

# Optimizing Viral Load Utilization in Malawi: Lessons from Balaka VL Quality Improvement Initiative

Michael Odo, MB;BCH, MSC, MPH

Technical Advisor, HIV Care and Treatment, MOH, Malawi

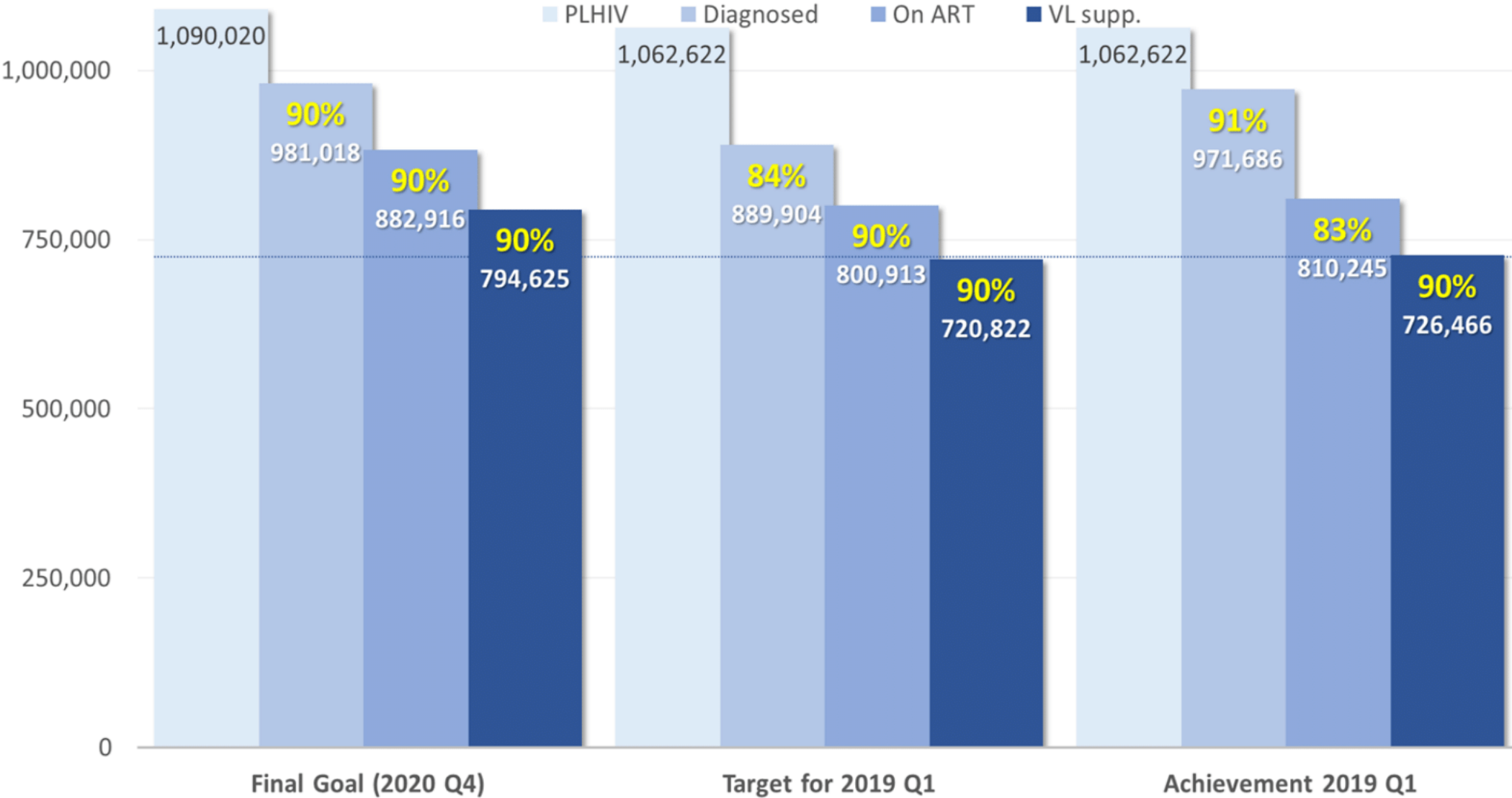
25 June 2019



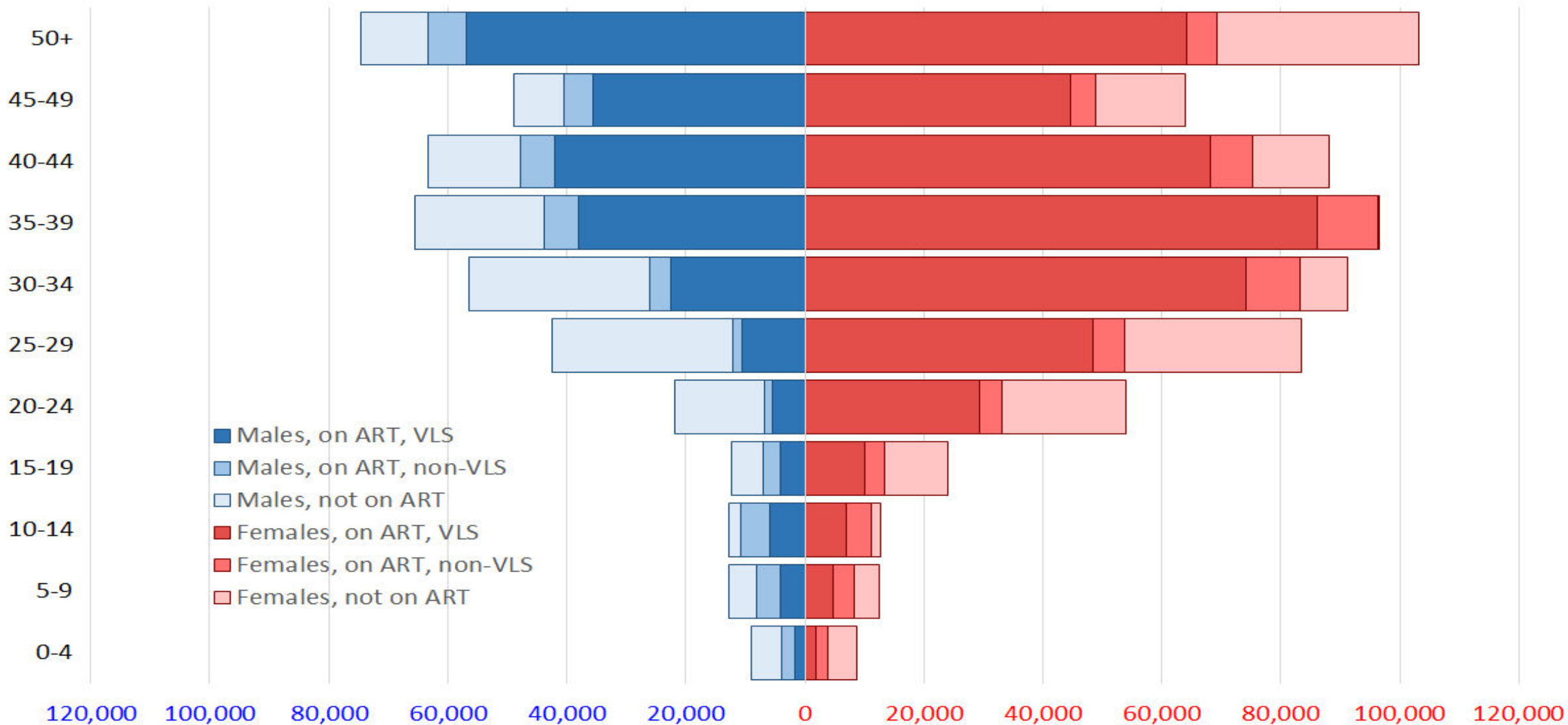
**HIV LEARNING NETWORK**  
The CQUIN Project for Differentiated Service Delivery



### Malawi progress towards the 90-90-90 HIV treatment targets (March 2019)



# Triangulation: Spectrum / Program Data

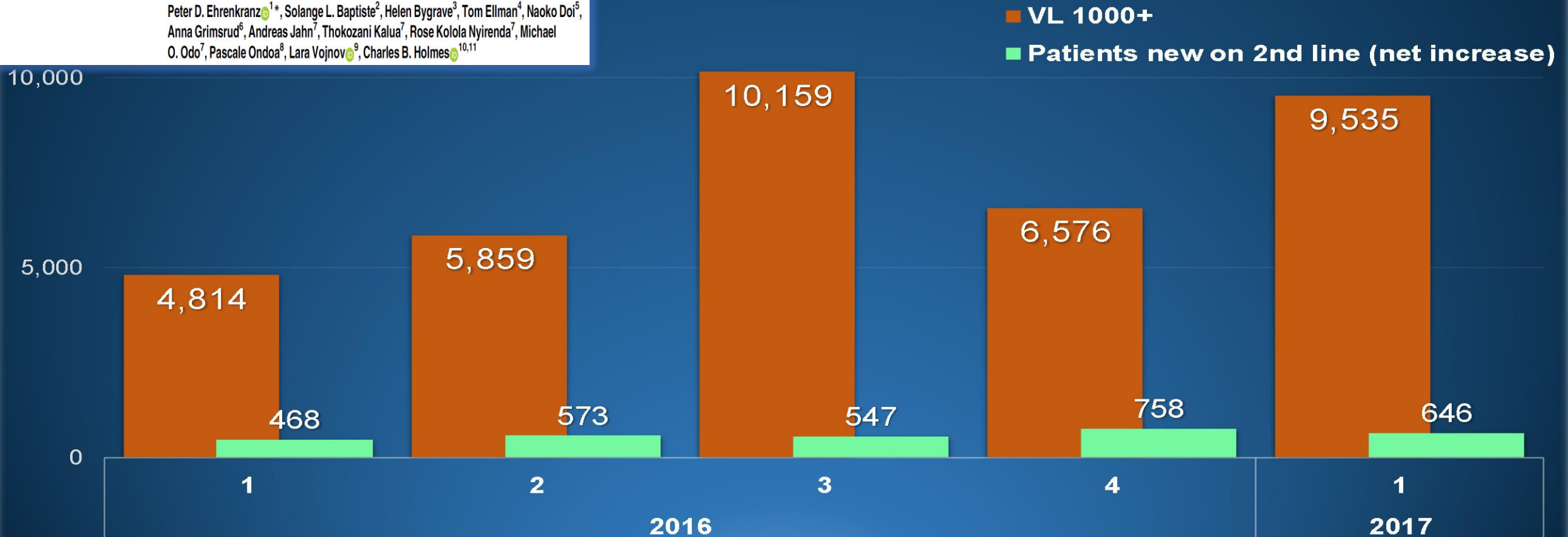


POLICY FORUM

# The missed potential of CD4 and viral load testing to improve clinical outcomes for people living with HIV in lower-resource settings

Peter D. Ehrenkrantz<sup>1\*</sup>, Solange L. Baptiste<sup>2</sup>, Helen Bygrave<sup>3</sup>, Tom Ellman<sup>4</sup>, Naoko Doi<sup>5</sup>, Anna Grimsrud<sup>6</sup>, Andreas Jahn<sup>7</sup>, Thokozani Kalua<sup>7</sup>, Rose Kolola Nyirenda<sup>7</sup>, Michael O. Odo<sup>7</sup>, Pascale Ondo<sup>8</sup>, Lara Vojnov<sup>9</sup>, Charles B. Holmes<sup>10,11</sup>

## VL Results Produced



# THE QUALITY CHALLENGE

- What the Malawi HIV treatment guidelines say:
  - Use of routine VL testing as a measure for client assessment on ART and
  - Intensive adherence counselling (IAC) as a differentiated service delivery model for those with high viral load result
- What was happening in 4 high volume sites in Balaka district:
  - **61%** of ART clients had their routine VL test done
  - **78%** of those with a high result were being routinely enrolled in IAC

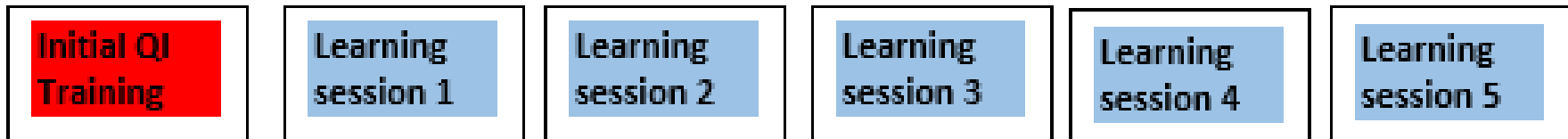
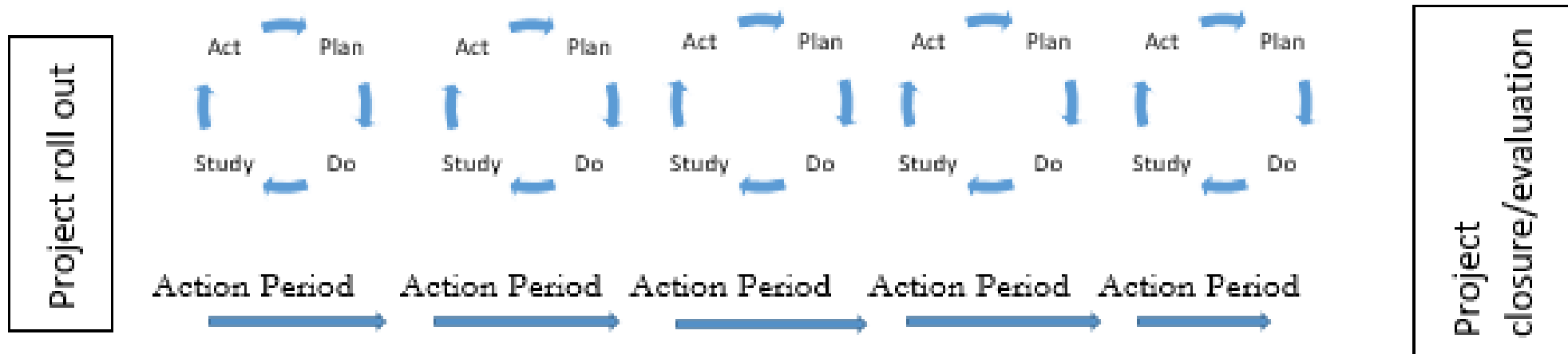
## Balaka

Population: 438,379

PLHIV Pop: 27,200

No of Health  
facilities: 14

# PROJECT TIMELINE: 2018



# Quality Improvement Aim

- Improve routine VL testing for eligible ART clients and enroll into intensive adherence counselling (IAC) all clients with high VL result in four (4) high volume ART sites in Balaka district.
  - Seek to increase routine VL testing from 61% to 90% by **August 2018** and improve viral load result utilization by increasing enrolment into IAC from 78% to 95% to benefit both the stable and non-stable clients.

## **Doing the right thing**

- **At the right time**
- **In the right way**
- **To achieve the best possible results**

# Process Indicators

- Proportion of ART patients categorized as stable & eligible for routine VL testing monthly
- Proportion of ART patients categorized as unstable due to a HVL result monthly
- Number of site-level QIT meetings held according to schedule per month
- Number of QI learning sessions performed per month
- Number of hands-on mentorship visits conducted per month

# Outcome Indicators

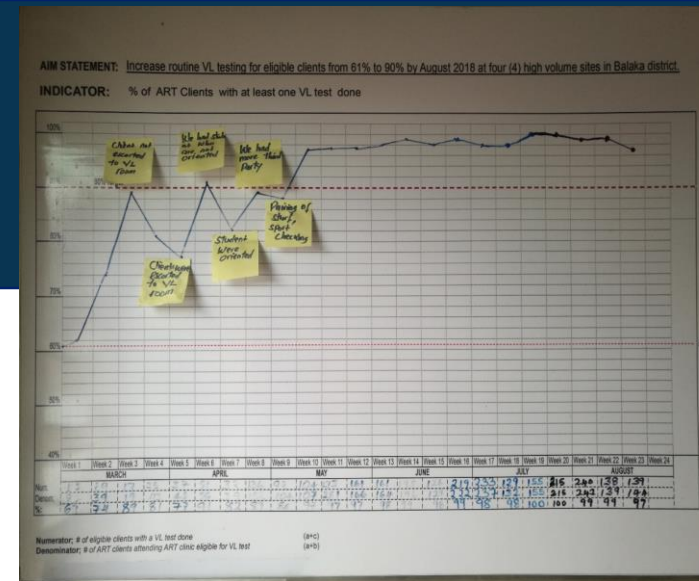
- Proportion of ART Clients with at least one VL test done
- Proportion of ART Clients with High VL result enrolled in IAC
- Proportion of ART Clients with High VL result enrolled in IAC completing all 3 sessions
- Proportion of ART Clients with 2nd High VL result that completed VL cascade

## Balancing indicator

Number of stock-out days for DBS bundles monthly

# QI PROCESS

- Weekly QIT meetings at facility level
- Weekly reports to district QI focal person
- Month long PDSA cycles
- Monthly supervision & mentorship sessions by the coordination team
  - *MoH-DHA/BALAKA DHO/URC & Baylor staff*
- Monthly learning sessions at a central point
- Plotting of Run charts to measure progress

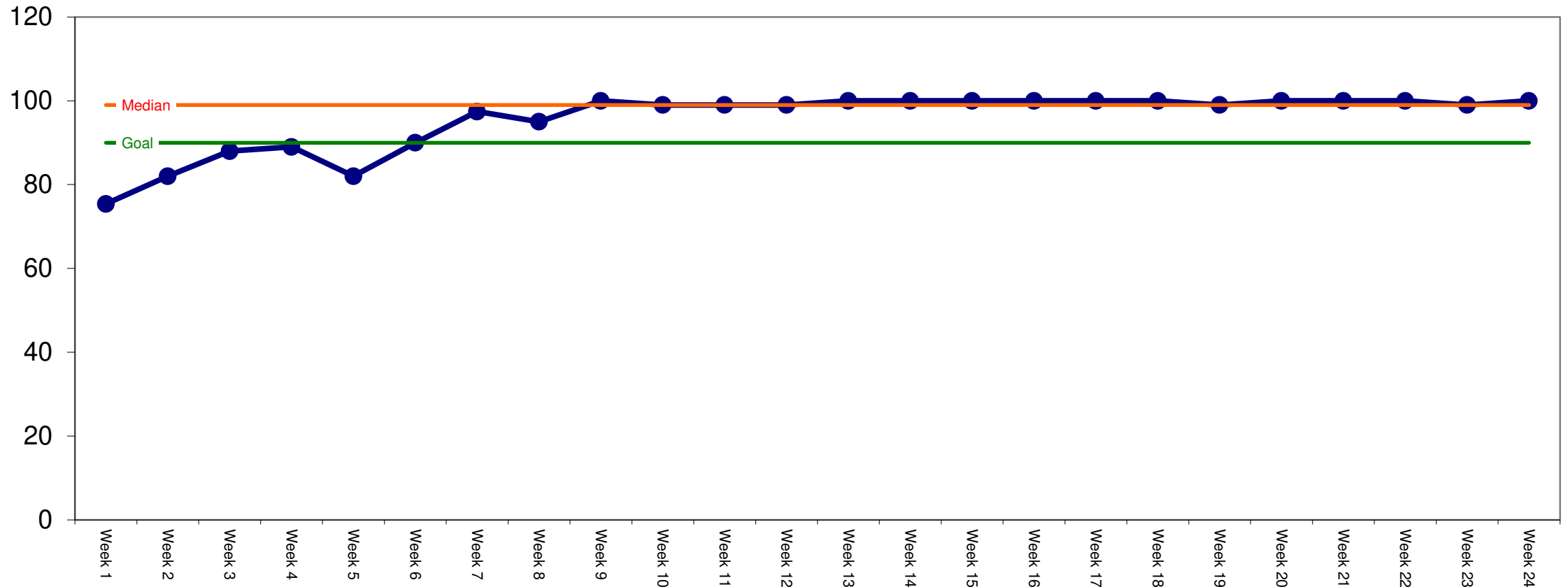


# RESULTS

(↑ Routine VL testing)

Increase routine VL testing for eligible clients from 61% to 90% by August 2018 at four high volume ART sites in Balaka District.

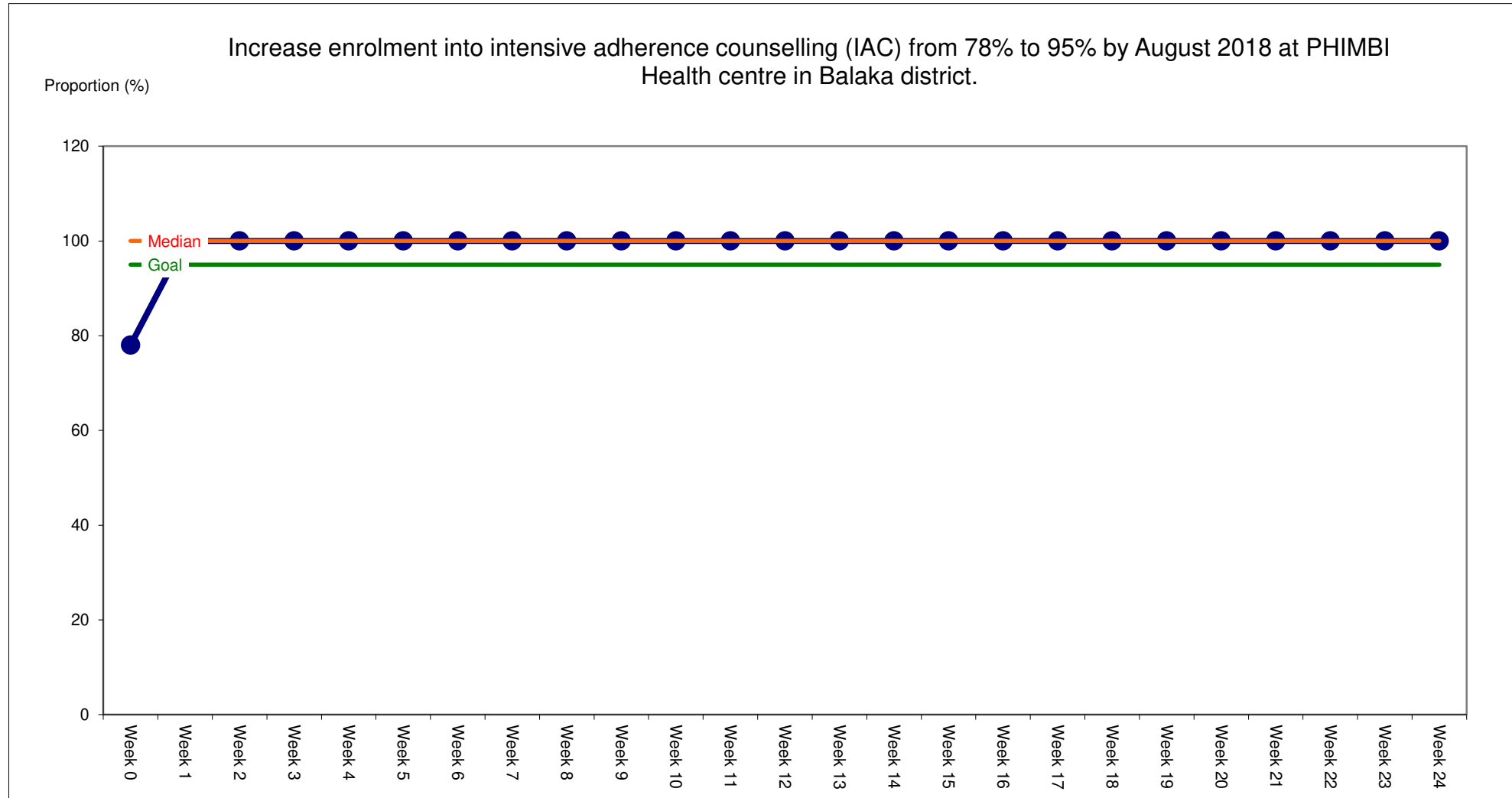
Proportion (%)



Completed run chart

# RESULTS – ↑ IAC Enrollment

(Case study of PHIMBI HC)




Completed run chart

# SUCCESSFUL CHANGE INTERVENTIONS

- Routine screening of clients for VL testing eligibility at the beginning of clinic
- Facility level data reviews
- Flagging HVL results on patient cards using coloured stickers
- Clear division of labour at facility level
- Prompt patient tracking system for HVL clients upon receipt of results from Lab.

I am due for my VL test today.



ARVs Given	CPT / IPT Given	Family Planning	Months on ART	Viral Load	Next Appointment/ Adv Outcome Date
No. of tablets To	CPT only IPT only CPT + IPT	Depo No. of condoms	No. of tablets given		
11 On	90	P G C I CI	60	Bled	30/07/18
11 On		P G C I CI		Bled	
11 On		P G C I CI		Bled	
11 On	90	P G C I CI	60	Bled	30/07/18
11 On		P G C I CI		Bled	
11 On		P G C I CI		Bled	
11 On	90	P G C I CI	90	Bled	29/07/18
11 On		P G C I CI		Bled	

# What we learnt

## Increasing VL testing demand :

- 1) Flagging the patient cards to signal a pending VL test
- 2) Patient empowerment – Develop specific VL messages for routine patient education at ART clinic
- 3) Make VL testing attractive - Improving TAT

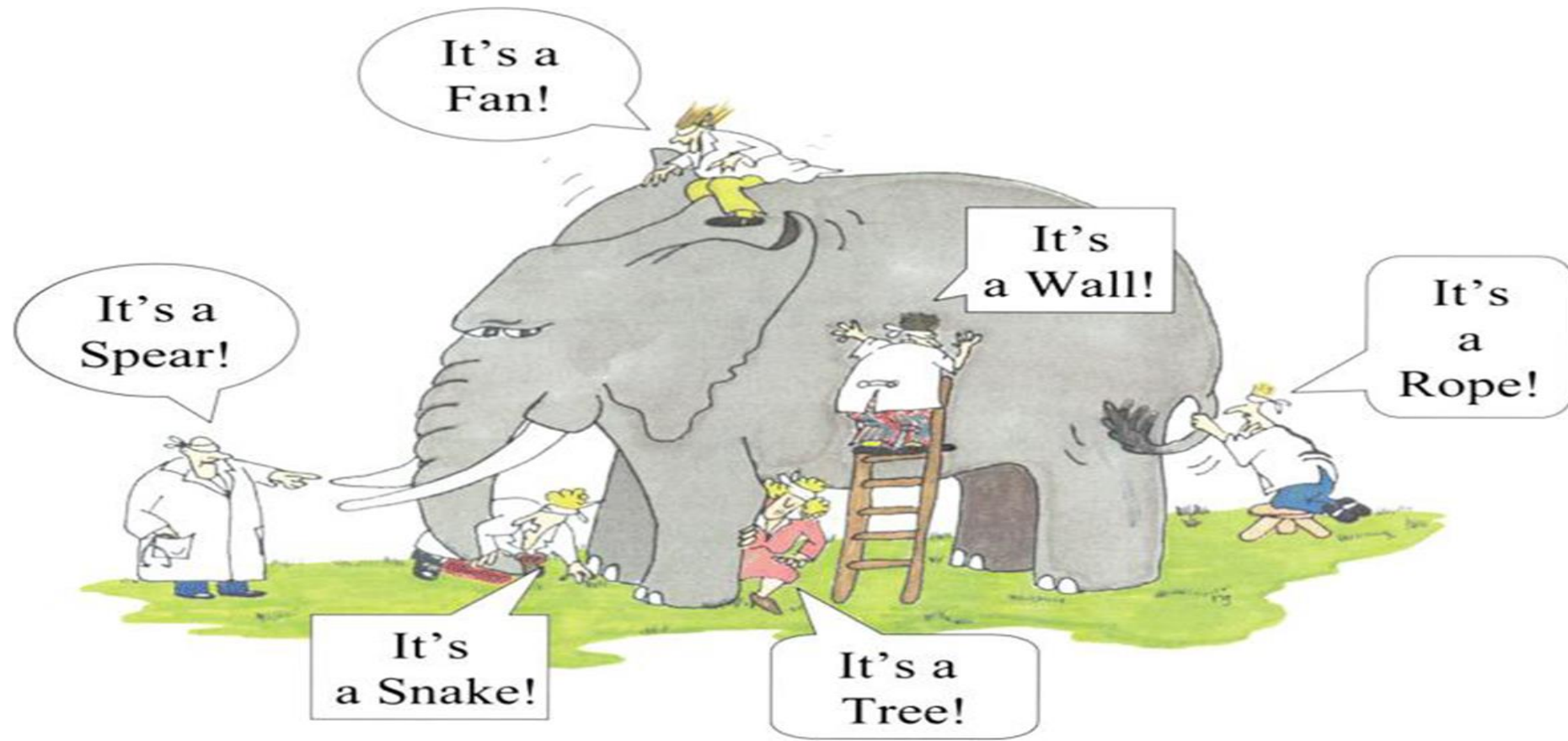
## Cont'd (2)

### **Improving results utilization :**

- 1) Enforce appointment of VL focal persons at every ART site
- 2) Facility level data reviews
- 3) Flagging high viral load results on patient cards
- 4) Clear division of Labour at site (esp. documentation in VL registers)
- 6) Use of expert client to track clients with high VL result
- 7) Prompt patient tracking system for HVL clients

At the end, quality improvement is a system initiative to justify responsibility and accountability

Asante sana  
Zikomo kwambiri



# ACKNOWLEDGEMENTS



Balaka District Health Office



**HIV LEARNING NETWORK**  
The CQUIN Project for Differentiated Service Delivery

