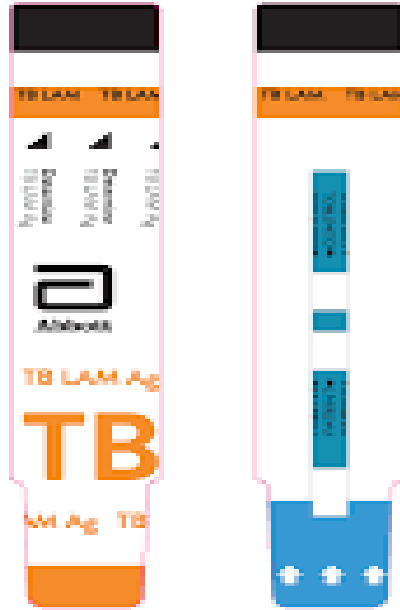


Accelerated and Comprehensive HIV Care for Epidemic Control in Zimbabwe (ACCE)



Enhancing TB Case Finding and Advanced HIV Disease Management using TB Lipoarabinomannan Screening: Lessons from Manicaland and Midlands provinces, 2023

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Presentation Outline

Introduction



Implementation

Lessons
Learnt



Conclusion &
Next steps



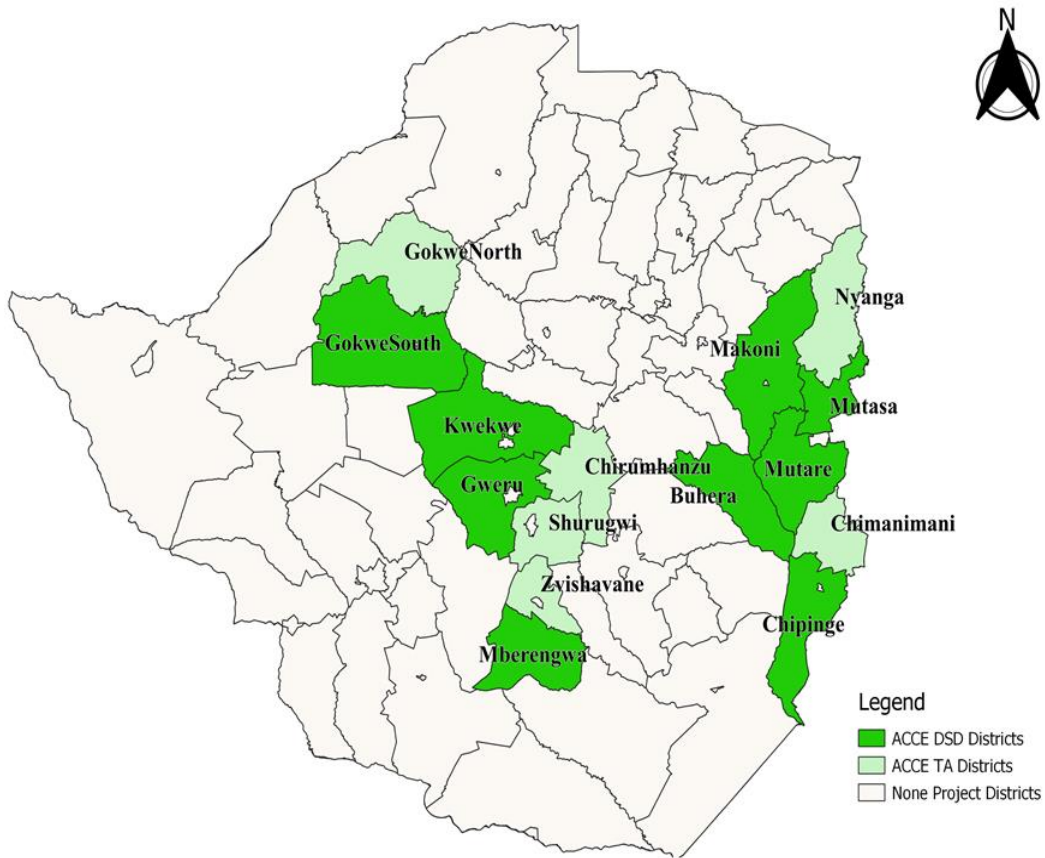
Introduction

- TB is the leading cause of mortality among PLHIV – 1/3 of all AIDS-related deaths
- PLHIV with advanced HIV disease (AHD) at risk of developing and dying from TB
- HIV infection complicates TB diagnosis and management
 - Most TB in PLHIV is diagnosed very late, or not at all,
 - SSA studies - 45.8% of PLHIV who died of TB remained undiagnosed at death
- Poor treatment outcomes especially among PLHIV with AHD
 - Low(er) treatment success, high(er) death and high(er) reoccurrence

Introduction

- TB remains a critical public health challenge for PLHIV in Zimbabwe
 - Estimated TB burden was 29,000 cases, 16,019 (55%) were diagnosed and notified to the NTP, in 2020.
 - The estimated TB mortality rate among HIV-positive people rose from 24/100,000 in 2018 to 40/100,000 in 2020.
- WHO recommends TB Lipoarabinomannan (LAM) testing for PLHIV with AHD
 - TB-LAM has better sensitivity in TB/HIV coinfection which further increases with lower CD4 counts

Introduction



372 Health facilities supported
in 9 districts



206, 506 Recipients of
care (RoC)

- The ACCE Project is a 5 – year PEPFAR / USAID-funded project
- Goal – support the country to achieve and sustain HIV epidemic control

Introduction

**Always think TB in PLHIV
with AHD**



- ZHI supported MOHCC to incorporate urine LF-LAM screening into the TB diagnosis algorithm at the beginning of COP22
 - Phased approach starting with high-volume facilities (>1000 ART clients) Starting with 62 learning sites in September 2022
 - Now more than doubled to 175 sites.
- Point-of-care urine TB-LAM for PLHIV with advanced HIV disease
 - Facilitates early TB diagnosis and treatment initiation in AHD
 - Potential to avert mortality

What did we do to scale up TB LAM for TB screening ?



- **Capacity building**
 - Combined classroom-based and practical – based capacity building sessions for health care workers
 - Target group was non-laboratory staff
 - primary care counselors
 - Laboratory staff remain responsible for quality assurance and continued on-job training and mentorship
- **Commodity ordering**
 - Supported facilities with quantification and ordering of AHD commodities

Objective

Broad Objective

- To assess the benefits of incorporating TB LAM testing into existing diagnostic cascades for enhanced TB case finding and improved AHD management in Manicaland and Midlands provinces.

Specific Objectives

- Assess the effect of introducing LF – TB - LAM as a screening test for TB among PLHIV with AHD
- Compare the TB case finding before and after LF-TB-LAM implementation.
- Determine the proportion of TB clients with documented HIV status before and after TB LAM implementation.

Methodology

Design

- A descriptive cross-sectional analysis of routine program data focusing on the use of TB LAM in the TB diagnostic algorithm was conducted

Setting

- 62 High volume facilities(>1000 ART clients) in Midlands and Manicaland Provinces

Participants

- PLHIV diagnosed with TB between Oct 2021 and September 2023 in Midlands and Manicaland Provinces

Methodology

Data Management

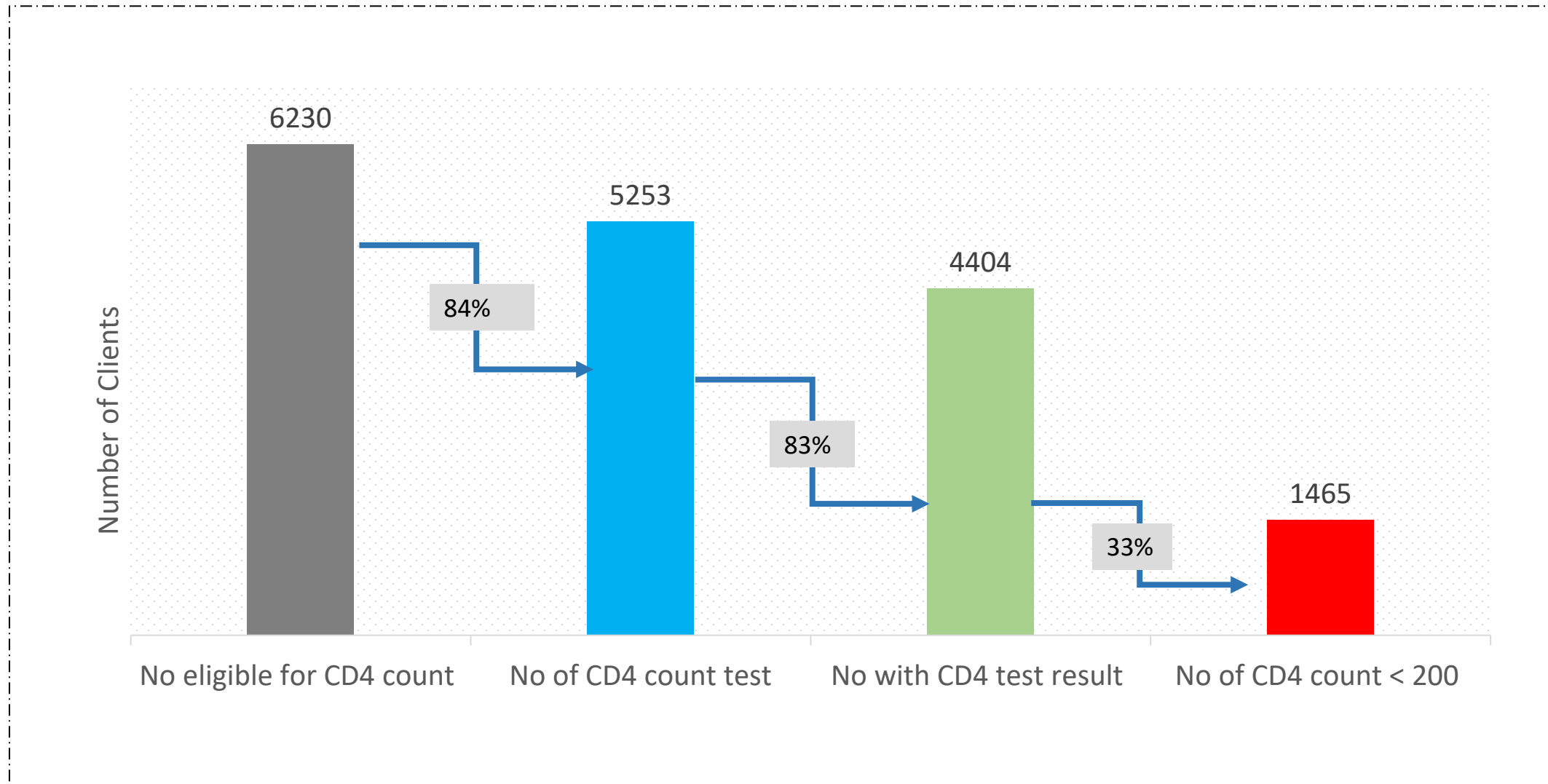
- Data were analysed using STATA generating frequencies, proportions, and measures of central tendency and spread

Ethical Consideration

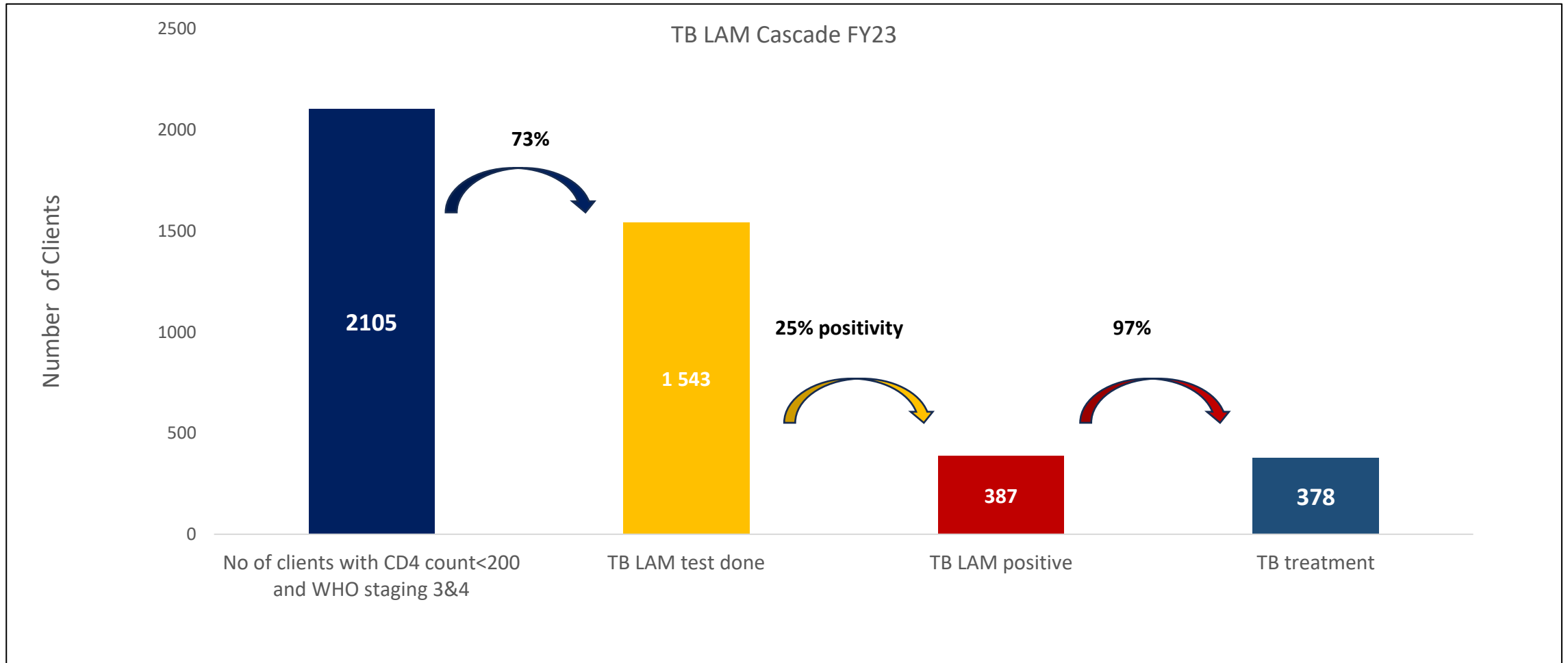
- Ethical considerations as approved by the MRCZ (MRCZ/E/159) were observed.
- Adhered to all ethical guidelines and principles, ensuring privacy and confidentiality of all study data.

Lessons Learnt

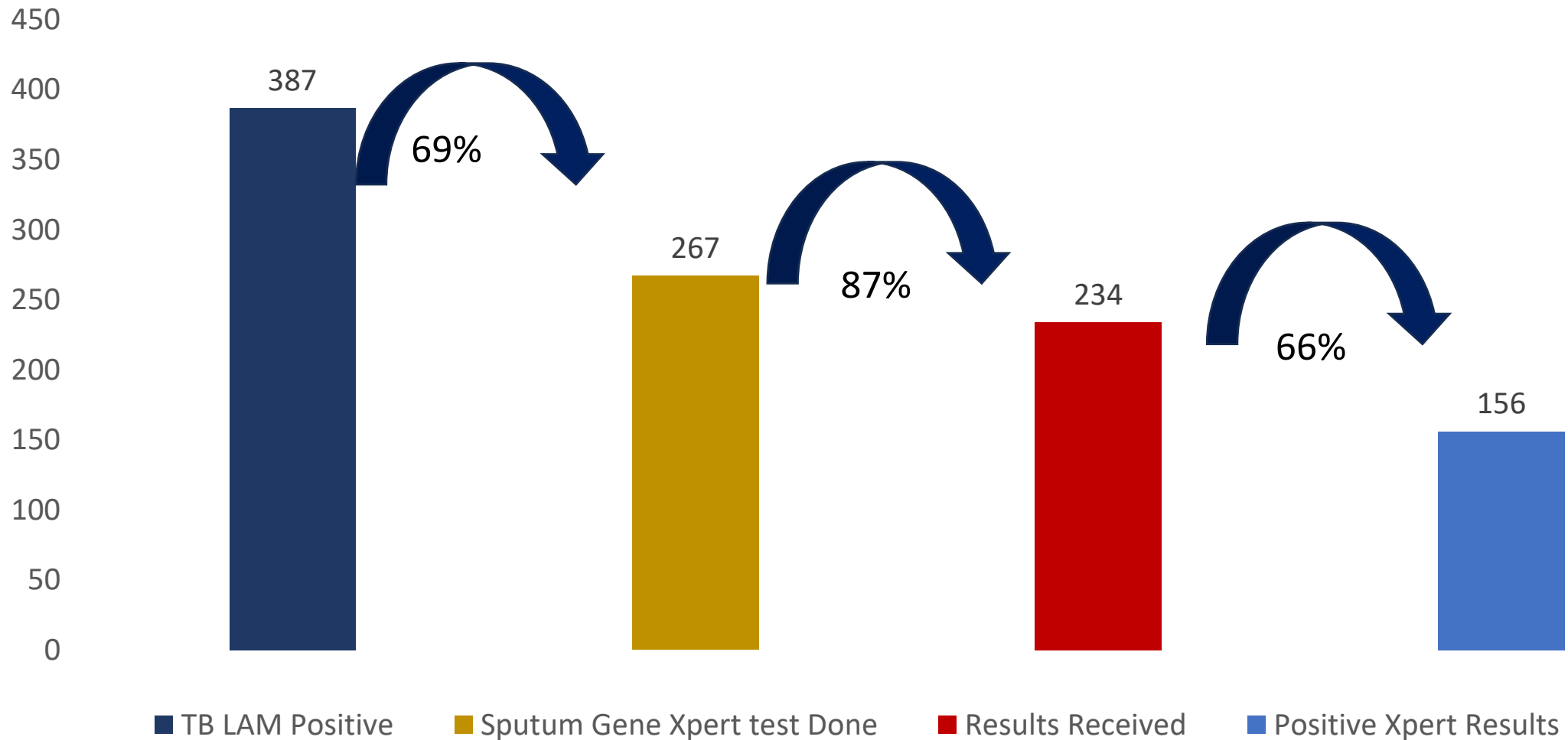
Implementation of Advanced HIV Disease screening package , October 2022 to September 2023



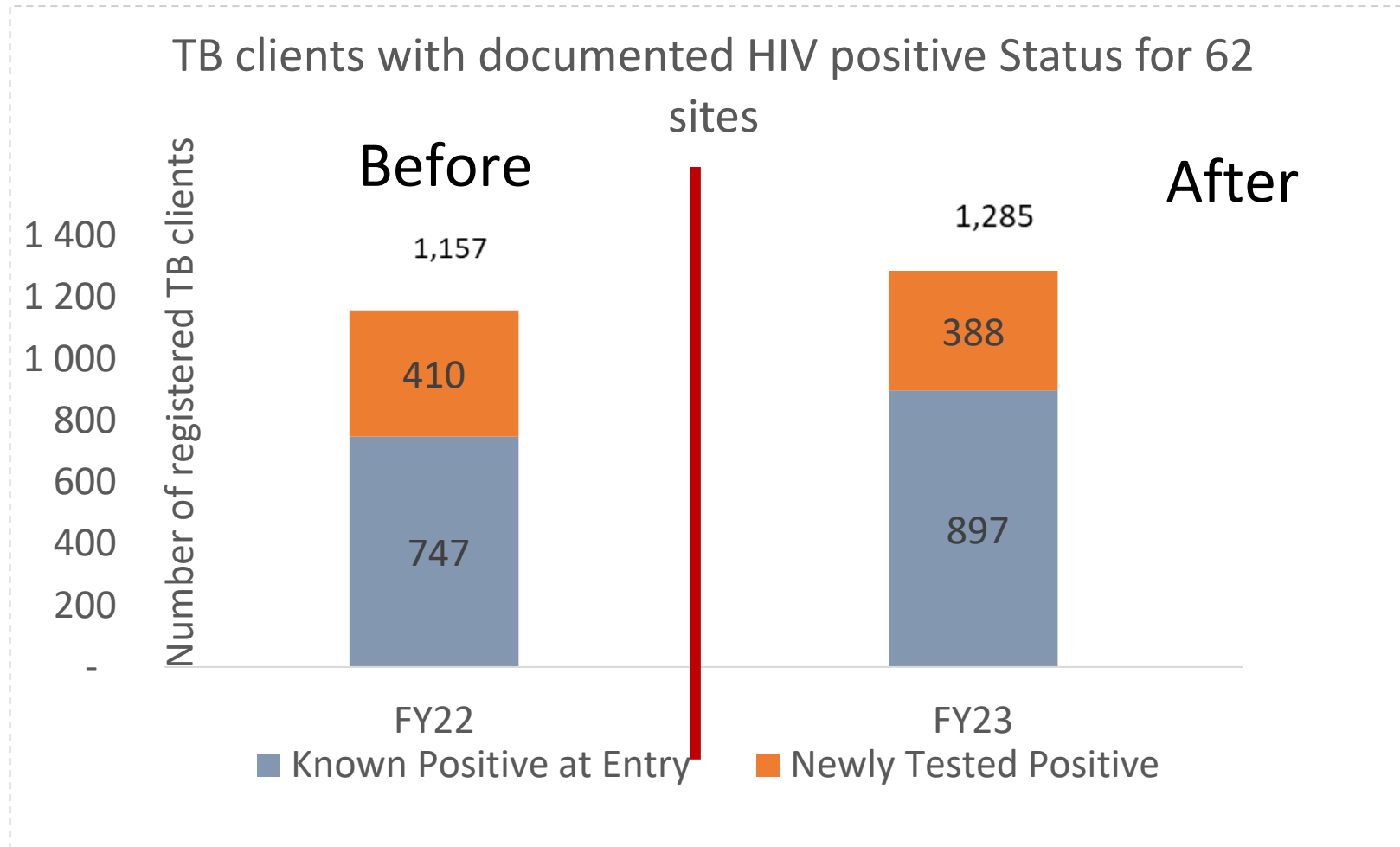
Implementation of Advanced HIV Disease Screening Package TB LAM cascade, October 2022 to September 2023



TB LAM Positive Clients with follow-up GeneXpert MTB/RIF, October 2022 – September 2023

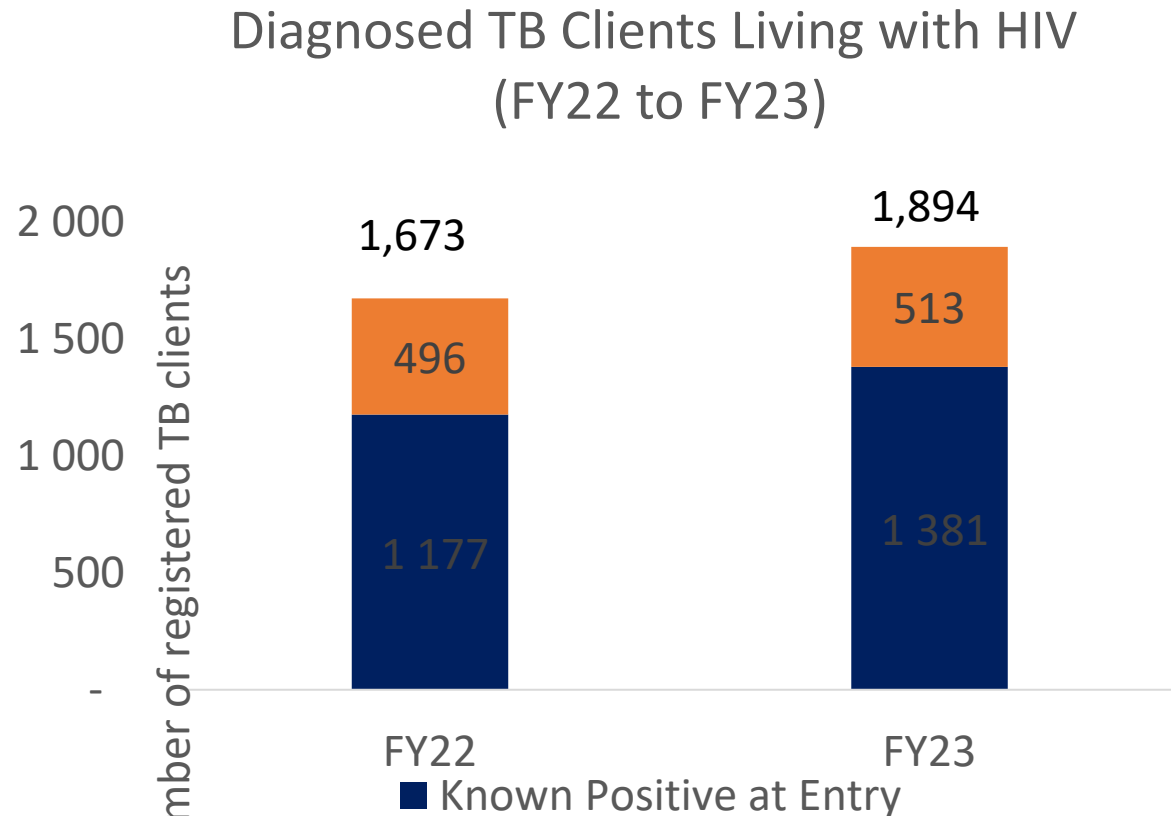


Improved Diagnosis in TB among PLHIV in the implementing sites



- The number of PLHIV diagnosed with TB **increased by 11%** from 1,157 in FY22 (**Oct 2021 – Sept 2022**) to 1,285 in FY23 (**Oct 2022 – Sept 2023**) in the sites implementing AHD

Overall improved Diagnosis in TB among PLHIV (FY22 to FY23) across the TB case finding cascade in the two provinces



- The number of PLHIV diagnosed with TB increased by 13% from 1,673 in FY22 (Oct 2021 – Sept 2022) to 1,894 in FY23 (Oct 2022 – Sept 2023)
- TB LAM testing was introduced in FY23, and 490 clients were diagnosed through TB LAM
- 991 clients already identified for the semi-annual period of FY24 (October 2023 – March 2024)

Challenges and mitigatory measures

Challenges

- Gap in conducting follow-up gene Xpert testing for all TB LAM positive cases to rule out DR TB
- Unavailability of nationally approved register / data collecting tools on AHD including TB case finding using TB LAM
- Commodity security for TB LAM commodities and other screening test reagents for AHD

Mitigatory Measure

- Continued mentorship and support by laboratory personnel
- Improvised registers
- Working closely with MOHCC to address the gap
- Support lower-level facilities with ordering and stock management of commodities
- Continued advocacy on funding for AHD commodities including TB LAM

Discussion

- Incorporating urine TB LAM test among PLHIV with AHD significantly improves TB case finding in this population
 - Reduces delays in treatment diagnosis and initiation
 - Averts mortality
- Non-laboratory personnel can be key in decentralizing and scaling up POC tests for AHD including TB LAM
 - Policy barriers in other countries but acceptable in other settings
 - training and adherence to protocols are critical.
- Gap in the implementation of the follow-up Xpert test for all positive TB LAM patients to rule out drug resistant TB
 - Identifying drug-resistant TB strains early allows for prompt adjustment of treatment regimens

Recommendations

- Scaling up AHD to all healthcare facilities in the country should be prioritized
 - Support the commodities for TB LAM testing in all patients with AHD are symptomatic of TB disease
- Promote use of POC testing for AHD screening and TB LAM through task shifting to non-laboratory staff
- Strengthen laboratory support to ensure Gene Xpert testing to rule out DR-TB in all positive TB-LAM cases.

Conclusion

- Use of TB LAM improved TB case finding and can be implemented by non-laboratory staff
- TB LAM has potential to enhance TB and HIV management, particularly for those with advanced HIV disease
- There is a gap in the implementation of the follow-up Xpert test for all positive TB LAM patients to rule out drug resistant TB

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Acknowledgements

- This assessment was made possible by the support of the U.S. Government and American people through the United States Agency for International Development (USAID) and the U.S. President's Emergency Plan for AIDS Relief (PEPFAR)
- MOHCC staff at all levels
- ZHI program staff
- Program beneficiaries

Thank You

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