Establishing diagnostic connectivity network for laboratory data flow across POC systems – Mozambique approach

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POC Distribution in Mozambique
Flow of Information

Results transmission to Datapoint via Mobile Network

Users’ Access

Health Facility
Data utility

Connectivity Access

- Central Level (MoH & Partners)
- Provincial Level (MoH & Partners)
- Point Focal – Local Program Managers
<table>
<thead>
<tr>
<th>Activity</th>
<th>Objective</th>
<th>Outcomes</th>
</tr>
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<tbody>
<tr>
<td>Error Rates</td>
<td>Keep error rates controlled</td>
<td>Reduce COPQ</td>
</tr>
<tr>
<td>Operators’ performance</td>
<td>Identify operator related errors, testing and training gaps</td>
<td>Real time technical assistance, optimize patient flow and schedule refresher trainings</td>
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<tr>
<td>Stock levels and validities</td>
<td>Maintain optimal stock levels</td>
<td>Reduce expiries and stock outs</td>
</tr>
<tr>
<td>Instrument location and performance</td>
<td>Identify device location and faulty instruments</td>
<td>Reduce COPQ &amp; reduce testing stoppage</td>
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<tr>
<td>Patient’s coding</td>
<td>Monitor coverage of POC EID on alternative entry points</td>
<td>Improved device utilization</td>
</tr>
<tr>
<td>Testing algorithm</td>
<td>Monitor adherence to testing algorithm</td>
<td>Strengthen/ Improve adherence to national guidelines</td>
</tr>
<tr>
<td>EQA participation</td>
<td>Ensure EQA participation of POC sites</td>
<td>100% EQA participation of POC sites</td>
</tr>
<tr>
<td>Patient follow-up</td>
<td>Elimination of missed HIV positive cases</td>
<td>ART initiation of all infected babies</td>
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<tr>
<td>Results submission</td>
<td>Reduce POC sites’ downtime</td>
<td>Improvement of data accuracy &amp; monitor connectivity</td>
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Connectivity Improves POCEID Performance
Improving Adherence to EID Testing Algorithm

Adherence to Testing Algorithm

- Positive Tests
- Confirmed Positives
- % Adherence

Period:
- Feb-18
- Mar-18
- Apr-18
- May-18
- Jun-18
- Jul-18
- Aug-18
- Sep-18
- Oct-18
- Nov-18
- Dec-18
- Jan-19
- Feb-19
- Mar-19
- Apr-19
- May-19

% Adherence
- 0%
- 20%
- 40%
- 60%
- 80%
- 100%

# of cases
- 0
- 10
- 20
- 30
- 40
- 50
- 60
- 70
- 80
- 90
- 100
- 110
- 120

Note: The graph shows a trend of improving adherence to the EID testing algorithm over the specified periods.
Remote and proactive monitoring can support these areas
Centralized database - Alere Datapoint

Reference laboratories database

Two Core Data Streams

Verification of programmatic data

Paper-based submission captured into National EID Database

Mobile network transmission into POC connectivity portal

Health Facility
Challenges

• Mobile network limitations
• Operators’ work culture
• Staff rotations
• Management use of connectivity
Sustainability

• Manufacturer’s responsibility over connectivity – 100% costs coverage
• Partners engagement
• Local representative of Manufacturer
Thank you
Acknowledgements