African HEALTH PROFESSIONS Regional Collaborative

FOR LABORATORY TECHNOLOGISTS & TECHNICIANS

PEPFAR

EMORY NELL HODGSON WOODRUFF SCHOOL OF NURSING

CNMF Commonwealth Nurses and Midwives Federation

Mozambique

Demand Creation

Isabel Pinto,
Head of the National Laboratory Department ,
MOH

1st August

Country Team

- Isabel Pinto - Head of Laboratory Department
- Olga Novela - Chief of department of Nursing
- Lúcia Manhiça- Head of Lab of CS Bagamoio
- Laura Williamo - Head of lab CS Bagamoio
- Asina Armindo de Oliveira - Head of Midwifes CS Bagamoio
- **Partners**
- Jessina Masahama and Luciana Kohotsu - CDC

African HEALTH PROFESSIONS Regional Collaborative FOR LABORATORY TECHNOLOGISTS & TECHNICIANS

PEPFAR

EMORY NELL HODGSON WOODRUFF SCHOOL OF NURSING

CNMF Commonwealth Nurses and Midwives Federation

- Mozambique has around **26 million** people;
- The population of Mozambique is predominantly rural;
- National HIV prevalence is 11.5%;
- Estimated **1,500,000** (PLHIV);
- Higher prevalence among women (13.1% vs 9.2% in men) and especially among young women (aged 15-24 years);
- Prevalence among adolescent girls is estimated at 11.1% Of the estimated number of PLHIV;
- **802,659** are currently on Anti-Retroviral Therapy (ART) (annual report of the national HIV/AIDS Program in Mozambique, 2015)

Bagamoio Health Centre

- Located in Maputo, Mozambique
- Primary health care facilities in the National Health Systsem (NHS)
- Attends a high number PLHIV in Maputo City.

- **Bagamoio has 6914 patients on treatment** ;
- Is the **6th highes**t in Maputo City.
- The demand for VL testing at Bagamoio is low.
- One clinician trained in VL monitoring in 2015
- Health facility staff attending HIV patients were not trained on VL.;
- CD4 monitoring is applied for pregnant and lactating women and children 2- 5, not following National Guidelines.

2016 Planning Process

February

- Invitation to participate in LARC received. 1st LARC Meeting

March

- Bagamoio Health Center Identified for LARC Project
- Clinician engagement initiated
- Lab and Nurses Team Members indentified

April

- Lab and clinicians assessed and identified weakness in VL cascade
- First draft of LARC proposal developed by Isabel Pinto and CDC partners

May / June

- Engaged ANEMO and Health Unit Leadership

July / August

VL Process Mapping. Participation in 2nd LARC Meeting

Leverage the PEPFAR implementing partner supporting Bagamoio HC (assisted with specimen transport, printing documents, supervision and follow'ups)

African HEALTH PROFESSIONS Regional Collaborative FOR LABORATORY TECHNOLOGISTS & TECHNICIANS

PEPFAR

EMORY NELL HODGSON WOODRUFF SCHOOL OF NURSING

CNMF Commonwealth Nurses and Midwives Federation

Background: Problem Statement

Gaps Identified by Process Mapping:

- Site visit to all areas involved in VL cascade: **MCH Clinic, Clinic Lab, and reference Lab Jose Macamo**
- Different VL cutoffs published (3,000 vs 1,000 copies)
- Improper referral for second line treatment guideline – no counseling before referral for 2nd line therapy
- Patients who had VL drawn were lost to follow up
- Lab has limited phlebotomy hours – only between 6:30 - 9 am on Monday-Thursday;
- VL results not recorded in lab register
- Protocol for DBS preparation not followed - Insufficient drying time

- **Target: Patients of the Maternal Child Health Clinic (MCH) at the Bagamoio Health Facility**

Project Objectives

Goal

- Increase the demand for viral load testing for the HIV+ patients of the Maternal Child Health Clinic (MCH) at the Bagamoio Health Facility, in order to prevent vertical transmission and detect treatment failure

AIM

- Increase the percentage of viral load tests ordered according to national algorithm for MCH population (pregnant and breastfeeding women)
  - from 0% to 30% by 29 July 2016 (Short term aim)
  - from 30% to 80% by 31 October 2016 (Long term aim)

Metric

- # of viral load tests ordered
- # MCH patients that require viral load testing according to country algorithm

African HEALTH PROFESSIONS Regional Collaborative FOR LABORATORY TECHNOLOGISTS & TECHNICIANS

PEPFAR

EMORY NELL HODGSON WOODRUFF SCHOOL OF NURSING

CNMF Commonwealth Nurses and Midwives Federation

Methods - Intervention

Action Item	Responsible person	Start Date	End Date
1. Train the clinicians to ensure proper implementation of the national algorithm	Isabel / Jessina	July 18	July 22
2. Create data collection log to capture baseline and change data	Lucia	July 18	July 18
3. Implement blood draw for VL testing in the MCH clinic	Asina	July 19	July 19
4. Conduct LARC team meeting	Isabel	July 22	July 22
5. Calculate baseline %	Isabel	July 22	July 22
6. Obtain lab statistics for # VL ordered from MHC	Laura	July 29	July 29
7. Collect data for the next two weeks	Asina & Isabel	July 29	July 29
8. Analyze data	Isabel & Lucia	July 29	July 29
9. Revise LARC proposal and send to Emory	Luciana/Isabel/Olga	July 22	July 22
10. Create PowerPoint presentation for Tanzania per template	Isabel	July 29	July 29
11. Partner with CDC Communication expert to design patient engagement materials to increase VL demand/requests by patients	Jessina/Luciana/ Nathaniel	July 29	August 29

Methods – Data Collection Plan

- Increase the percentage of viral load tests ordered according to national algorithm for MCH population (pregnant and breastfeeding women) **from 0% to 30% by 29 July 2016**

Base line (July 22):

- Revised 25 pacient records
- 11/25 patients qualified for VL test
- 0/11 viral load request
- **0% VL test requests at baseline**

African HEALTH PROFESSIONS Regional Collaborative FOR LABORATORY TECHNOLOGISTS & TECHNICIANS

PEPFAR

EMORY NELL HODGSON WOODRUFF SCHOOL OF NURSING

CNMF Commonwealth Nurses and Midwives Federation

Methods – Data Collection Plan (cont'd)

- Data collected July 29
- MCH clinician recorded patient VL requests daily in log sheet
- Responsible for collecting data: **Asina Armindo**

- **Observation:**
- Increasing number of pregnant and lactating women who presented themselves to the laboratory for VL specimen collection
- Improved completion of lab request forms by clinicians

- **Result: 95% of pregnant women with VL requisitions**
- **Revised 43 patient record**

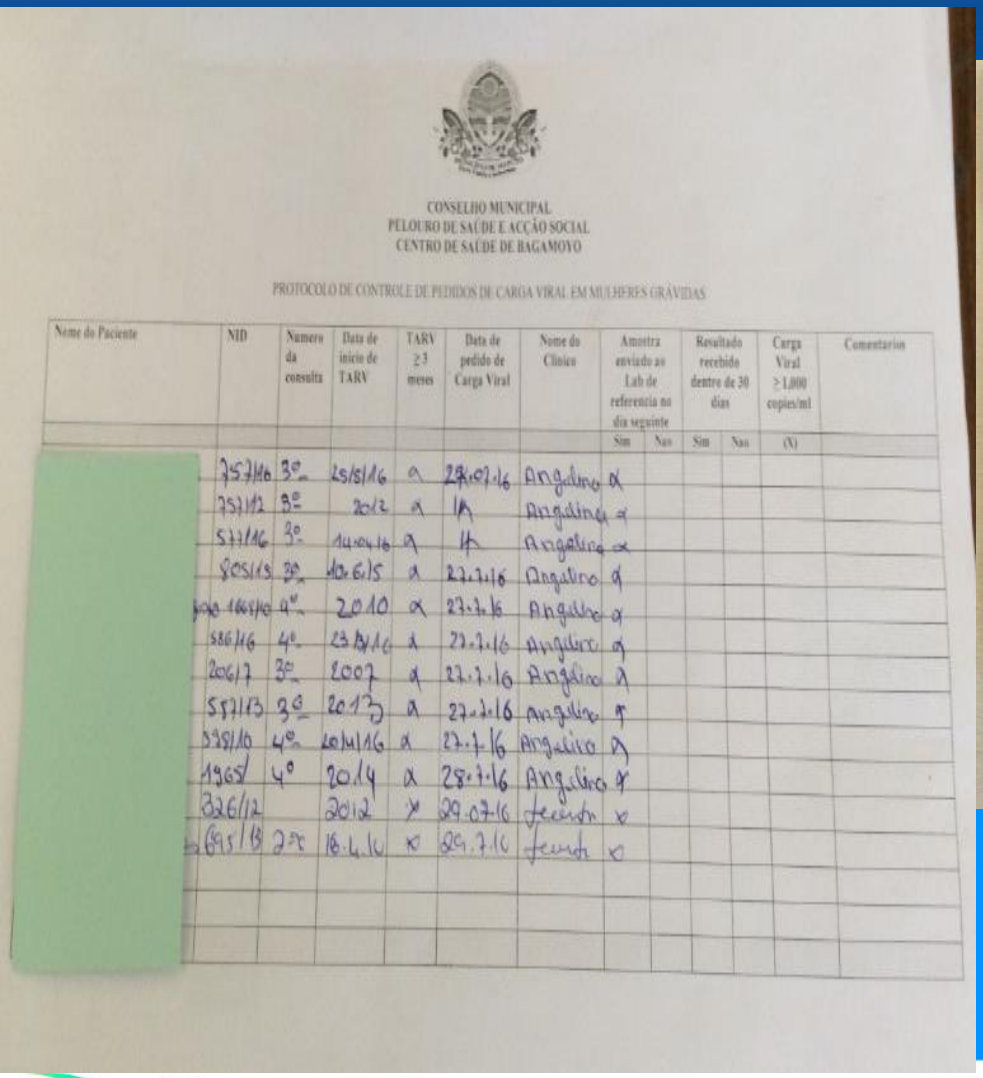
22/43 patients correctly identified as not needing VL test

19/43 patients with correct requests for VL test

1/43 patient with VL request did not qualify for VL test

1/43 patient that needed VL test requested did not get a VL test requested

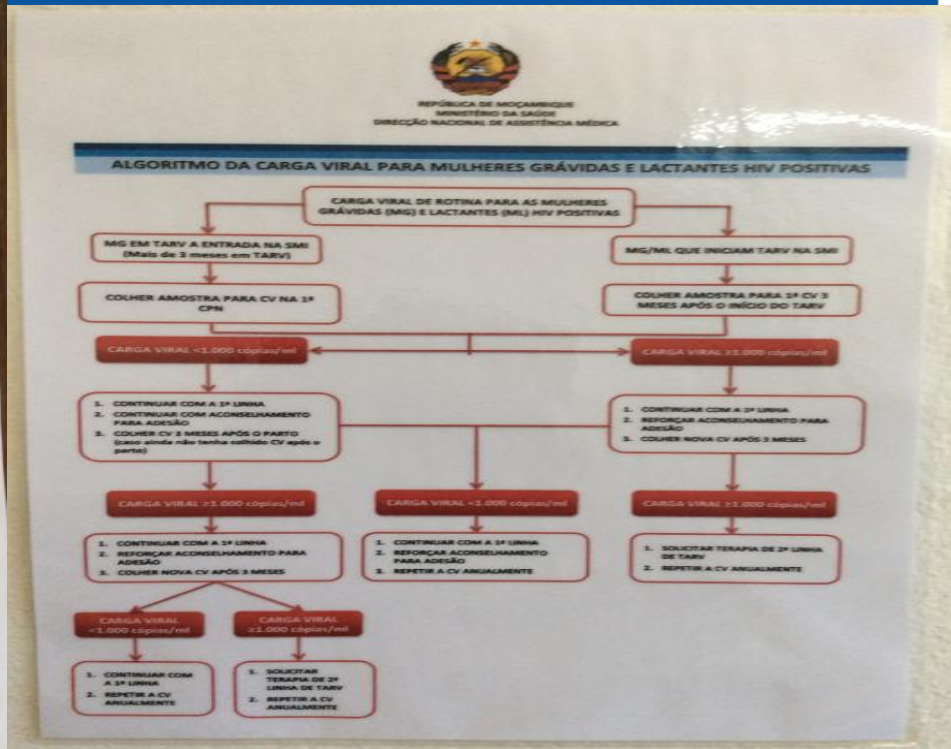
Data Collection Tool



CONSELHO MUNICIPAL
PELOURO DE SAÚDE E ACÇÃO SOCIAL
CENTRO DE SAÚDE DE BAGAMOYO

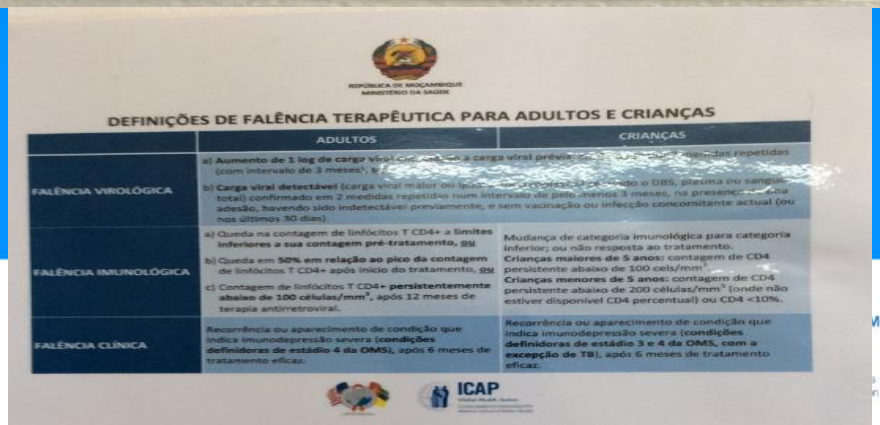
PROTOCOLO DE CONTROLE DE PEDIDOS DE CARGA VIRAL EM MULHERES GRÁVIDAS

Nome do Paciente	NID	Numero da consulta	Data de inicio de TARV	TARV ≥3 meses	Data de pedido de Carga Viral	Nome do Clinico	Amostra enviado ao Lab de referencia no dia seguinte		Resultado recebido dentro de 30 dias		Carga Viral ≥1,000 copies/ml	Comentarios
							Sim	Nao	Sim	Nao	(X)	
	757/16	3º	25/5/16	✓	27.07.16	Angelina	✓					
	752/12	3º	20/2	✓	IA	Angelina	✓					
	577/16	3º	14.04.16	✓	IA	Angelina	✓					
	805/15	3º	10.6.15	✓	27.7.16	Angelina	✓					
	1665/10	4º	2010	✓	27.7.16	Angelina	✓					
	586/16	4º	23/5/16	✓	27.7.16	Angelina	✓					
	2061/7	3º	2007	✓	27.7.16	Angelina	✓					
	557/13	3º	2013	✓	27.7.16	Angelina	✓					
	595/10	4º	20/4/16	✓	27.7.16	Angelina	✓					
	1965	4º	2014	✓	28.7.16	Angelina	✓					
	326/12		2012	✗	29.07.16	fecundo	✗					
	695/13	2ª	16.4.16	✗	29.7.16	fecundo	✗					



REPÚBLICA DE MOÇAMBIQUE
MINISTÉRIO DA SAÚDE
DIRECÇÃO NACIONAL DE ASSISTÊNCIA MÉDICA

ALGORITMO DA CARGA VIRAL PARA MULHERES GRÁVIDAS E LACTANTES HIV POSITIVAS



REPÚBLICA DE MOÇAMBIQUE
MINISTÉRIO DA SAÚDE

DEFINIÇÕES DE FALÊNCIA TERAPÊUTICA PARA ADULTOS E CRIANÇAS

	ADULTOS	CRIANÇAS
FALÊNCIA VIROLÓGICA	a) Aumento de **1 log de carga** viral [illegible] a carga viral prévia [illegible] duas repetidas (com intervalo de 3 meses), [illegible] b) **Carga viral detectável** (carga viral maior [illegible] ...do o DBS, plasma ou sangue total) confirmado em 2 medidas repetidas num intervalo de pelo menos 3 meses, na presença [illegible] da adesão, havendo sido indetectável previamente, e sem vacinação ou infecção concomitante actual (ou nos últimos 30 dias).	
FALÊNCIA IMUNOLÓGICA	a) Queda na contagem de linfócitos T CD4+ a **limites inferiores a sua contagem pré-tratamento**, OU b) Queda em **50% em relação ao pico da contagem** de linfócitos T CD4+ após início do tratamento, OU c) Contagem de linfócitos T CD4+ **persistentemente abaixo de 100 células/mm³**, após 12 meses de terapia antiretroviral.	Mudança de categoria imunológica para categoria inferior; ou não resposta ao tratamento. **Crianças maiores de 5 anos:** contagem de CD4 persistente abaixo de 100 cels/mm³. **Crianças menores de 5 anos:** contagem de CD4 persistente abaixo de 200 células/mm³ (onde não estiver disponível CD4 percentual) ou CD4 <10%.
FALÊNCIA CLÍNICA	Recorrência ou aparecimento de condição que indica imunodepressão severa (**condições definidoras de estádio 4 da OMS**), após 6 meses de tratamento eficaz.	Recorrência ou aparecimento de condição que indica imunodepressão severa (**condições definidoras de estádio 3 e 4 da OMS, com a excepção de TB**), após 6 meses de tratamento eficaz.

ICAP

African HEALTH PROFESSIONS Regional Collaborative
FOR LABORATORY TECHNOLOGISTS & TECHNICIANS

Challenges

Challenge	• Lack of V.L. request form • Lack of time (national campaign and training during implementation) • Multiple tasks; • Lack of Human Resources;
Strategies to address challenges	• Work outside normal office hours • Entice dedication of colleagues in all levels • Training of more staff • Care of all patients independent of the time of arrival
Lessons learned	• Improved communication between clinicians and laboratories Better understanding of reference laboratory workflow
In Future	• Greater involvement of all clinicians; • Incrise the number of HR

Way Forward

- ART committee monthly meeting agenda: include need to strengthen viral load algorithm implementation to increase VL test requested correctly
- Partner with CDC Communication expert to design patient engagement materials to increase VL demand/requests by patients
- Disseminate the project model throughout Maputo City
- Need to strengthen training on clinical interpretation of the VL algorithm and test results (PMTCT);
- Work with José Macamo Laboratory to improve TAT

Obrigada!

- Bagamoio Team
- LARC team
- CDC HQ and Mozambique team
- CCS Partner
- DNAM Directorate