

Applying a seven-step approach to rapidly improve viral load testing coverage: Lessons from Burundi, Nigeria, and Togo

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BACKGROUND

Viral load (VL) monitoring is the preferred approach for monitoring treatment outcomes for people living with HIV on antiretroviral therapy. Globally, VL testing coverage falls short of the 95% benchmark, and in 2021 was only 73%, 69%, and 35% in Burundi, Nigeria, and Togo, respectively. The FHI 360 Viral Load Action Group worked with three FHI-360-supported projects (Reaching an AIDS-Free Generation

[RAFG] Burundi, Ending AIDS in West Africa [#EAWA] Togo/Burkina Faso, and Strengthening Integrated Delivery of HIV/AIDS Services [SIDHAS] Nigeria) to implement a seven-step approach to examine barriers to VL testing coverage, develop and implement tailored plans to address barriers, and track progress to achieve optimal VL coverage.

METHODS

We implemented the following steps (Figure 1):

1. Developed the VL testing service chain framework to guide identification of gaps and address gaps (Figure 2)
2. Developed a 31-item VL testing coverage gap diagnostic tool in MS Forms to identify barriers at each step in the VL service chain
3. Developed an interactive analytic and visualization tool in Excel using PowerQuery and PowerPivot to generate graphs and tables
4. Applied the VL diagnostic tool in 10 provinces in Burundi, three regions in Togo, and two states in Nigeria

5. Used the data analytics and visualization tool to map gaps, decide which sites to prioritize, and develop VL testing surge plans tailored to the largest gaps

6. Implemented the VL testing surge plans
7. Tracked progress and provided feedback

We conducted a pre- and post-intervention analysis using routine data from the three projects to determine the effect of these interventions.

RESULTS

On the Burundi project, which began the interventions in March 2021, VL testing coverage across 161 health facilities increased from 34% in March 2021 to 83% in August 2021 — an average of 9.0% per month. This was greater than the 5.8% per month pre-intervention (p-value=0.01). In Togo, coverage across 24 health facilities increased from 6% in October 2020 to 93% in August 2021, with an average growth of 9.9% per month post-intervention (p-value=0.34). On the Nigeria project, coverage at health facilities in two supported states increased from 61% in October 2020 to a peak of 94% but dropped to 78% at the end of August 2021.

CONCLUSIONS

The multistep, structured approach tailored to country context improved VL testing coverage significantly. When scaled up, this approach could help close global VL testing coverage gaps.

FIGURE 1. The seven-step viral load coverage optimization intervention

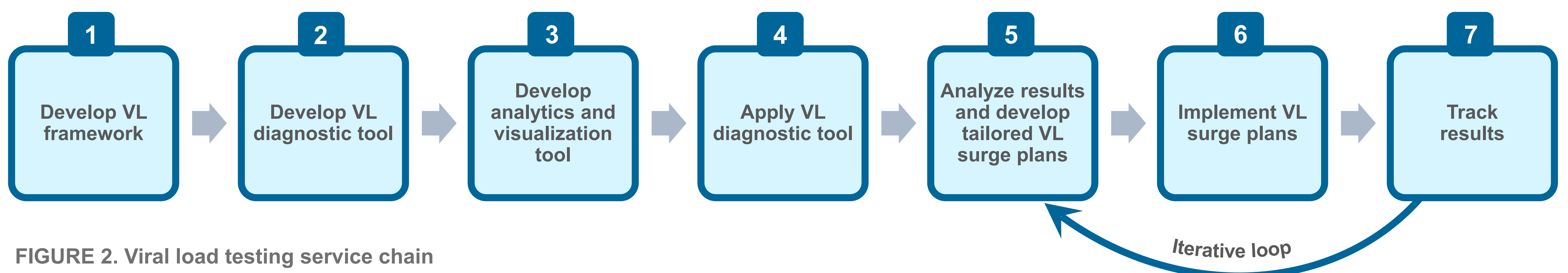
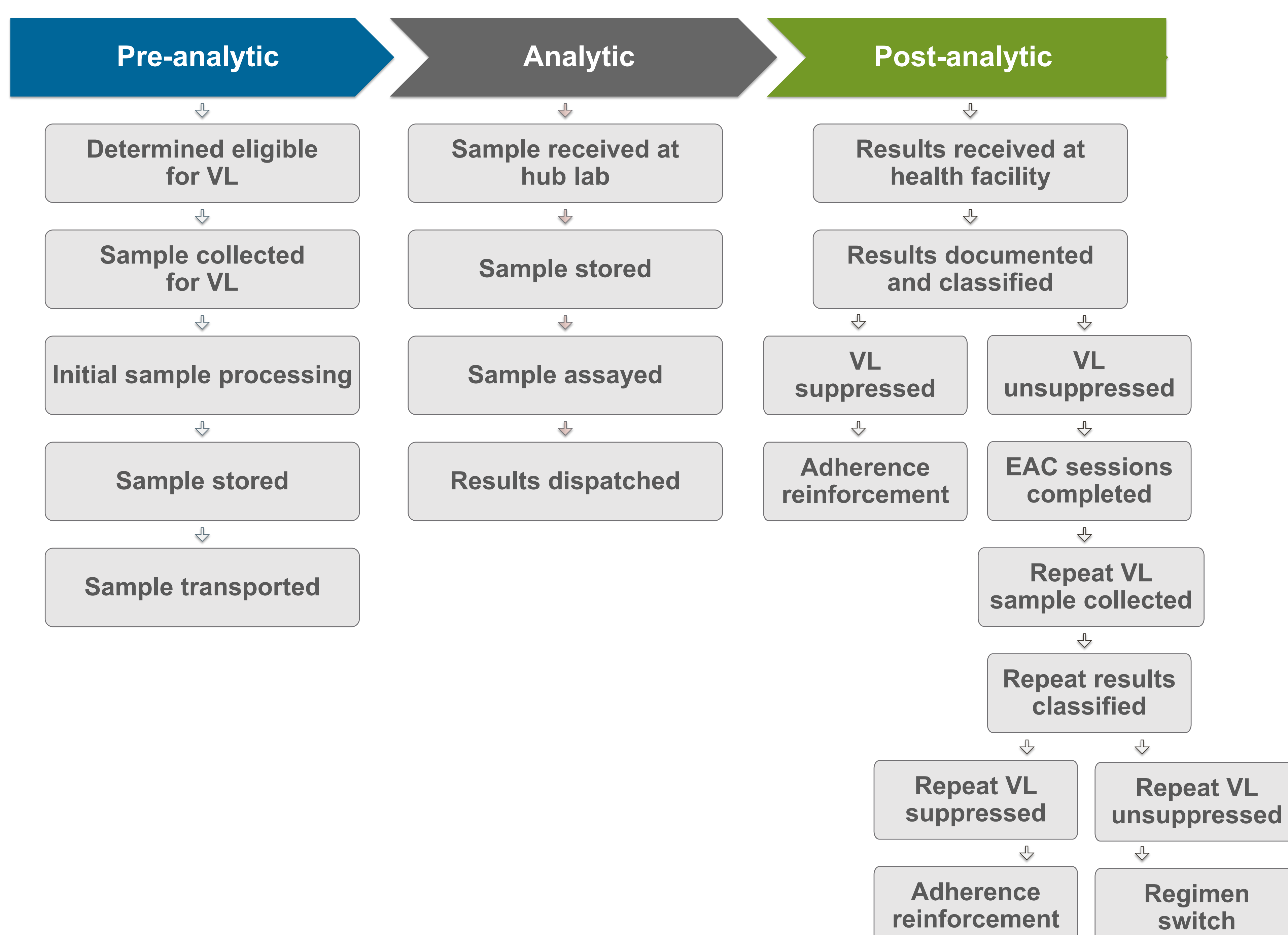


FIGURE 2. Viral load testing service chain



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