Introducing the M & E Sub-Community of Practice

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M&E Sub-Community of Practice

Laboratory Community of Practice Project (LabCoP)
The Laboratory System Strengthening
Outline

• The viral load testing continuum
• Rationale for M&E sub-community of practice
• Discussion on data elements and source for tracking VL Cascades
• Overview of strengths as weakness for M&E for VL as reported by countries
• Summary M&E sub-community of practice activity implementation plan

LabCoP
Laboratory System Strengthening
Samples collected and transported are tested. Results are returned and utilized. Pts with VL suppression referred to less intense models of care. Pts with elevated VL referred to intensified adherence counseling, resuppressed, or switched.

STAKEHOLDERS
- Laboratory staff
- Program managers
- Clinicians
- Civil society
- Policy makers
- Implementing partners

OUTCOMES
- Pts with VL suppression referred to less intense models of care
- Pts with elevated VL referred to intensified adherence counseling, resuppressed, or switched
Monitoring this continuum is critical in order to assess the impact of HIV treatment efforts:
- How are clients on treatment being managed?
- How effective is our HIV programming across the entire HIV care continuum?

Key indicators to monitor include indicators on:
- Availability
- Coverage
- Quality
- Utilization of results

Viral load measurement is an asset that is too precious to waste.
M&E Across Program Life Cycle

1. Strategic Planning
   What primary objectives should my program pursue to address this problem?

2. Design
   What strategy, interventions, and approaches should my program use to achieve these priorities?

3. Implementation/monitoring
   How do I know the activities are being implemented as designed? How much does implementation vary from site to site? How can the program become more efficient or effective?

4. Evaluation
   Do I know that the strategy is working? How do I judge if the intervention is making a difference?

5. Assessment
   What is the nature of the (health) problem?
Rapid Self-Assessment Checklist for National Lab Systems & Viral Load Testing Scale-up

Domains

1. Demand Creation for HIV VL testing
2. Specimen Management
3. Sample Transportation
4. HIV VL Testing process and result quality
   - QMS & standards
   - Waste Management and Biosafety
   - Supply Chain Management and Equipment Maintenance
5. Result delivery and utilization
6. Leadership and management
7. National Data on VL Testing coverage and result utilization

**National Data on VL Testing and ART**

7.1 Number of Laboratories currently carrying out HIV VL testing: ________ labs
   Number of VL testing Machines for different types: Abbott Alinity m: ________Roche Cobas 8800: ________
   Testing capacity of the national VL testing labs altogether: ________ tests/year
   - Total # VL tests done in the last 12 months: ________ tests/year
   - Please list the company(ies) if there is a national reagent rental agreement in place. Name the company(ies): ________

7.2
   - Estimated number of PLHIV in the current year:
   - #/% PLHIV currently on ART:
   - #/% PLHIV currently on 1st line ART regimen:
   - #/% PLHIV on ART eligible for a routine VL test:
   - #/% PLHIV on ART who received a routine VL test:
   - #/% PLHIV on ART who are Virologically Suppressed (<1,000 copies/ml) on routine testing:
   - #/% Virologically suppressed PLHIV referred to a less intense model of HIV care:
   - #/% PLHIV on ART with a VL of 2,000 RNA copies/ml who received Enhanced Adherence Counseling (EAC): ________
   - #/% PLHIV on ART with 21,000 copies/ml who received a follow-up VL testing within 3-6 months of Enhanced Adherence Counseling (EAC): ________
   - # of people with a >21,000 copies/ml who had suppressed VL at follow-up testing: ________
   - #/% PLHIV on ART with two consecutive VL test results of 21,000 copies/ml who SWITCHED to a 2nd or 3rd line ART regimen: ________

List 3-5 critical challenges of VL scale up in the country:

1. __________________________________________
2. __________________________________________
3. __________________________________________
4. __________________________________________
5. __________________________________________

Any comments/best practices/recommendations for VL scale up that could be applicable in other settings:

1. __________________________________________
2. __________________________________________
3. __________________________________________
4. __________________________________________
## What do countries report in section 7?

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Countries have challenges tracking the VL testing cascade

- It affects the ability to design targeted interventions to improve the cascade (where are the gaps?)
- It results in delays achieving the 3rd 95
- Questions related to epidemiology of HIV cannot be answered
Cascade of Routine Viral Load Testing and Key Indicators to Track Virally Suppressed Patients

Number of PLHIV on ART

Number of PLHIV on ART that require at least one* routine annual VL test (dependent on VL algorithm)

Number of PLHIV on ART who have access to viral load testing

Number of PLHIV on ART who received a viral load testing

Number of PLHIV on ART who are virally suppressed

Number of virally suppressed PLHIV referred to less intense model of care

*A patient generally requires a VL test 6 and 12 months after ART initiation, and then once every 12 months thereafter.

Source: Considerations for developing a monitoring and evaluation framework for viral load testing. Geneva: World Health Organization; 2019
VL cascade for patients with a non-suppressed VL test result (VL>1000 copies/mL)

*In general, a patient switching to 2nd line will receive a VL test 6 months after 2nd line initiation, and again at 12 months, and once every 12 months thereafter.

Source: Considerations for developing a monitoring and evaluation framework for viral load testing. Geneva: World Health Organization; 2019
How is the M & E framework for HIV VL designed in your country?
Example of an M & E evaluation framework

**Facility**
1. Clinician orders viral load test (monitoring and evaluation tool: viral load requisition form)
2. Sample collected with documentation of sample collection date (monitoring and evaluation tool: viral load requisition form, viral load sample logbook)
3. Samples packed and dispatch date added (monitoring and evaluation tool: viral load sample register, specimen transport log)

**HUB**
1. Samples arrive at laboratory hub (monitoring and evaluation tools: laboratory requisition form, daily sample laboratory log)
2. Samples sent to central lab for testing; hub dispatch date documented (monitoring and evaluation tool: specimen transport log)
3. Viral load results sent to subnational units, laboratory hubs and/or sites (hard copies and/or electronic results) (monitoring and evaluation tool: laboratory electronic system such as a laboratory information management system, viral load testing result form)

**Central Hub**
1. Laboratory requisition form data entered into the laboratory information management system (monitoring and evaluation tools: laboratory requisition form, laboratory electronic system)
2. Test performed and results added to the laboratory information management system (monitoring and evaluation tools: daily laboratory testing register, viral load testing result form, laboratory information management system)
3. Viral load results sent to subnational units, laboratory hubs and/or sites (hard copies and/or electronic results) (monitoring and evaluation tool: laboratory electronic system such as a laboratory information management system, viral load testing result form)

**Facility**
1. Viral load results received via hub transport network and/or electronically at facility sites (monitoring and evaluation tools: viral load test results form, laboratory information management system)
2. Data from results forms transferred to site monitoring and evaluation tools (monitoring and evaluation tools: patient records and charts, antiretroviral therapy register, viral load sample logbook, high viral load logbook)
3. Cross-check site-level viral load data with data in the laboratory information management system for data quality during preparation of quarterly reporting form (monitoring and evaluation tools: antiretroviral therapy quarterly reporting form, antiretroviral therapy register, laboratory information management system)
4. Routine review of viral load data for quality improvement and patient care management (monitoring and evaluation tool: antiretroviral therapy register, high viral load logbook, viral load dashboard, site summary reports)

**Subnational and National**
1. Subnational unit (such as a district) receives aggregated site-level data for inclusion in national HIV health management information system (monitoring and evaluation tools: antiretroviral therapy quarterly reporting form, DHIS2)
2. Review of viral load data at the subnational and national levels (monitoring and evaluation tools: DHIS2, laboratory information management system)
3. Data quality check to compare data in health management information system, receiving antiretroviral therapy quarterly reporting form with data entered into a laboratory information management system (monitoring and evaluation tools: heath information management system or electronic medical records, DHIS2, laboratory information management system, antiretroviral therapy register)

*Source: Considerations for developing a monitoring and evaluation framework for viral load testing. Geneva: World Health Organization; 2019*
What information can you pick from each? What are some of the decisions they can support you to make?
What are the questions that countries report being able to answer at national level?
What are the differences in virologic suppression rates between men and women on ART?

Which sites/service delivery points have particularly poor rates of virologic suppression?

What percent of samples collected are rejected due to improper or insufficient collection (including incorrect lab requisition form completion)?

What percent of pregnant or breastfeeding women on ART are virologically suppressed?

What percent of children on ART are virologically suppressed?

What percent of clients on ART virologically suppressed are on less intense model of care?

What percent of non-suppressed patients under went some adherence counseling interventions?

What proportion of non-suppressed patients received a follow-up (i.e. 2nd) VL test?

What percent of non-suppressed patients underwent some adherence counseling interventions?

What proportion completed the prescribed amount before being re-tested?

What percent of patients with a first non-suppressed VL test re-suppress after receiving adherence counseling interventions?

What percent of patients with persistently high VL have been switched to 2nd line ART?

What impact COVID-19 testing has had on VL testing?

Achieved

Gap
What percent of clients on ART virologically suppressed are on less intense model of care?

What percent of non-suppressed patients underwent some adherence counseling interventions? What proportion completed the prescribed amount before being re-tested?

What proportion of non-suppressed patients received a follow-up (i.e. 2nd) VL test?

What percent of patients with a first non-suppressed VL test re-suppress after receiving adherence counseling interventions? How does this vary by population (e.g., men vs. women, children vs. adults)?

What percent of patients with persistently high VL have been switched to 2nd line ART?

Discussion

1. Why is it difficult to get data to answer these questions?
2. What can we do to remedy this?
What are countries identifying as strengths and weaknesses of their VL M&E systems?
Availability of Monitoring and Evaluation Tools for Capturing Data Related to Viral Load

- Lab Information Management Systems (LIMS) and other systems at viral load testing labs and laboratory hubs
  - Available: 60%
  - Somewhat: 40%

- Aggregate health information systems (e.g. District Health Information Systems 2 (DHIS2))
  - Available: 80%
  - Somewhat: 20%

- Patient Monitoring Systems (electronic and/or paper): Patient charts, ART registers, ART cards, ANC registers, Postnatal Registers
  - Available: 60%
  - Somewhat: 40%

- High Viral Load Registers or Logbooks to follow-up patients who are not virally suppressed (i.e. VL≥1000 copies/mL)
  - Available: 50%
  - Somewhat: 50%

- Viral Load Results Form
  - Available: 100%

- Viral Load Sample Register/Logbook
  - Available: 100%

- Viral Load Test Requisition Forms
  - Available: 100%
Who are the actors involved in collecting, analyzing and reporting data for M&E in your country?
Team Representation

✓ Laboratory staff
✓ HIV care and treatment programme managers
✓ Health-care workers
✓ Supply chain management staff

Strategic information and monitoring and evaluation specialists

Key Resources

NB: Laboratory M&E systems is a long-term endeavor involving multiple stakeholders including government, development partners, implementing partners, the private and public sectors, communities and others. Identify strategic stakeholders to support in towards achievement of the expected outcomes.
Topical Presentation (Every 1st Thursday)

- **Session 1:** M&E fundamentals
- **Session 2:** M&E framework for laboratory program
- **Session 3:** Indicators for lab program monitoring and evaluation
- **Session 4:** Establishing data management systems and dashboards, and data triangulation for program monitoring.
- **Session 5:** Data Quality
- **Session 6:** Evaluations and Service quality assessments

Expected outcome

- M&E frameworks for VL testing services developed
- Roadmap for development/review of national level dashboards for tracking of viral load cascade developed
- Increased availability, access and use of VL data at all levels for decision making

"You can't manage knowledge – nobody can. What you can do is to manage the environment in which knowledge can be created, discovered, captured, shared, distilled, validated, transferred, adopted, adapted and applied.” ~ Chris Collison and Geoff Parcell
Thank You