# Client Cohorting, Community Outreach, and On-site Sample Preparation Increase HIV Viral Load Coverage in Western Zimbabwe, 2022

<u>Edward Dembedza</u><sup>1</sup>, Gloria Gonese<sup>1</sup>, Batsi Makunike-Chikwinya<sup>1</sup>, Phibion Manyanga<sup>1</sup>, Edson Chidovi<sup>1</sup>, Kerry A. Thomson<sup>2</sup>, Stefan Wiktor<sup>2</sup>, Ponesai Nyika<sup>3</sup>, Tsitsi Apollo<sup>4</sup>

<sup>1</sup>Zimbabwe Technical Assistance, Training & Education Center for Health (Zim-TTECH); <sup>2</sup>International Training and Education Center for Health (I-TECH); University of Washington; <sup>3</sup>CDC Zimbabwe, Zimbabwe; <sup>4</sup>Ministry of Health and Child Care, Zimbabwe

### Background:

- The most important use of viral load (VL) monitoring among people living with HIV (PLHIV) is to monitor effectiveness of antiretroviral therapy (ART) therapy after initiation.
- Scheduled VL monitoring among PLHIV is an integral part of ART management and clients should adhere to their VL collection dates annually.
- Adult and pediatric VL coverage across the three districts of Mashonaland West province, Zimbabwe, in 2022 ranged between 80.2% to 87.8%, beneath the 95% PEPFAR program target.
- Contributing to these challenges were limited reminder system through messages and long turnaround time of VL results of more than three months.
- In June to July 2022, the Zimbabwe Ministry of Health and Child Care (MOHCC) Quality Improvement (QI) Unit implemented pragmatic interventions to collect and process specimens and improve VL documentation in three districts in Mashonaland West.

### **Description:**

We implemented the following interventions to improve VL coverage in three districts in Mashonaland West:

- Reviewed and organized clients' records by cohort using the month and year of ART initiation from two months pre-implementation (April – May 2022) and two months of implementation (June – July 2022);
- Flagged all clients with an invalid VL result as per the MOHCC VL testing algorithm (Figure 1);
- Availed VL mobile-phones at each facility to improve turnaround time;
- Compared VL coverage before and after implementation of these interventions.

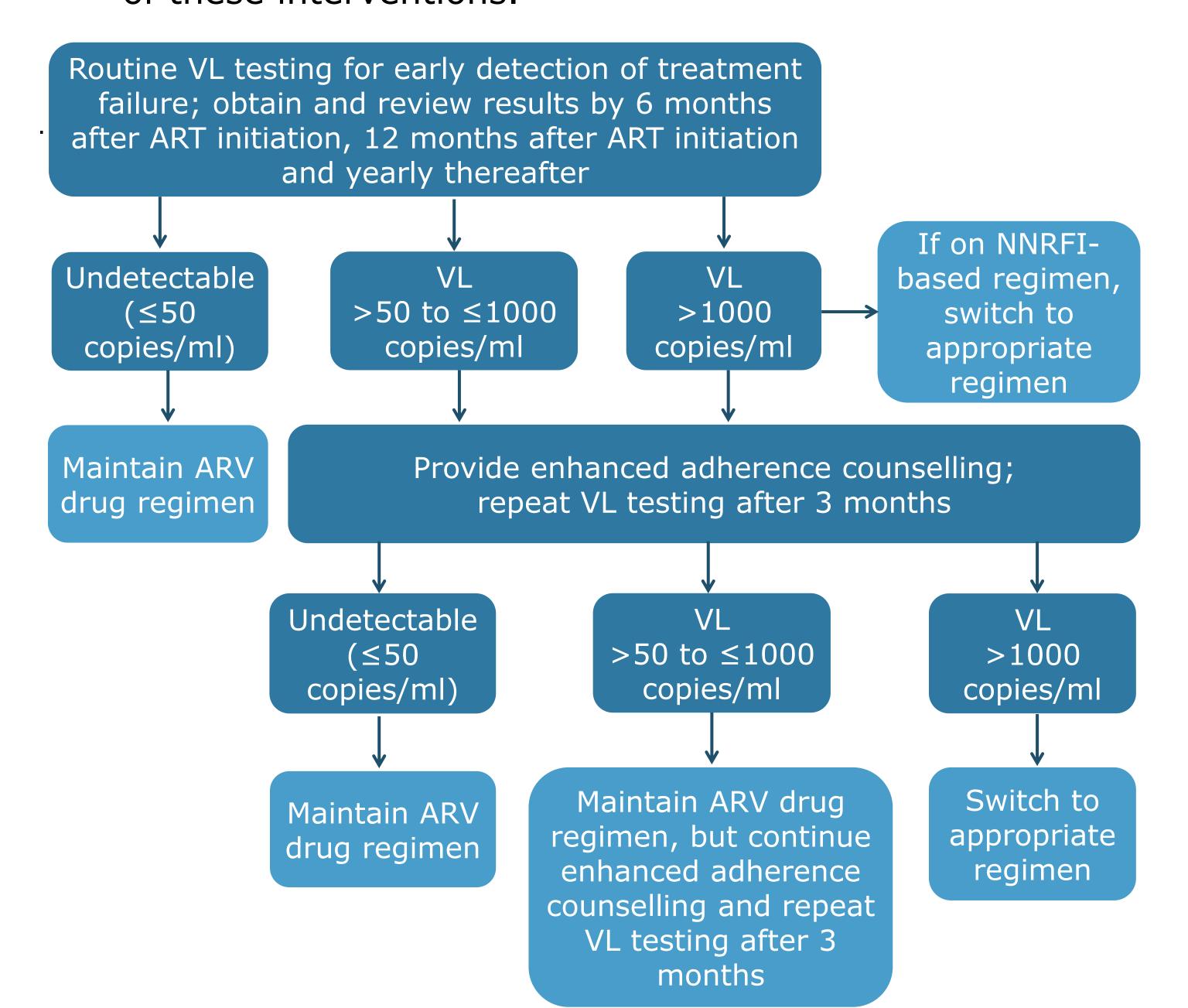


Figure 1: Viral Load Testing Algorithm

## Lessons Learned:

• The number of on-site samples collection and preparation before sending to central lab increased by an average of 24% across the three districts (*Table 1*).

Table 1: Increase in number of VL samples collected between April – May and June – July 2022

District	April –May 2022	June – July 2022	Percentage Increase (%)
Mhondoro	80	325	24.6
Sanyati	100	410	24
Chegutu	125	465	26.8

- Turnaround time between laboratory and facility
  decreased from an average of 90 days to 1 day. This was
  facilitated by availability of dedicated VL mobile phones at
  facility level to received results for clients.
- The proportion of clients with a current VL increased from 5% to 16% across districts, putting overall coverage within reach of PEPFAR 95% target (*Table 2*).

Table 2: Comparison of Viral Load Coverage in Three Districts in Western Zimbabwe Pre- and Post-Implementation

Zimprometrication					
	April – May 2022	June – July 2022			
District	Baseline	Achievement	% Improvement		
Mhondoro	80.2%	96.7%	16.5%		
Sanyati	87.8%	93%	5.2%		
Chegutu	81.1%	92%	10.9%		

#### Conclusions:

- Implementing pragmatic catch-up interventions improved VL coverage in the three districts within two months of implementation.
- Availing designated facility mobile phones to receive VL results from the central laboratory improved VL results turnaround time thereby improving documentation in the client records.
- This project can be replicated in other districts to improve VL coverage. Programs should consider augmenting routine QI efforts with similar periodic catch-up campaigns to increase program performance.

**Acknowledgments:** The Zimbabwe Technical Assistance, Training & Education Center for Health (Zim-TTECH)'s Care and Treatment Program is supported by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) through the U.S. Centers for Disease Control and Prevention (CDC) under cooperative agreement #GH002157. We are grateful for the support of the Zimbabwe MOHCC and Mashonaland West Provincial Health Executive.













