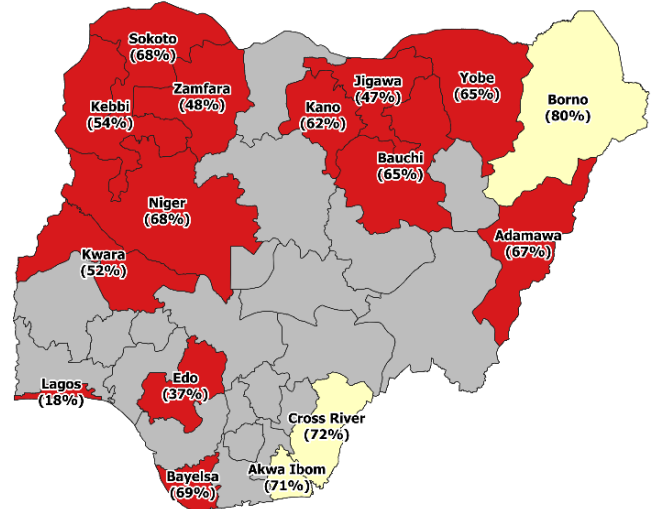
Improving Viral Load Testing Coverage across USAID-Supported States in Nigeria

INTRODUCTION

To effectively measure the global indicator of 95 percent of people living with HIV (PLHIV) on treatment having suppressed viral load (VL),¹ high VL testing coverage is required. Yet, in Nigeria—despite large investments by the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) to address the HIV epidemic and reach the 2030 goal—coverage of VL testing remains low.

In this brief, we highlight barriers to VL testing in 16 states in Nigeria with PEPFAR funded, United States Agency for International Development (USAID)-supported HIV programs, and present efforts by USAID implementing partners (IPs) and state governments to address VL testing gaps.

Figure 1. Viral load testing gaps across implementing states at the end of July 2020



DATA.FI’S ROLE IN THE VIRAL LOAD DATA REVIEW PROCESS

Data.FI conducts routine collation, validation, and analysis on weekly high-frequency reporting (HFR) data on VL indicators. The routine analysis results are then shared with stakeholders to monitor VL testing and suppression rates across the states, and in turn, stakeholders can make changes in HIV program implementation, as needed.

Steps in Assessing Viral Load Testing Gaps in Supported States

To enable effective monitoring of VL suppression, high coverage of VL services for PLHIV is necessary. According to the PEPFAR Monitoring, Evaluation, and Reporting (MER) Indicator Reference Guide (Version 2.4 FY20), a client who is initiated on antiretroviral therapy (ART) is eligible for a first VL test after three months of HIV treatment. Clients who are virally suppressed have a subsequent VL test six months after the initial test. Clients with an unsuppressed VL receive enhanced adherence counseling and repeat the test three months after the initial test.

To estimate VL testing coverage, we compared VL test results (TX_PVLS_D) received in July 2020 with the total number of patients on treatment (TX_CURR) at the end of Q2 FY20 (March 2020). The total number of active clients (TX_CURR) at the end of Q2 FY20 was set as a proxy for the number of clients eligible for a VL test, given that patients newly initiating ART in Q3 FY20 may not have been eligible for a VL test.

¹ To attain epidemic control, the Joint United Nations Programme on HIV/AIDS (UNAIDS) issued a fast-track strategy to reach the 95-95-95 goals by 2030: 95 percent of people living with HIV knowing their HIV status; 95 percent of people aware of their status being on treatment; and 95 percent of people on treatment having suppressed viral load (VL).

Low Viral Load Testing Coverage Found in 16 States

In the beginning of August 2020, Data.FI also conducted a geospatial analysis on VL testing coverage among PLHIV eligible for VL services across 16 USAID-supported states in Nigeria as of the end of July 2020. Findings from the preliminary analysis were presented at the USAID weekly virtual meeting with IPs held on August 4, 2020. The participants from the USAID HIV technical teams and IP strategic information and program technical teams took part in the meeting to review IP performance across the HIV care and treatment continuum.

Findings from the analysis revealed gaps in VL coverage across all 16 USAID-supported states. Only 60 percent (n=198,768) of eligible clients (N=328,934) were tested. The lowest VL testing coverage was observed in Lagos (18%), and the highest coverage was in Borno (80%). Thirteen of the 16 states had lower than 70 percent VL testing coverage (see Figure 1).

After the USAID meeting, IPs engaged with staff and stakeholders in their respective states to determine the root causes of low VL coverage. Data.FI followed up with IPs from August 5–7, 2020 by mail and phone to document problems fueling VL testing gaps.

In general, the barriers identified were related to structural components of program implementation. Causal factors included the following:

- **COVID-19 pandemic:** The number of visits by PLHIV to clinics dropped due to the COVID-19 pandemic. As a result, clients eligible for VL testing were not tested. In addition, some healthcare workers contracted COVID-19, which led to a shutdown of affected facilities for fumigation.
- **Stockouts of consumables:** Some facilities in the northern region experienced stockouts of VL testing consumables, which led to a low number of VL samples collected.
- **Laboratory delays:** There was a temporary breakdown of the polymerase chain reaction (PCR) machine at the University of Maiduguri Teaching Hospital (UMTH), resulting in delays in processing of samples.
- **Insecurity:** Insecurity in the northern region has rendered some supported facilities inaccessible to clients, presenting a challenge for collection of VL samples.

STRATEGIES TO ADDRESS VIRAL LOAD TESTING GAPS

The IPs proposed and implemented several strategies to address barriers to low VL testing coverage, and implemented these across the 16 states in August 2020 for a period of three weeks:

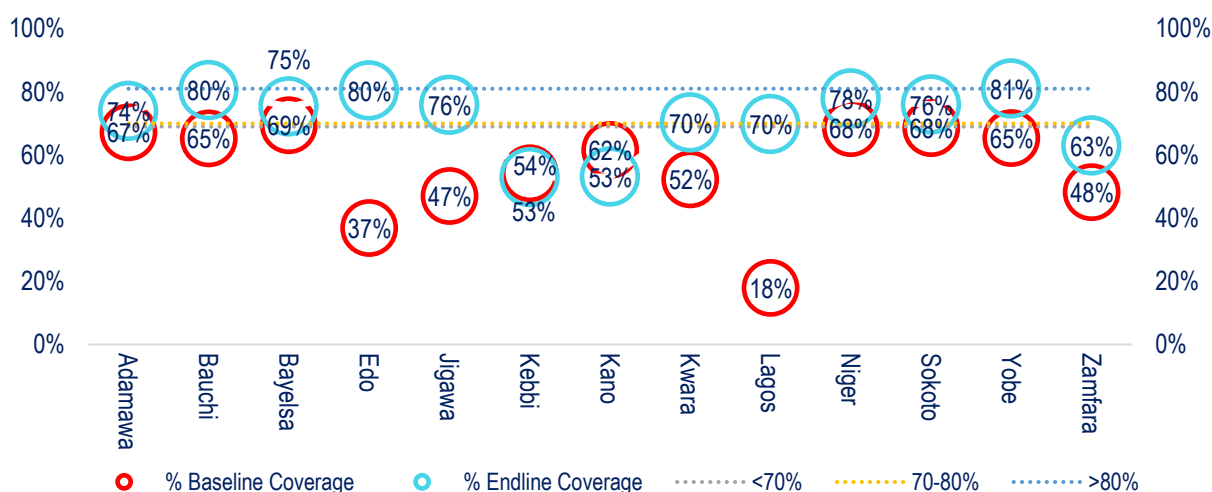
- **Deployment of a VL surge team to the communities:** Due to the drop in the number of facility visits, the state managers from each IP assembled a VL surge team and deployed them in communities. A case-management approach for collection of VL samples was adopted, and human resources for optimizing VL sample collection were improved by engaging trained and experienced case managers as phlebotomists.
- **Preventing stockouts:** IP project staff engaged with procurement and supply management staff to supply VL consumables to facilities identified as having stockouts. This was done by making a formal request for VL consumables through a biweekly form and ensuring routine tracking of consumable stocks.
- **Prevention of laboratory delays:** IP project staff consistently followed up with the primary PCR lab (UMTH) for a weekly update on the functionality of the machine and prompt resolution of any challenges. When necessary, IPs requested rerouting of VL samples to the closest PCR labs in the regions.
- **Keeping up-to-date client contact information:** IP project staff routinely updated clients' information on their electronic medical records and generated line lists to ensure the ability to

contact clients who might have relocated to other communities or internally displaced persons camps.

OUTCOME OF IMPLEMENTED STRATEGIES

Data.FI conducted a comparative analysis of the VL testing coverage baseline performance in July 2020 and the end line results in August 2020. This analysis showed a significant improvement in VL testing coverage compared to baseline across all 16 states reviewed. The average percentage of VL testing coverage increased from 60 percent coverage at baseline to 75 percent coverage at the end line assessment. Moreover, 10 out of 13 implementing states with less than 70 percent coverage at baseline recorded coverage greater than or equal to 70 percent at the end line (see Figure 2).

Figure 2. Reduction in VL testing coverage gap among states with the highest baseline coverage gap



STAKEHOLDERS SUSTAIN ACTION

To ensure continuous and sustained improvement to VL testing coverage, IPs will:

- Institutionalize the effective use of VL testing registers across all facilities in the implementing states
- Further strengthen the use of facility electronic medical record (EMR) and laboratory information management systems (LIMS) to automate the transfer of VL samples and test results from the facilities to the PCR laboratory
- Hold weekly coordination meetings for the IP laboratory technical team and PCR laboratory team, with an aim to resolve emerging challenges to VL services

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