Current status of HIV viral load access in Sub-Saharan Africa

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Cascade of Routine Viral Load Testing and Key Indicators to Track Virally Suppressed Patients: 2020

* Denominator= Estimated # of PLHIV

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Southern and East Africa countries have higher VL uptake – LabCoP countries

- % of PLHIV on ART who received routine VL
- % of PLHIV on ART With Suppressed VL
- % of PLHIV on ART with UVL

Southern African country – LabCoP countries
- 74% – 65% – 89%
- 65% – 61% – 83%

East African country
- 64% – 57% – 60%
- 60% – 55% – 45%

West and Central African country
- 29% – 23% – 22%
- 29% – 23% – 22%

South Africa
- 35% – 17% – 17%
- 39% – 43% – 43%

Kenya
- 65% – 61% – 83%
- 65% – 61% – 83%

Malawi
- 64% – 57% – 60%
- 64% – 57% – 60%

Zambia
- 60% – 55% – 45%
- 60% – 55% – 45%

Nigeria
- 77% – 46% – 22%
- 77% – 46% – 22%

Sierra Leone
- 60% – 55% – 45%
- 60% – 55% – 45%

Uganda
- 78% – 46% – 26%
- 78% – 46% – 26%

Zimbabwe
- 54% – 54% – 57%
- 54% – 54% – 57%

Congo (DR C)
- 57% – 54% – 53%
- 57% – 54% – 53%

Cameroon
- 46% – 46% – 44%
- 46% – 46% – 44%

South Sudan
- 54% – 54% – 56%
- 54% – 54% – 56%
Factors affecting VL access and scale up

• Proximity to testing services facilities
• Technologies and viral load sample types
• Turnaround time to result
• Costs of Equipment and Reagents
• Supply chains reliability
• Sample transport network
Strategies for improving access to VL testing
Note: this slide only reflects the PCR testing labs used for VL testing in the public sector. This excludes private PCR testing labs or those used for research purposes. Some circle represent multiple labs in the same city.
48% [33% - 66%] of all patients\(^1\) are at facilities close to centralized labs and can transport samples within 24 hours.

Data based on facility level ART patient numbers from Kenya, Malawi, Uganda and Zimbabwe.

... and so are the largest ART facilities where patients seek care...

Can be accessed using EDTA blood.

Require alternative strategy.

\(^1\) Data based on facility level ART patient numbers from Kenya, Malawi, Uganda and Zimbabwe.
1 - Alternative sample types and technologies to plasma

- Dried blood spots
- Dried plasma spots
- Plasma preparation tubes
- Near POC
- VL for EID
2. Targeted POC/near POC VL for specific populations: patient centered approaches

POC VL is cost-effective;
Limited infrastructure
Simplicity
Fast Turnaround Time

BUT not a Silver Bullet -
3. Improving the sample transport networks

- Rider reaches each of the 20 to 30 health facilities under the hub catchment at least once a week,

- At each visit:
  - samples pick up
  - results drop off

100 hubs reaching 2500 to 3000 health facilities
~90% coverage
4. Diagnostic Network Optimisation (DNO)

- Optimize diagnostic services across the national tiered laboratory networks to do **more with less**!
- Situate point of care and conventional VL testing systems within diagnostic networks to increase coverage. Consider diagnostic integration – use of multiplex instruments
- GIS mapping – Improve functionality of national and regional laboratory networks by mutualising existing resources
- DNO lays ground for procurement innovations to reduce costs
  - Pricing innovations - All inclusive pricings, price per test, bundled pricing packages
  - Pooled procurement.
Improvements in the HIV viral load access benefit other diseases?

Some countries with better access to HIV viral load diagnostics were better positioned to respond to the COVID 19 pandemic.
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Challenges Described:
- Poor tracking system for clients with HVL – e.g. communication
- Poor documentation – e.g. HVL register ...
- Poor management of non-suppressed clients
- Poor monitoring & reporting – no clear indicator and reporting forms
- No standard implementation approach e.g. SOPs
Not enough viral load results are being used clinically.

Cascade of care after detection of virological failure. VL, viral load.


Reminder: Suppressed VL is also important for DSD.
Conclusion

• VL Scale-up in SSA has improved significantly in the past few years.
• Barriers to access still persist and patient-centered approaches are required to address them.
• A number of technologies and specimens at our disposal that can support expansion of viral load scale-up.
• As scale up intends to increase access, it needs to also focus on clinical utilization of results and fully demonstrated by data.
• We need to continue to implement these strategies/interventions FOR improving access, and to ensure results are being used in a systems approach.
Thank You