African HEALTH PROFESSIONS Regional Collaborative

FOR LABORATORY TECHNOLOGISTS & TECHNICIANS

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Mozambique Viral Load Capability Maturity Model

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VL CAPABILITY STAGE FOR DEMAND CREATION FOR TESTING: SUMMARY

STAGE 1:

- Clinicians unaware of access to viral load testing and have not been educated on its role in ART monitoring

- Community leaders – CSOs unaware of access to viral load teting and have not been educated on its role in ART monitoring

- Patients unaware of access to viral load testing and have not been educated on what is viral load testing and its role in ART effectiveness monitoring
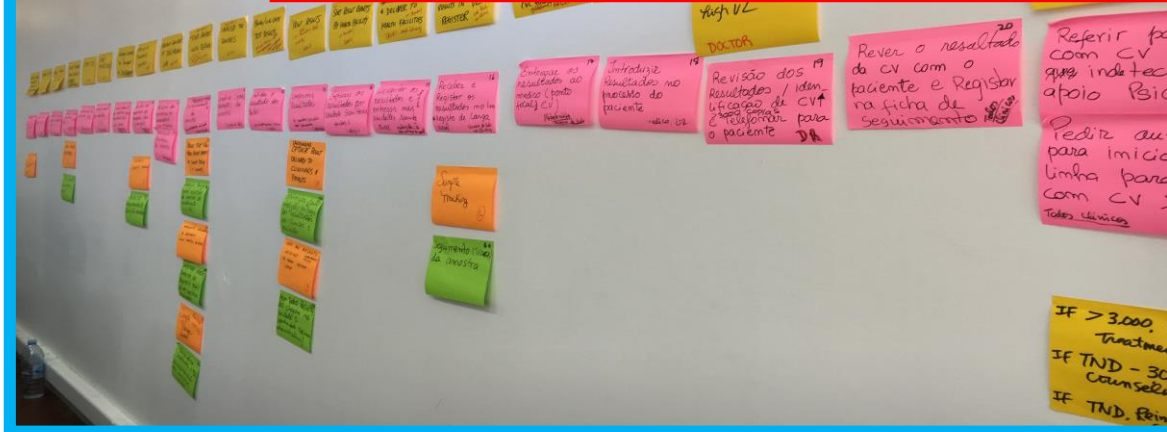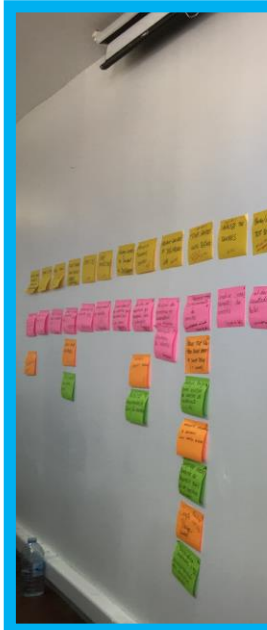
STRENGTH:

- Available Guidelines for VL testing

- Available Community Educators´ cadre

- Available daily platform for patient´s educators

- Available Cafe ART for health care workers

Improving the Demand for Viral Load Testing at Bagamoio Health Care Center in Maputo City, Mozambique

PROCESS MAPPING / IDENTIFYING OPPORTUNITIES FOR IMPROVEMENT: SUMMARY

Bagamoio Viral Load Process Mapping

Process Steps (1)

PROCESS STEP	WHAT HAPPENS?	WHO IS RESPONSIBLE?	OPPORTUNITIES FOR IMPROVEMENT
1. Identify patients who meet criteria for targeted VL testing	Refer to patient chart to determine eligibility (clinical presentation & CD4)	Clinicians – Physician, Technica medicina, Nurse	1) Identify all patients who need viral load; Unclear criteria for ordering VL/ Passive ordering of VL; 3) Unclear on country algorithm for when to order VL (MCH Clinic);
2. Order VL test	Complete lab request form	Clinicians	Multiple lab forms
3. Refer patient to lab	Pt carries form & goes to lab	Clinicians	In MCH - blood drawn by MCH for all but VL (potential attrition)
4. Collect sample from patient	Venipuncture – collect samples M-Th 6:30 to 9 am	Phlebotomist	1) Collect samples on Friday 2) Collect samples during clinic hours on all days 3) Syringe / blood draw tube packaged with DBS materials (Does not follow workflow)
5. Create DBS	Pipette blood to create DBS	Lab Tech	Employ best practices for DBS drying - 4 hours recommended

Process Step (2)

PROCESS STEP	WHAT HAPPENS?	WHO IS RESPONSIBLE?	OPPORTUNITIES FOR IMPROVEMENT
6. Store samples (DBS)	Store DBS	Lab Tech	Store in Lab until transport
7. Package Samples (DBS) for transport to lab (Jose Macamo)	Create patient sample list to accompany sample	Phlebotomist or Lab Tech	1) Create patient sample list for VL only 2) Use 2 identifiers - Include NID#
8. Pick up and Transport Samples		Driver / Partners	Improve Sample Tracking - Use 2 patient identifiers
9. Receive Samples at Jose Macamo	Check for complete requisition & Date stamp; Box (120 samples); Enter info into LIS & create 3 barcodes	Admin Staff	Let site know if sample inadequate or requisition incomplete 2) Consider Barcode on DBS card - ? proper identification
10. Store Samples until Testing	Store at Room temp	Lab Techs	1) Reduce time from sample receipt to testing; 2) Place in freezer (-70) if stored > 2 weeks; 3) Immediate notification of site if sample rejected

Process Steps (3)

PROCESS STEP	WHAT HAPPENS?	WHO IS RESPONSIBLE?	OPPORTUNITIES FOR IMPROVEMENT
11. Process DBS / Analyze the samples	Process into tubes & analyze	Lab Techs	1) Keep order of samples in amplification lab 2) Sample processing in separate room from amplification or use biosafety box
12. Review/ Validate Test Results		Lab Tech	
13. Print Results	Lab tech phones to say run is complete; Rescan barcodes to print results;	Admin Staff	1) Specimen transmittal log to assure all results/printed returned 2) Automate result delivery 3) Not all results delivered - ? admin staff training &/or improve process
14. Sort Result reports by Health Facility	Sorted by facility & put in envelopes; Await driver	Admin Staff	
15. Pick-up Reports & Deliver to Health Facility		Driver	

Process Steps (4)

PROCESS STEP	WHAT HAPPENS?	WHO IS RESPONSIBLE?	OPPORTUNITIES FOR IMPROVEMENT
16. Receive Results in Lab & check in VL Register		Lab Tech / Clinic	1) Sort results to identify high viral load; 2) Enter actual results in Lab register
17. Deliver result reports to the Doctor		Phlebotomist	Need designated person / workflow/designated place
18. Review / flag high viral load results & place into patient file		Doctor	
19. Refer to counseling		Doctor	Variable process
20. Call patient with results		Counselor	

Process Steps (5)

PROCESS STEP	WHAT HAPPENS?	WHO IS RESPONSIBLE?	OPPORTUNITIES FOR IMPROVEMENT
21. Counseling		Counselor	Educate / follow National Algorithm
22. Review results & complete patient chart (Use VL results for patient management) a) If Between TND and 3000, refer to counseling b) If > 3,000, request committee evaluation for switching to second line c) If TND, congratulate & reinforce behavior		All clinicians	Educate/ follow National Algorithm
23. Reorder VL test 3 months after receipt of 1st VL results		All clinicians	Tracking system for monitoring

Create Demand from the Clinician

Activities	Responsible	When
Harmonize the trainig tool for all clinicians	Isabel + Lúcia	8/10/2016
Update MCH data collection tool	Asína	8/17/2016
Develop/ modify new data collections tool for clinicians	Lúcia	8/08/2016
Train all Clinicians	Lúcia	8/10/2016

Create Demand from the Clinician (cont.)

Activities	Responsible	When
Implement training and data colletion tool	Lúcia	8/18/2016
Implement assessement	Isabel, Lúcia, Jessina, Luciana,Asína, Laura	8/31/2016
Meeting With clinicians (evaluation)	Lúcia	9/08/2016
Follow Up	Lúcia + Asina	Bi-monthly meeting

Increase Demand by Empowering the Patient

Activities	Responsible	When
Meet with CDC to develop advertisement material	Luciana	8/09/2016
Monitor data collection tool	Lúcia	All Fridays
Train all Clinicians to deliver education	Lúcia	8/08/2016
Conduct educational sessions for TB, Prevention, and Parent´s education	Lúcia	8/10/2016

Increase Demand by Empowering the Patient (cont.)

Activities	Responsible	When
Implement assessement	Isabel, Lúcia, Jessina, Luciana, Asína, Laura	8/31/2016
Meet With clinicians (evaluation)	Lúcia	9/08/2016
Follow Up	Lúcia + Asina	Bi- monthly meeting
Implement assessement	Isabel, Lúcia, Jessina, Luciana, Asína, Laura	8/31/2016