VL DIAGNOSTIC TESTING SERVICE DELIVERY IN KENYA

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Outline

• Overview
• Policy and guidelines on scale up plan
• Lab capacity and sample referral
• Best practices
• QA/QMS
• Supply chain
Kenya’s Timeline; The VL Story

**2008**
- Testing labs -1
- No of sites - 4
- Samples - 102

**2012-2013**
- Sample shipment to the lab a major challenge

**2013-2014**
- Within lab testing was a challenge (TATs > 60 days)

**2015-2016**
- Results not reaching the sites
- 7 testing Labs

**2016-2017**
- Results reaching the site but not entered in patients

**2017-2018**
- No of testing laboratories 10
- Testing capacity
- 20 abbott
- 17 Roche CAPCTM
- 1 Roche c8800

**TAT days 22-25**
- Samples held for 2 weeks at collection sites/hubs
- Clear VL networks established

**TAT days 22-25**
- Onset of routine testing
- Work load overwhelming the equipment, HR & reagent stocks
- VL/EID TWG established

**TAT days 24-35**
- Improved lab capacities
- National database established
- Access of results by email/website introduced

**TAT days 13-22**
- Lab-clinical interphase needed
- Referral Networks reviewed
- Sample remote log-in implemented

**TAT days 7-10**
- Scale up of remote logging
- Improve relay of results by SMS text notification
Policy & guideline supporting VL& EID diagnostic testing

- Point of care testing policy: 2016
- Framework for the Implementation of HIV-Related POCT Policy & QA
- National Point of care testing implementation roadmap in Kenya
- Utilization of Multidisease Testing platforms for optimizing EID in Kenya
Testing Laboratory Networks

Key
- WRP
- KEMRI Busia
- AMPATH
- KEMRI Nairobi
- KNH CCC
- CPGH
- KEMRI Kisumu
- NHRL

Ministries of Health
Testing Laboratory Networks
Sample Referral System

- 2196 facilities referring samples
- 10 testing labs referral centralized testing labs)

**Means of sample transportation**
- Mixed model
  - National Contracted courier (G4S)
  - Motor riders
  - County partner contracted couriers

**Types of sample**
- 66% Plasma (facilities close to testing labs);
- 34% DBS (hard to reach areas)
Testing Capacity

- Current 38 conventional platforms in 10 VL/EID testing labs
  - Total Capacity (Per Year) = 1,801,440
  - Functional capacity (Per Year) = 1,441,152
  - Total Utilization (Year 2017) = 1,088,753
  - Percent Utilization = 76%

*Country has adequate capacity for current needs

<table>
<thead>
<tr>
<th>No of EID/VL HIV Molecular Platforms</th>
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<tbody>
<tr>
<td>ROCHE CAPCTM</td>
<td>17</td>
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<tr>
<td>ABBOTT</td>
<td>20</td>
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<tr>
<td>ROCHE C8800</td>
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For Kenya: functional capacity considered at 80% of total instrument capacity: equipment downtime, power interruptions, running of QC
Best practices

• Remote log-in
  – Improve data quality
  – Improve sample and results tracking by clinicians improving TAT leading prompt interventions

• Use of VL champions
  – National: support coordination of testing at referral labs
  – Site: support sample referral and result tracking at facilities

• Active TWG
  – Labs review their performance on quality indicators (TAT, rejection rates, failure rates, EQA performance)
  – Share best practices to standardize and optimize service delivery
  – National coordinating TWG have biweekly conference calls to review arising issues from the testing labs
Best Practices

• Lab- clinical interphase initiatives
  – Result interpretation
  – Follow up on rejections and redraws
  – Utilization of right tools for data completeness

• Weekly review of sample workload; Dashboard and SMS
  – Labs with backlog refer samples to designated backup lab to reduce TAT

• Different platforms for results access
  – Online access from respective lab URLs
  – National dashboard
  – Facility emails
  – SMS on facility phone and staff with rights of access
Best Practices

South to South collaboration:
Kenya acting as a ground for other countries (multidisciplinary and multi-agency teams) to learn from:

- Ivory Coast (Visited)
- South Sudan (Visited)
- WHO (Visited)
- Tanzania
- Guinea
- Mozambique
QA/QMS

- All lab Enrolled to VL/EID PT
  - CDC –GAP Atlanta Scheme
  - VL/EID PT interlab -peer comparisons
- Use standardized harmonized VL/EID tools
- Schedule trainings /Capacity building of testing personnel by the manufacturers.
- Quarterly QA VL TWG meetings for testing labs and stakeholders
- 8/10 labs are ISO 15189 :2012 Accredited,
- Regular Data Audit between systems and Registers
Supply Chain Distribution

Labs submit:
- Online data on equipment breakdown
- Monthly supply consumption reports
Acknowledgements

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- Testing labs
- PEPFAR (CDC, USAID, DOD)
- UMB
- CHAI
- APHL
- All stakeholders
Thank you