

Improved TB Testing in Malawi Following Targeted Supportive Supervisions for TB LAM uptake



*Yamikani Gumulira, ** Gabe Saemisch, *Dyson Telela, *Elinat Matupa, ***Bilal Wilson, **Paul Nyasulu***Rose Nyirenda
 *Clinton Health Access Initiative, Malawi
 **Clinton Health Access Initiative, Global
 ***Department of HIV & AIDS, Ministry of Health, Malawi



BACKGROUND

Tuberculosis (TB) case finding in people living with HIV (PLHIV) has been a focus of HIV and TB programs for years. Malawi historically depended on sputum microscopy and, more recently, GeneXpert for TB diagnosis. GeneXpert improved pulmonary TB detection, however, given that significant proportions of PLHIV with TB are unable to produce sputum or have extra-pulmonary TB, TB detection remained a challenge.

In response to this, Malawi adopted the use of TB lipoarabinomannan (LAM) Point of Care (POC) in the 2018 national guidelines for Clinical Management of HIV as recommended by WHO 2017 guidance. In this guidance, it was recommended to routinely test all children 5 years+ and adults with CD4 < 200 cells/ml or signs and symptoms of WHO Stage 3 or 4 disease using the TB LAM test before ART initiation.



Although the Malawi Department of HIV and AIDS (DHA) introduced the TB LAM test in a bid to address these issues, uptake of the test remained lower than anticipated. In response to this, the DHA conducted a tailored supportive supervision visits in July 2021 to improve TB LAM uptake.

DESCRIPTION

In 2018, the DHA adopted the World Health Organization recommendation that all PLHIV with CD4 < 200, WHO stage 3/4 or who are seriously ill, have access to TB LAM testing for TB diagnosis. By January 2021, TB LAM implementation had scaled up to 118 sites across 28 districts.

However, uptake data from the lab registers demonstrated gaps in TB LAM testing for confirmed patients with AHD. Following lifting of COVID 19 movement restrictions, capacity building through supportive supervision visits were conducted in June 2021 utilizing a checklist/score card at implementation sites to identify and address uptake barriers and share TB LAM best practices with health care workers (HCWs).

RESULTS

Malawi has seen a steady increase in the percentage of AHD patients who received a TB LAM test since the supportive supervision visits were conducted. From January – June 2021, the 118 AHD sites in country were testing AHD patients for TB at an average of 81.4%. However, following capacity building and uptake reinforcement, the average TB testing rate increased to 93.7% during July – December 2021.

In addition to the scorecard, crucial components of the supervision visits include interviews with providers to understand barriers to uptake and provide clinical refresher trainings, stock inventory and management to ensure prevention of stock outs and timely ordering, and review of data capturing tools to ensure tools were functional and TB LAM testing was being recorded in the data tools.

DISCUSSION / NEXT STEPS

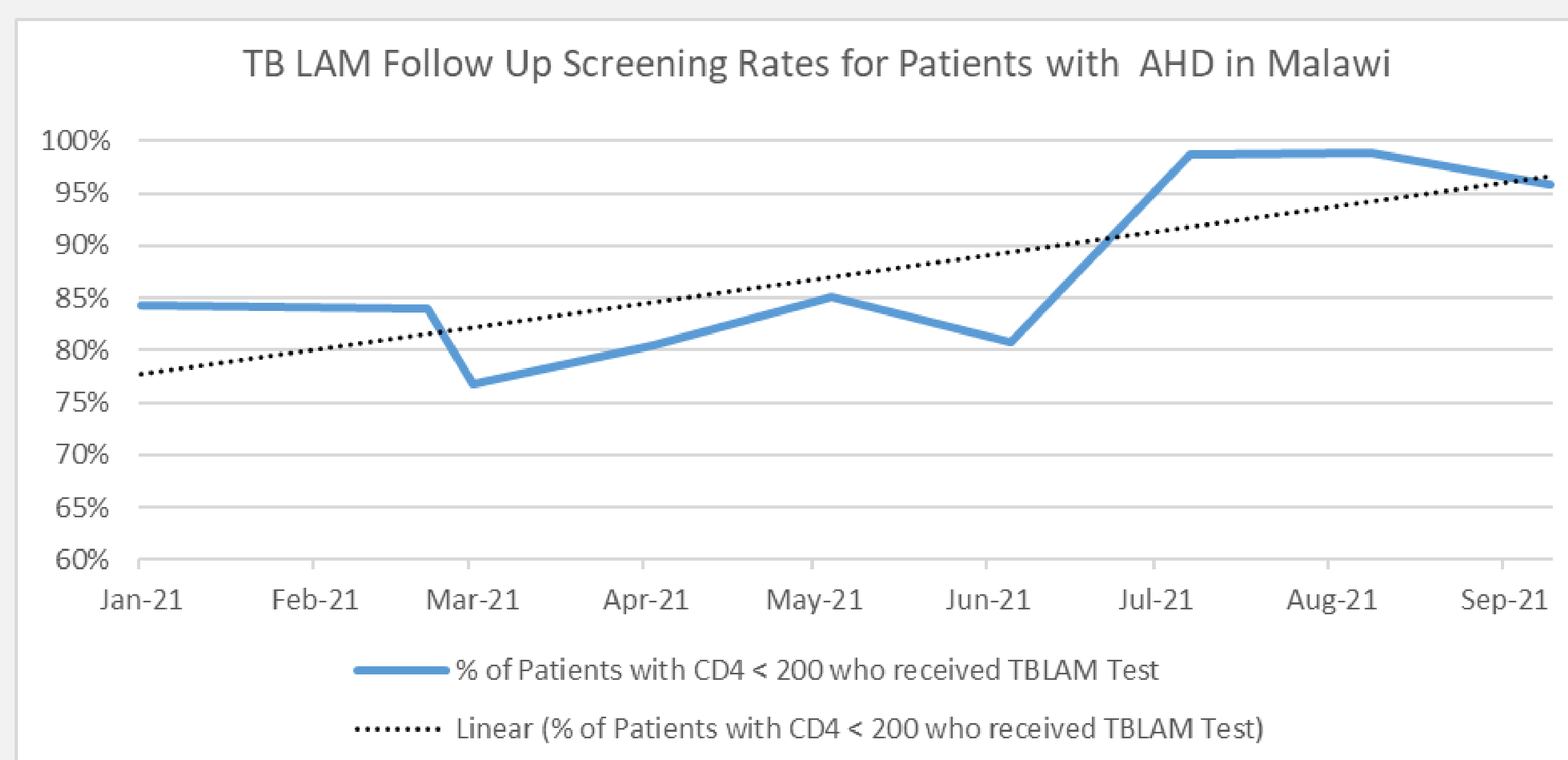
- Malawi was one of the first low- and middle-income countries to adopt TB LAM testing and tailored supportive supervisions have been crucial in improving TB testing.
- Scale up to 218 facilities started in 2022 to increase access and further decentralize POC TB testing in Malawi.
- National HIV and TB programmes can learn from Malawi's experience improving TB LAM uptake for PLHIV with AHD.

LIMITATIONS

- The study was not a controlled trial and was not powered to look at uptake changes.
- Not all sites had TB LAM data consistently recorded in the HIV and Lab registers. Additionally, sites were provided data entry mentorship alongside support visits, which could have contributed to the increased rates of TB LAM reported at sites following the visits.



Improved TB Screening Rates at the 118 AHD Sites Following Supportive Visits



Data collected from the 118 AHD sites in Malawi demonstrates a clear improvement in TB LAM screening rates following supportive supervision visits conducted in July 2021. Key components during support visits include:

1. Refresher trainings on how to conduct and accurately read the result of the TB LAM test
2. Guidelines review to ensure HCWs at sites were familiar with TB LAM guidance for patients with CD4 < 200/ml or Stage 3 or 4 disease
3. Review site workflows to ensure timely and efficient TB LAM sample transfer and testing
4. Overview of M&E protocol for accurately inputting TB LAM testing data into site data tools

ACKNOWLEDGEMENTS

This work was made possible through the support of Unitaid. The project also acknowledges all the subjects and health care workers at each of the AHD sites in Malawi.

