# TANZANIA LARC

## Result reporting

16th May, 2017

PIGGS PEAK HOTEL

SWAZILAND

African HEALTH PROFESSIONS
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# Tanzania LARC Team

# Country Team

## Laboratory Professional

**Core**

- Charles Massambu,
- Mike Mwasekaga
- Anyelwisye  Kabuye,
- Dickson Majige,
- Angelika Luguru ,
- Victor  and
- Erenest Lokoya

**From the site**

**Magreth  Msanga**

**Magreth   Lyimo**

## Nursing Professionals

**Core**

- Gustav Moyo ,
- Nassania Shango ,
- Ligmas Samwel
- Paul Magesa
- Lena Mfalila,

**From the site**

- **Sweet Ndurumaki**
- **Mwanamsham Jangama**

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# Mkuranga District Hospital

# Project Summary

| What are we trying to accomplish? | How will we know if a change is an improvement? | What change will we make that will result in an improvement? |
|---|---|---|
| Overarching Goal | Metric: AIM Statement | Intervention |
| **Impacting HIV+ patients management by assuring patients with high Viral Load (VL) receive timely enhanced adherence counseling** | Increase percentage of high VL patients with a documented return visit from 35% to 70% by 31st Jan 2017 and to 100% by 30th June 2017.<br><br>Metric: Number of high VL patients with documented return visit within 14 days after being called/ All patients with high VL results per month | ▪ Flagging System to highlight patient with high viral load<br>▪ Call/notify patients with high VL to return for EAC within 2 weeks<br>▪ Document EAC conducted |

# Elevator Speech

**This project is about**

Impacting HIV + patient management by assuring patients with High Viral Load receive timely Enhanced Adherence Counseling (EAC)

**As a result of these efforts,**

Patients will achieve HIV viral suppression

**It's important because we are concerned about:**

- ❖In country HIV epidemic control
- ❖Achieving 90/90/90 HIV&AIDS goals by 2020

**Success will be measured by showing improvement in:**

Percentage of HIV patients with high Viral Load receiving timely EAC (within 14 days of receiving call)

**What we need from you –**

Continued Technical support and commitment

LARC project Stakeholder

- MoHCDGEC
- District Health administrators
- Hospital Management
- CTC and Laboratory health workers
- We shared information about the LARC project with our stakeholders by actively engaging them in meetings.
- we have an excellent team sprit and ownership at the facility level because all the health care workers are actively involved in the Project Implementation.


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# Process Mapping

| Process Step | What Happens? | Who is responsible? | Duration | Forms/logs | Opportunity for Improvement | Remarks/status |
|---|---|---|---|---|---|---|
| 1. Check in at CTC Clinic | CTC 1 Card accepted; Triage; File pulled | Nurse | Minutes | CTC 1 Card; CTC 2 Card | Updating CTC 2 – no place for Viral Load (VL) tracking | CTC 2 updated to accommodate the Viral Load (VL) tracking |
| 2. Identify eligible client for Viral Load (VL) test | Review the file; Identify clients eligible for VL test according to country protocol | Nurse | Minutes | Patient file with CTC 2 Card; National Guidelines | flagging on patient file or highlighting on CTC VL Register to identify HVL pts or those due for VL testing | Patient files are being flagged<br><br>Register to identify HVL pts or those due for VL testing in place |
| 3. Educate & Obtain Consent for VL Test – Group or Individual | Explain VL testing/significance; Obtain verbal consent for VL testing | Nurse | Minutes | | Let patients know that if VL results are abnormal, they will be called and should be prepared to return early for next appointment; Standardized VL education material | Information about being called is being provided before sample collection.<br><br>Standardized education material reviewed. |
| 4. Obtain Anthropometrical Measurements - Check-In | Obtain BMI, BP, breathing, | Nurse | Minutes | CTC 2 Card | No Streamlined Check-in process | Streamlined process for check in is in place |

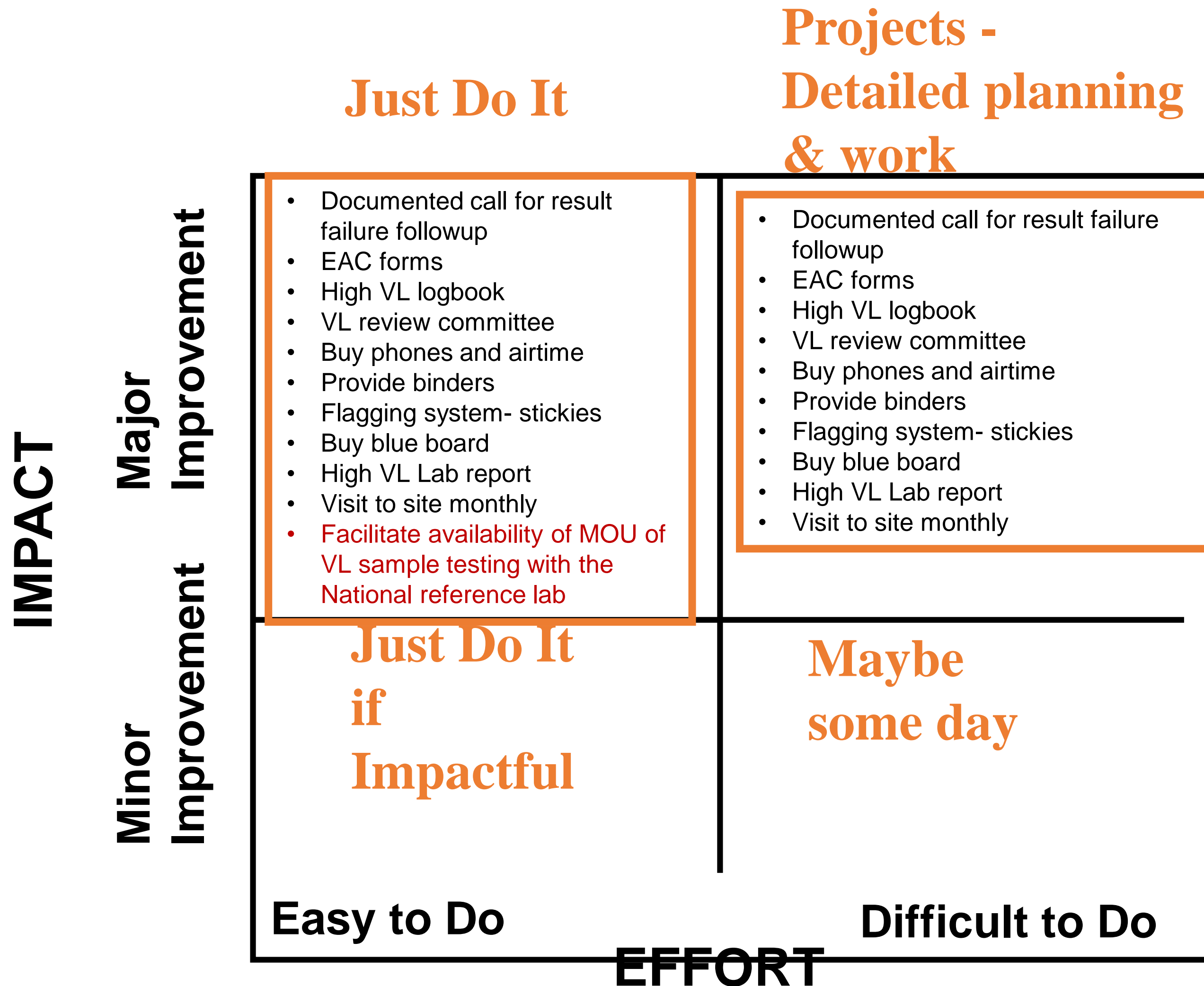
| Process Step | What Happens? | Who is responsible? | Duration | Forms/logs | Opportunity for Improvement |
|---|---|---|---|---|---|
| 5. Examine Patient | TB screen (standardized tool), OI Screen; Document on CTC 2 card | Clinician | Minutes | Patient File | Updated CTC 2 Card; flagging of patients who need an initial VL test |
| 6. Order Viral Load (VL) | Complete VL request form | Clinician | Minutes | HVL Laboratory Request Form | Provided VL laboratory requisition forms |
| 7. Document in CTC VL Register | Record in CTC Registration Book & VL Log Book; Assign Lab ID or look up if done before; Validate completeness of VL requisition form; Set up follow-up appointment | Nurse | Minutes | HVL Laboratory Request Form<br><br>CTC VL Register<br><br>Appointment book | Incompletely-filled VL lab request forms; Multiple Logs; No way to follow-up if patient returned for f/u appointment; Challenges in assigning "Lab ID" - currently assigning serial numbers as patients come |
| 8. Escort to lab | Escort patient | Peer Educator | Minutes | | |
| 9. Register patient in Lab | Check Request Form for completeness; Register in Lab register; Check if other tests requested | Lab technician | Minutes | HVL Laboratory Request Form<br><br>HIV Viral Load Facility Register (Lab Register) | |

| Process Step | What Happens? | Who is responsible? | Duration | Forms/logs | Opportunity for Improvement |
|---|---|---|---|---|---|
| 10. Draw patient's blood (phlebotomy) | Patient education; Sample collection | Phlebotomist | Minutes | HVL Laboratory Request Form | |
| 11. Process Sample | Centrifuge; Store Plasma at 2-8 degrees if necessary | Lab Technologist | Minutes – 3 days | | |
| 12. Prepare sample for Transport | Package sample; Complete manifest; Transfer to Peer Educator | Lab Technologist | Minutes | HVL Sample Manifest | Future Point of care Testing |
| 13. Transport Sample | Load bus fare; Check manifest, verify & sign; Receive samples in cooler box; Deliver to National Reference Lab (NRL) | Peer Educator | 4-8 hours | HVL Sample Manifest | Biosafety training for peer educator; Concerns re: Biosafety in transport (public bus system); Bus fare not loaded on phone; |
| 14. Deliver samples; | Samples delivered to testing lab; Manifest reviewed & signed; Sample handoff; Specimen rejected if does not meet criteria | Peer Educator; NRL VL lab technician | Minutes | HVL Sample Manifest; NRL Sample Receiving Log | |

| Process Step | What Happens? | Who is responsible? | Duration | Forms/logs | Opportunity for Improvement |
|---|---|---|---|---|---|
| 15. Test Sample | Sample received, stored, tested & results reported | NRL VL Medical Laboratory Scientist | 2-4 weeks | Electronic Report → Printed | Result delivery not electronic (SMS or or wireless printer for NK site); No monthly high VL report to site |
| 16. Collect Results at NRL/Transport to NK Clinic Lab | Results dispatched to peer educator; Dispatch book signed | NRL VL Medical Laboratory Scientist; Peer Educator | 0.5 day | Result Dispatch Book; Printed laboratory reports | Improve lab result report – Standardize reporting (e.g., TND, Not detected, <20), Add clinical decision support to report & Flag high VL |
| 17. Receive / Register Results / Dispatch to CTC | Receive results; Transcribe into Lab Register; Transcribe to paper VL Request Form; Document time/date delivery to CTC | Lab Technician | 1- 2 days | Patient's HVL Request Form; HIV Viral Load Facility Register (Lab Register); HIV Viral Load Dispatch Log | highlighting of high VL results; |
| 18. Enter results into Data Base / Sort into high & low values | Hand off form signed; Results entered in data base & | Data Clerk | 1-2 days | Hand-off form; VL Request Form with transcribed result | highlighting of high VL results |

| Process Step | What Happens? | Who is responsibl e? | Duration | Forms/logs | Opportunity for Improvement |
|---|---|---|---|---|---|
| 19. Place results in patient file | Recorded in CTC VL register & High VL Log Book; Place report in patient file; Transcribe results to CTC 2 Card | Nurse | 1-3 days | CTC VL Register; High VL Log Book (Register) | No flagging files or highlighting CTC VL log to identify HVL pts or those due for VL testing; No patient notification of HVL results (e.g., No Phone); No communication log - no place to record if called; No method to track follow-up; i.e. did patient return for scheduled appt. (Suggest appointment book); No national high VL register |
| 20. Initiate EAC at next visit | EAC initiated; | Nurse | 1 month | High Viral Load Counseling From (now in CTC Clinic) | No EAC Forms; No place to track when next VL is due if patient is compliant – suggest EAC form redesigned to include “decision point”; |
| 21. EAC #2/#3; Continued ART dispensing | Additional EACs; Pharmacist dispensing additional monthly ART | Nurse / Pharmacist | 2 months | | No pill count recorded - Pharmacist not engaged in pill count; |
| 22. Check 2nd viral load if patient compliant | | Nurse | After 3 months | | Inconsistent implementation of country algorithm – I.e., ordering of 2nd VL, No pill count recorded; No place to record when follow-up VL due if pt. compliant; |

# IMPACT / EFFORT GRID A Tool for Prioritizing Opportunities

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| JUST DO IT - HIGH IMPACT & EASY TO DO | PROJECT |
|---|---|
| Documented call for result failure followup<br>Availability of forms for EAC<br>To have logbook for high VL result and EAC<br>Formulating VL review committee<br>Buy phones and airtime<br>Provide binders<br>Flagging system stickies<br>Buy blue board<br>High VL report visit to s ite monthly<br><br>**Facilitate availability of MOU of VL sample testing with the National reference lab** | Mornitoring time to pick up results from testing lab after calling the facility<br><br>Reduction of TAT<br><br>Mornitor actual TAT<br><br>Providing bus fee for sample transportation by peer group<br><br>Having standard result reporting<br>Create SOP<br><br>Mentorship &training<br><br>Availability of policy |
| | MAYBE SOME DAYS<br>Provide VL machine<br>Provide vehicle for sample transportation<br>Staff employment |

People
- No VL review committee
- Shortage of staff
- No mentorship and supportive Spv

Process
- Long distance sample transportation
- TAT

Materials / Supplies
- No availability of EAC forms
- No VL Lab request Forms

Environment
- Limited clinic space

Policy / Procedure
- Inadequate staff knw on VL
- No sops (EAC,VL)
- Fewer workers decide on VL

Equipment
- No mobile phones to call HVL pts
- No airtime
- No Noticeboard ,Folder
- No VL machine on site

Patients with HVL does not Receive EAC timely

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- **Gap Identified (Problem):**

High viral load results are not acted upon with appropriate timely follow up action

- **Aim Statement:**

Increase percentage of high VL patients with a documented return visit from 35% to 70% by 31$^{st}$ Jan 2017 and to 100% by 30$^{th}$ June 2017.


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Define | Measure | Analyze | Improve | Control

## Baseline Data

- 171 VL patient files reviewed (300 VL test specimens collected at Mkuranga from July to September 2016; however 129 specimens were requested to be recollected due to internal quality control failure)
- 66 patients had HVL results (viral copies greater than 1000)
- 23/66 (35%) patients had documented return EAC visits


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# Action Plan

| Action Item | By whom? | By When? | Status |
|---|---|---|---|
| Photo copying 1000 EAC and 2000 VL forms , Tagging files with High Viral Load | Magesa | October | done |
| Purchase mobile phones and Smart phones | Magesa | October | done |
| Data collection | Victor | February | done |
| Training of HW on Viral Load | Ligmas | March | done |
| Formulation of VL technical review committee | Anyelwisye | March | done |
| Monitoring and Evaluation | Core LARC team | Every two Weeks | On going |
| Site Visiting | Core LARC team | At least monthly | On going |
| Active communication | Ligmas | Weekly | |
| | | | |
| | | | |

- **Data Collection Plan / Tool –**
  - Data was evaluated and entered into a run chart monthly (Data closing period for each month will be the 15th of the following month)
  - Review / Analysis of results monthly (Victor) to guide implementation

| UNIQUE CTC NUMBER | Age | SEX | Viral Load Results (cp/ml) | Date of Viral Load Testing | Date of Viral Load Results at CTC | Phone Call Made /Appointment Date | Follow-up Visit for EAC |
|---|---|---|---|---|---|---|---|
| | | | | | | | |



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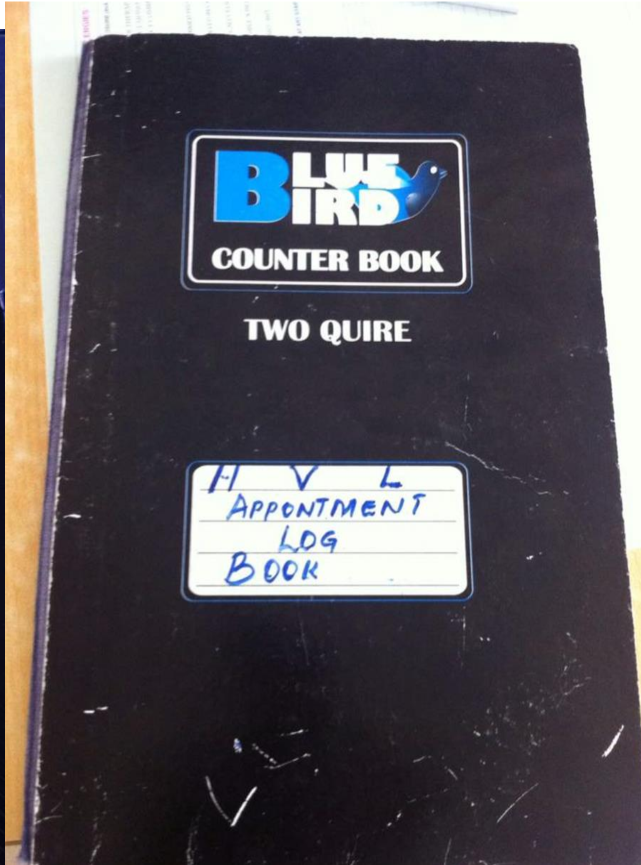
The following interventions were done to come up with success .LARC project supplied clinic &Lab with blue board, stationaries,cellphone, airtime and supportive supervision and mentorship on site.

Define | Measure | Analyze | **Improve** | Control

- Just Do Its

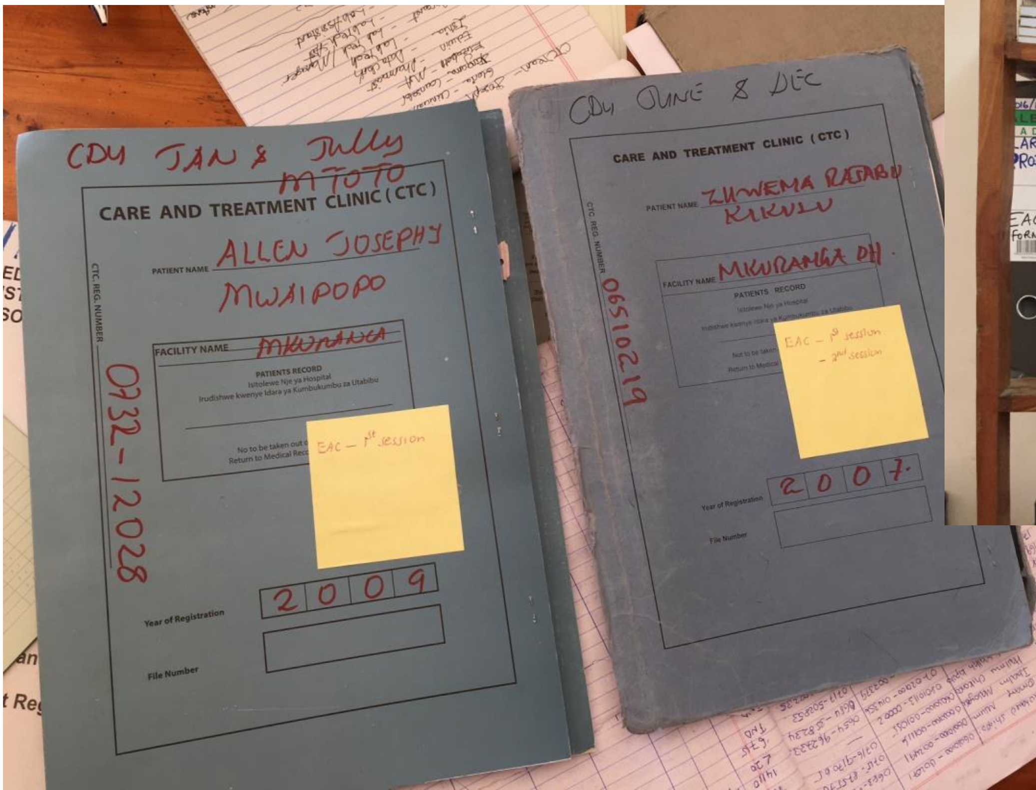
EAC
1st session 08/03/17
2nd session 10/04/17
3rd session 11/5/17



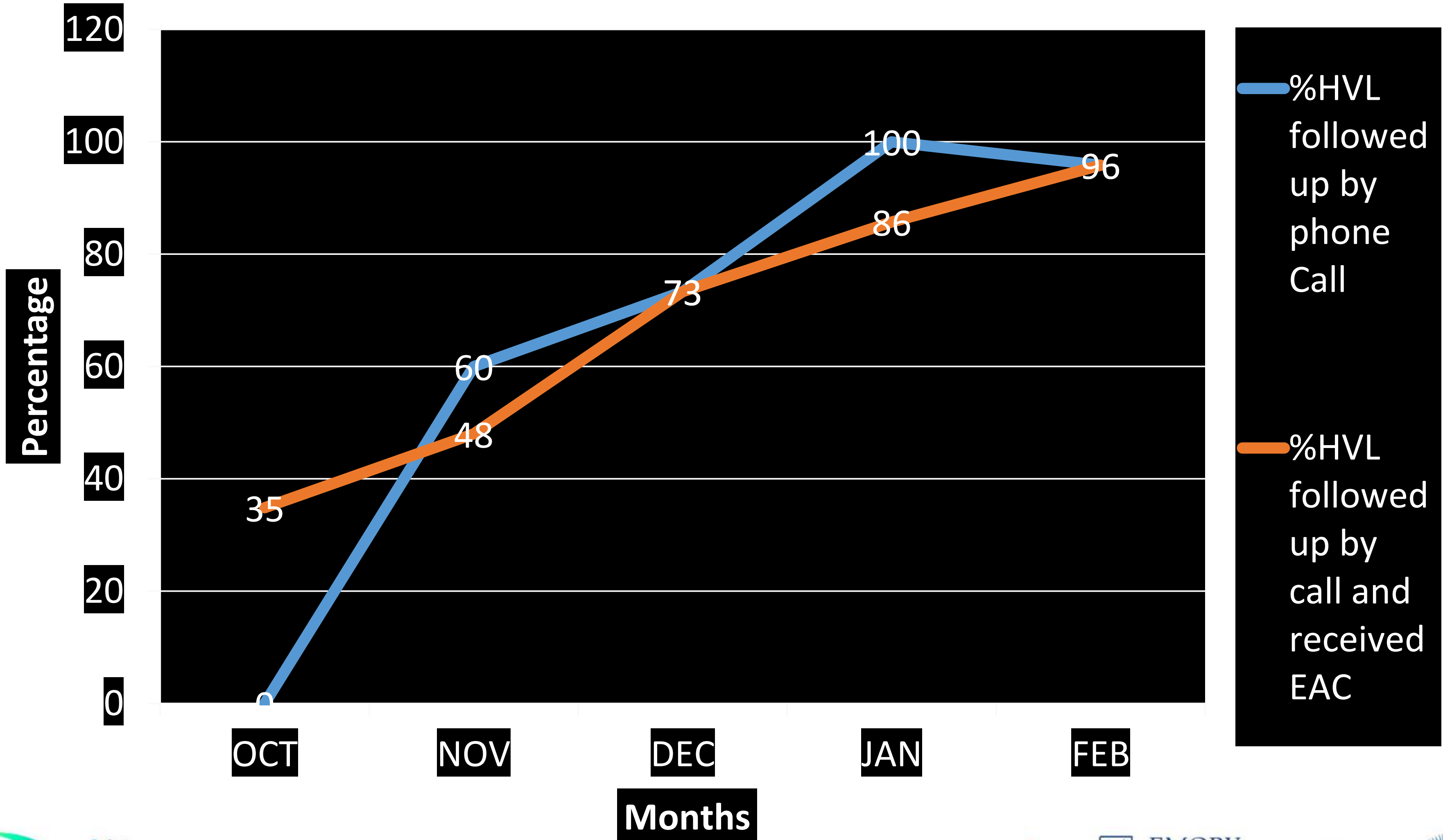

20/02/2017

# Results to Come

# Visual Management



# Results

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# Results to Come

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# Tanzania: Results Reporting

| Stage 1 | Stage 2 | Stage 3 | Stage 4 | Stage 5 |
|---|---|---|---|---|
| ☐ Results are not received in a timely manner at the clinic from the laboratory<br><br>☐ Results are not recorded in the client's chart in a timely manner<br><br>☐ No standard operating procedures for results reporting and documenting results in the client's chart<br><br>**AUGUST 2016** | ☐ Results are occasionally received in a timely manner by the clinic from the laboratory<br><br>☐ Results are occasionally recorded in the client's chart in a timely manner but often not returned to clients<br><br>☐ Standard operating procedures for results reporting and documenting results in the client's chart are in development<br><br>**NOVEMBER 2016** | ☐ Results are regularly received by the clinic in a timely manner from the laboratory<br><br>☐ Results are regularly recorded in the client's chart in a timely manner and returned to the client regularly<br><br>☐ Results reporting and chart documentation standard operating procedures are established and implemented across the organization<br><br>**NOVEMBER 2016** | ☐ Organization reviews routinely collected program data to measure performance in relation to standard operating procedures and national guidelines for results reporting<br><br>☐ Clinic ensures a facility-based person is accountable for timely recording of VL results in client charts and notification of clients with VL>1000 to return to clinic prior to scheduled appointment | ☐ Organization uses rigorous evaluation procedures and findings to demonstrate effectiveness and improve the process for results reporting |

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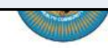

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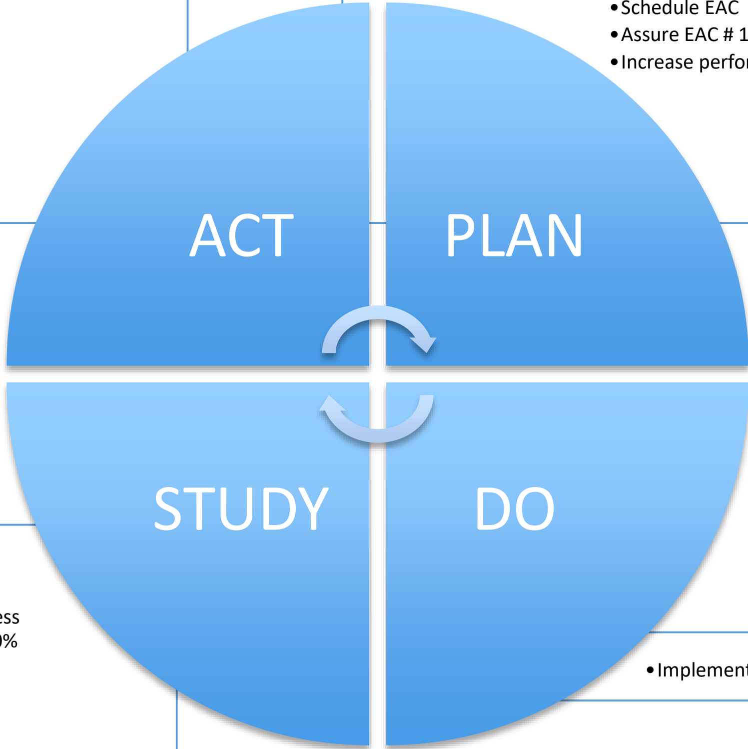
# PDSA #1

- Standardize the solution
- Develop measures to new gaps
- Implement PDSA #3




- Call ↑VL pts within 48hrs
- Schedule EAC
- Assure EAC # 1
- Increase performance from 86% to 100% by January 2017

- Evaluate monthly progress toward the target of 100%

- Implement the plan from November to June 2017



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# Questions for Thought

- Continuous inter-cadre collaboration was facilitated by;
  - Meeting with entire staff during each site visit (clinician ,Lab personnel ,Data clerk , Pharmacist, Medical attendant)
  - Everyone is able to give the AIM statement

- The project leveraged existing VL in-country initiatives as it is assisting in quality HIV services and improved clinical health outcomes of patient

# Lessons learned

- Are there lesson learned?
- Yes,the team learned that it is possible to achieve more just by :-
  - Providing supportive supervision &mentorship
  - Supplies
  - Team work-like inter-professional cooperation
  - Effective communication among team members
  - Airtime patient calling for return visit

# Lesson learned

- What will you do differently in the future?
- The following will be our strategies for future:-
  - To expand the scope from one site to sites

# Challenges / Changes

**Challenges**

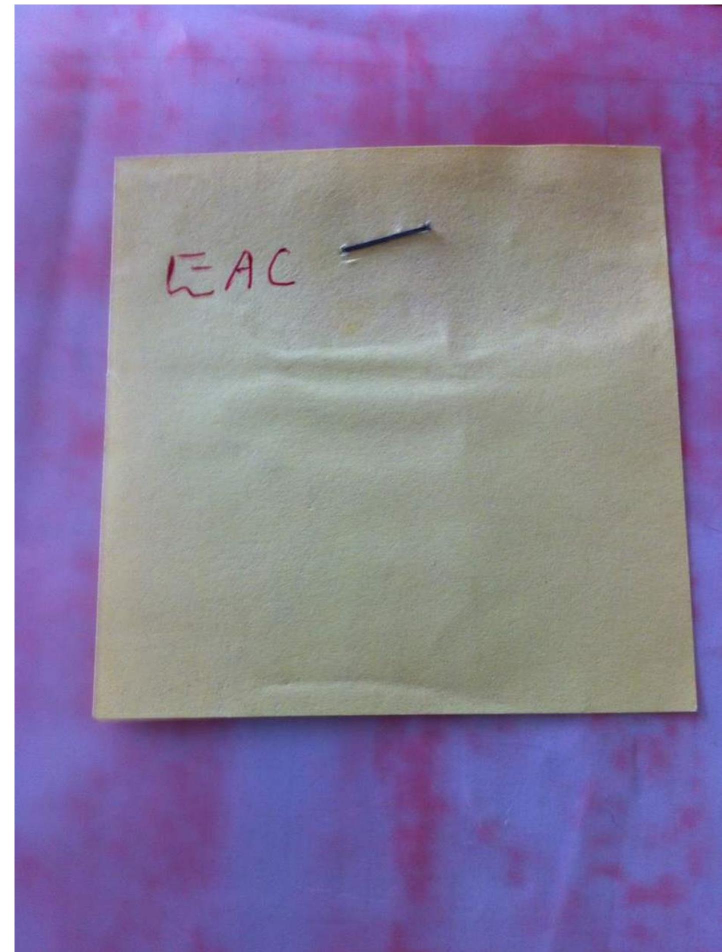
- Meeting as a team
- Delay of VL results in March and April due to missed supplies

**Do differently next time**

- Can’t wait for the whole team to meet; Keep project moving even when all can’t attend
- Must go to site to actually see what is occurring
- Regular communication with site
- Initiated MOU with
- Facilitate availability of MOU of VL sample testing with the National reference lab

# Good Practices Identified

- Dedicated Phlebotomy Work station for VL patients
- Patients escorted to phlebotomy work station
- Creating a high viral load register from a notebook – Don't wait for permission
- Flagging of patients file with VL load result greater than 1000cps/Mil with yellow sticker
- Strong Team Engagement for QI projects
- "We became their team."

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# Way Forward

❑We will build on what we accomplished by:-

- Continue supporting for airtime to enhance

EAC

- Continue equipping the site with monthly data collection tool
- Conducting weekly data collection and follow up
- Conduct monthly data review and analysis to monitor trends for improvement
- Providing supportive supervision, Mentorship and training to identified gaps

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# Way forward

❑We will carry it forward to next level by :-

- Expanding the scope by adding three more sites for mentorship using the LARC project strategies used at the pilot site and resulted into improved viral load testing practice.

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# Cont…

- Sharing the success to National Viral Load Technical Working group through presentation and discussion

- Shared with Minister for Health for scaling up of the LARC strategies, awaiting for final report

# THANK YOU FOR LISTENING

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