



Accelerating progress to end TB

8th SA

TB

Conference

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Durban ICC



Title: Enhancing TB testing strategies: Appraisal of Urine LF-LAM testing diagnostic value among PLHIV in Johannesburg Health District.

Authors: EO Moalosi, MG Neluheni, MC Ntuli, TP Neluheni-Tshinaba

Presenter: Dr Edwin O. Moalosi

MBChB, MBA, AdDipHCM



For more information, please contact:

T: +27 (0) 87 821 1109, E: info@tbconference.co.za / registration@tbconference.co.za

Background

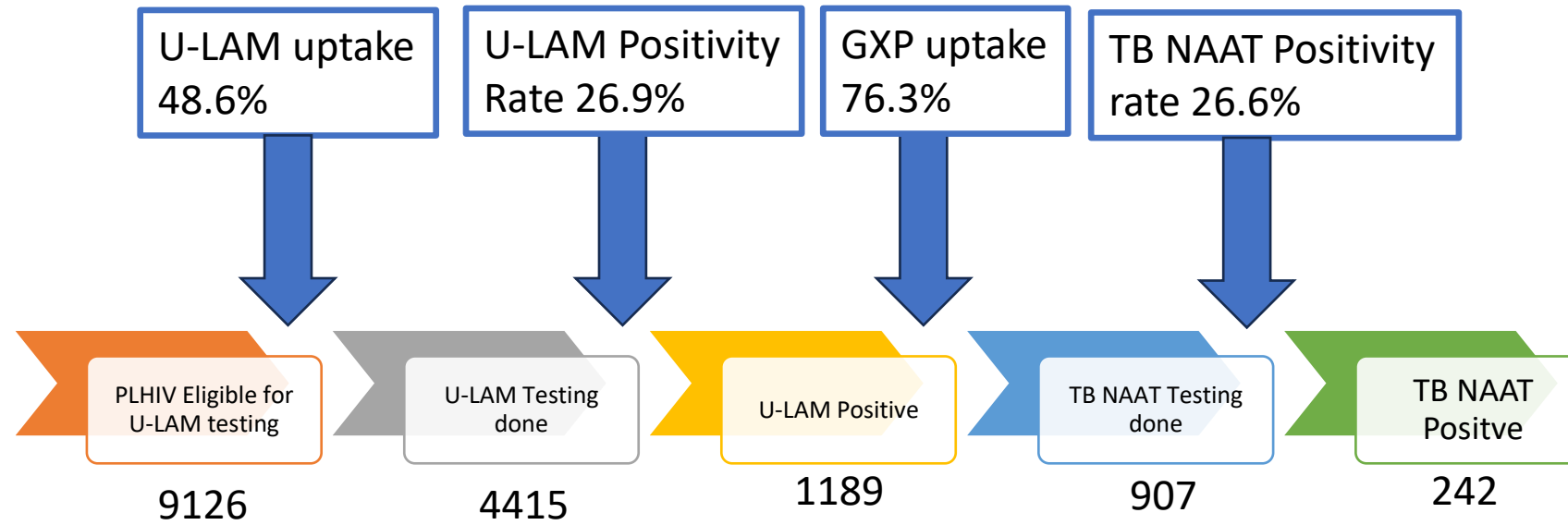
- Bacteriological diagnosis of Tuberculosis (TB) in people with advanced HIV disease remains a challenge in South Africa (SA) due to paucibacillary disease, Extrapulmonary/Miliary TB, poor cough impulse
- Urine Lateral Flow Lipoarabinomannan LAM (LF-LAM) has been proven to be effective in detecting TB among severely ill PLHIV, but the routine use remains suboptimal.
- The current National Department of Health (NDoH) guidelines have expanded the utilization of bedside LF-LAM testing to include:
 - Patients with advanced HIV disease.
 - Seriously ill PLHIV.
 - PLHIV with CD4 count below 200 in the last six months, presenting at primary health care (PHC) facilities
 - PLHIV admitted to Hospital wards with or without TB symptoms.
- In accordance with the latest NDoH guidelines Urine LF-LAM is prescribed as a diagnostic test rather than a screening tool in these patients.
- **The Urine LF-LAM antigen test is a point of care test, which ensures immediate initiation of first-line anti-TB treatment for patients with a positive result, with treatment modification based on susceptibility patterns identified using bacteriological tests.**

Method

- As a NDoH Global Fund (GF) subrecipient (SR) for period April 2022 to March 2025, the Institute of Health Programs and Systems (IHPS) is actively supporting the scale-up of LF-LAM testing and reporting in the Johannesburg Health District (JHD).
- Bedside LF-LAM testing is conducted for PLHIV with advanced HIV disease or serious illness, with concurrent sputum collection for TB Nucleic Acid Amplification Test (TB NAAT)
- Urine LF-LAM testing was conducted in 4415 eligible PLHIV from facilities with IHPS data captures (32 out of 100 facilities) in Johannesburg health district from April to December 2023

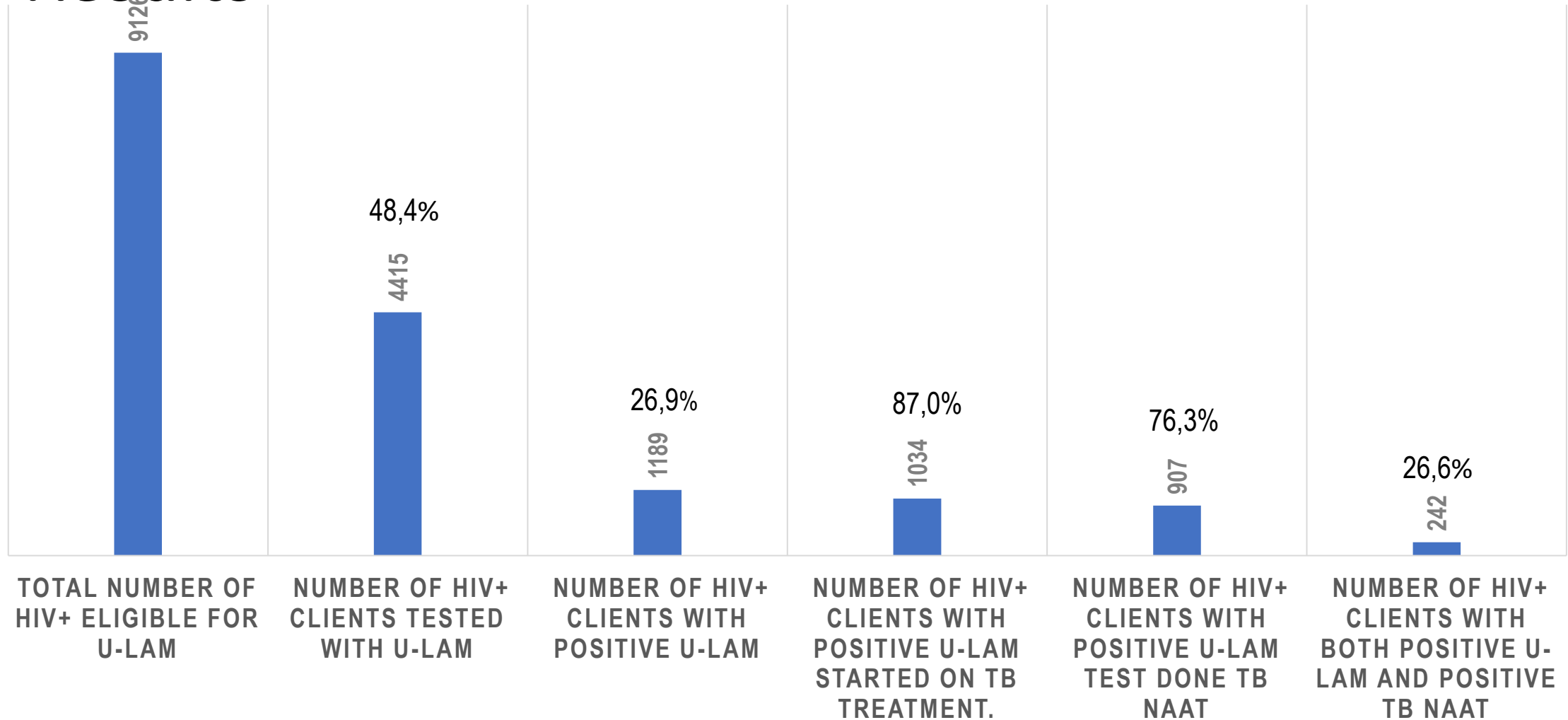


Results



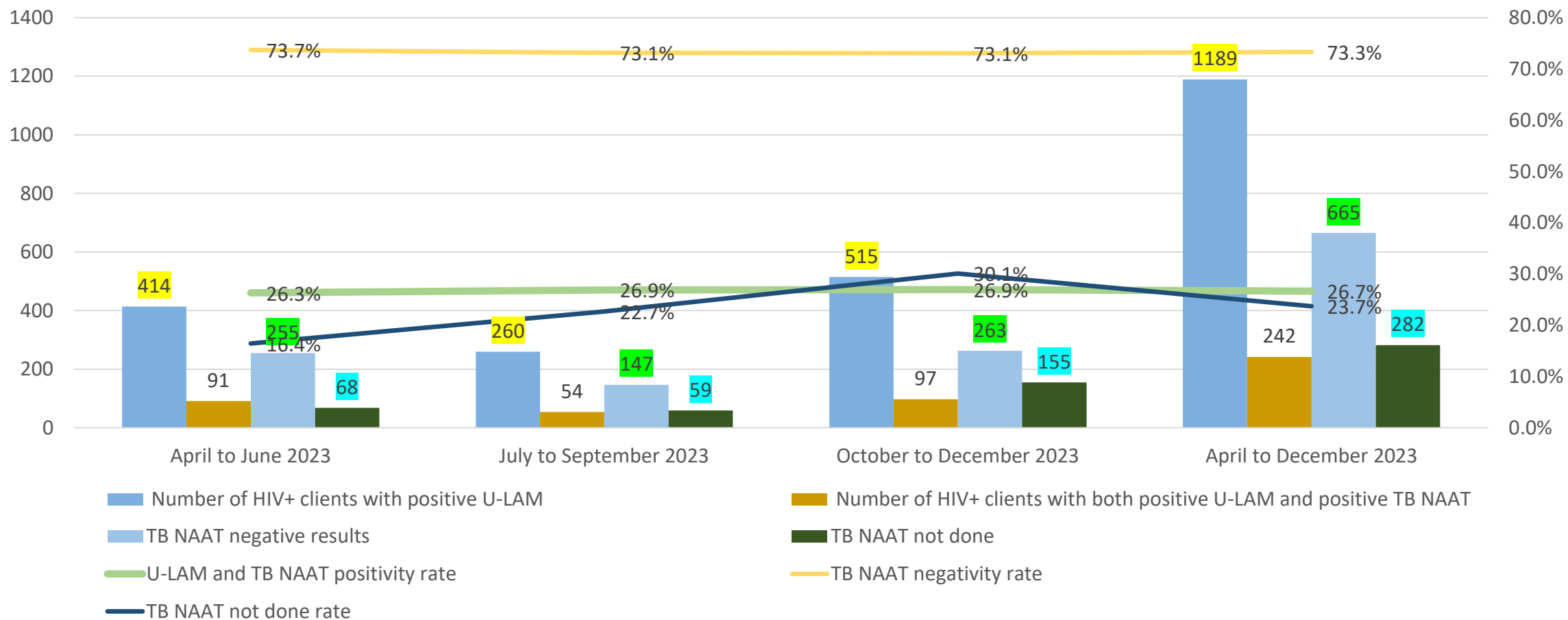
Results

URINE LF-LAM CASCADE

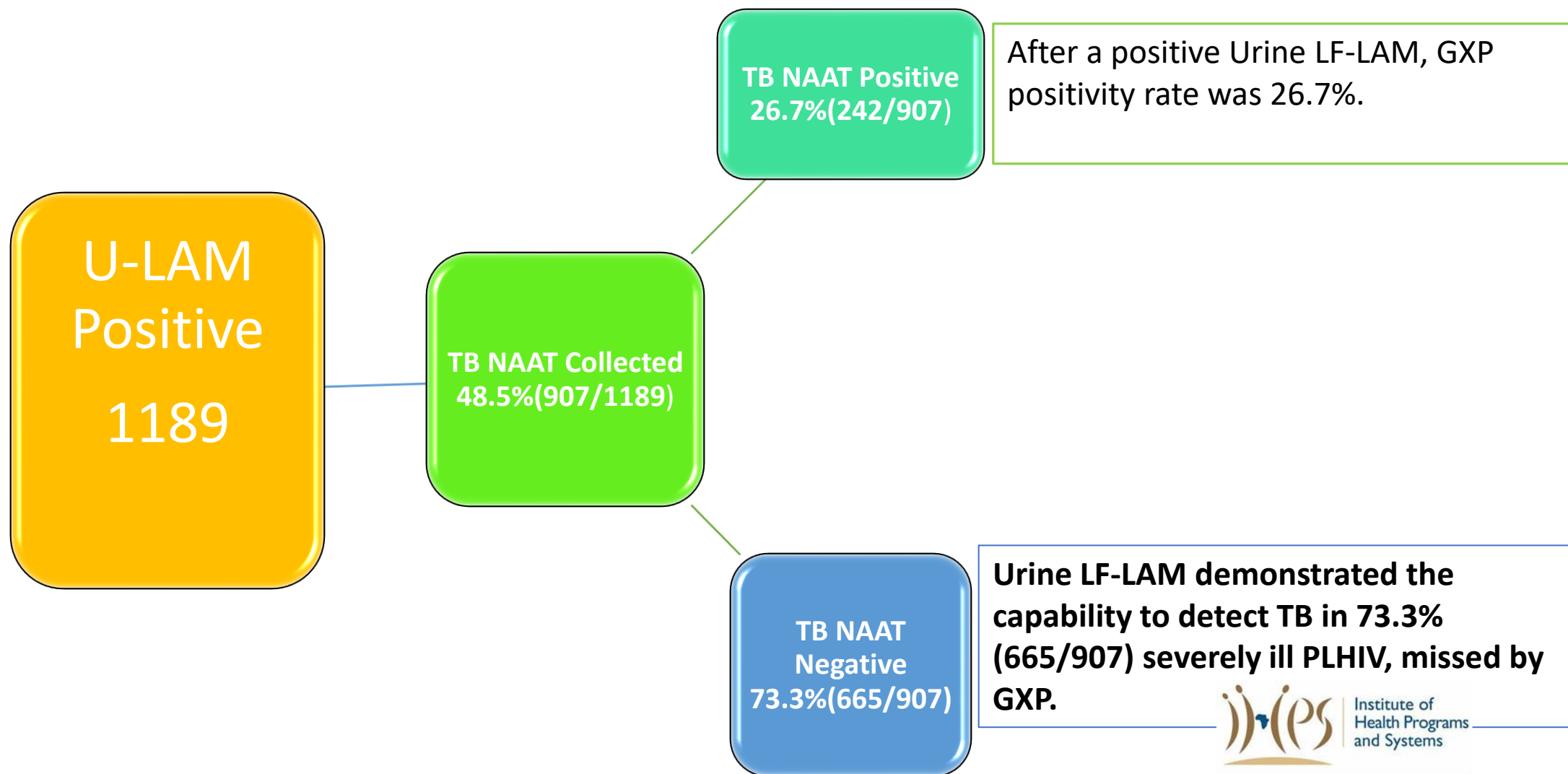


Results analysis

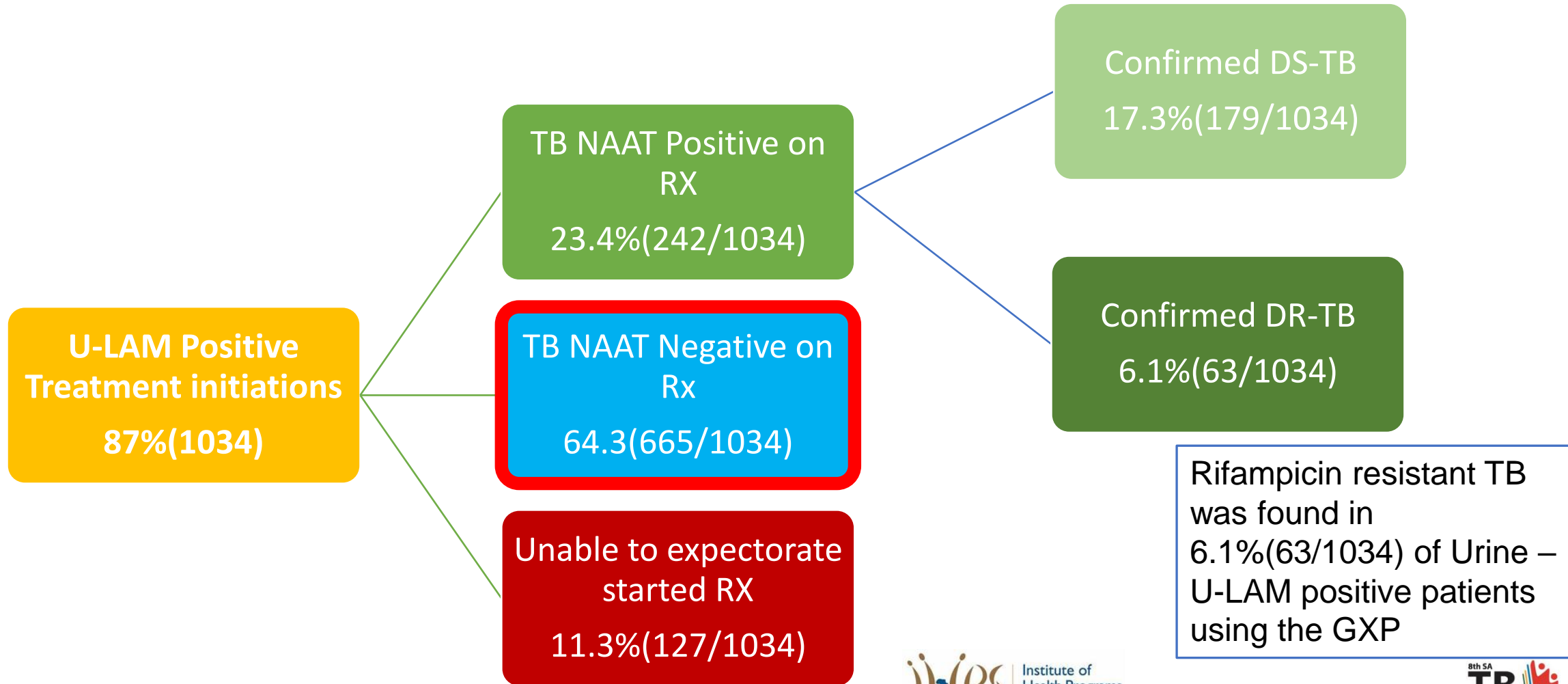
TB NAAT RESULTS AMONG U-LAM POSITIVE PATIENTS



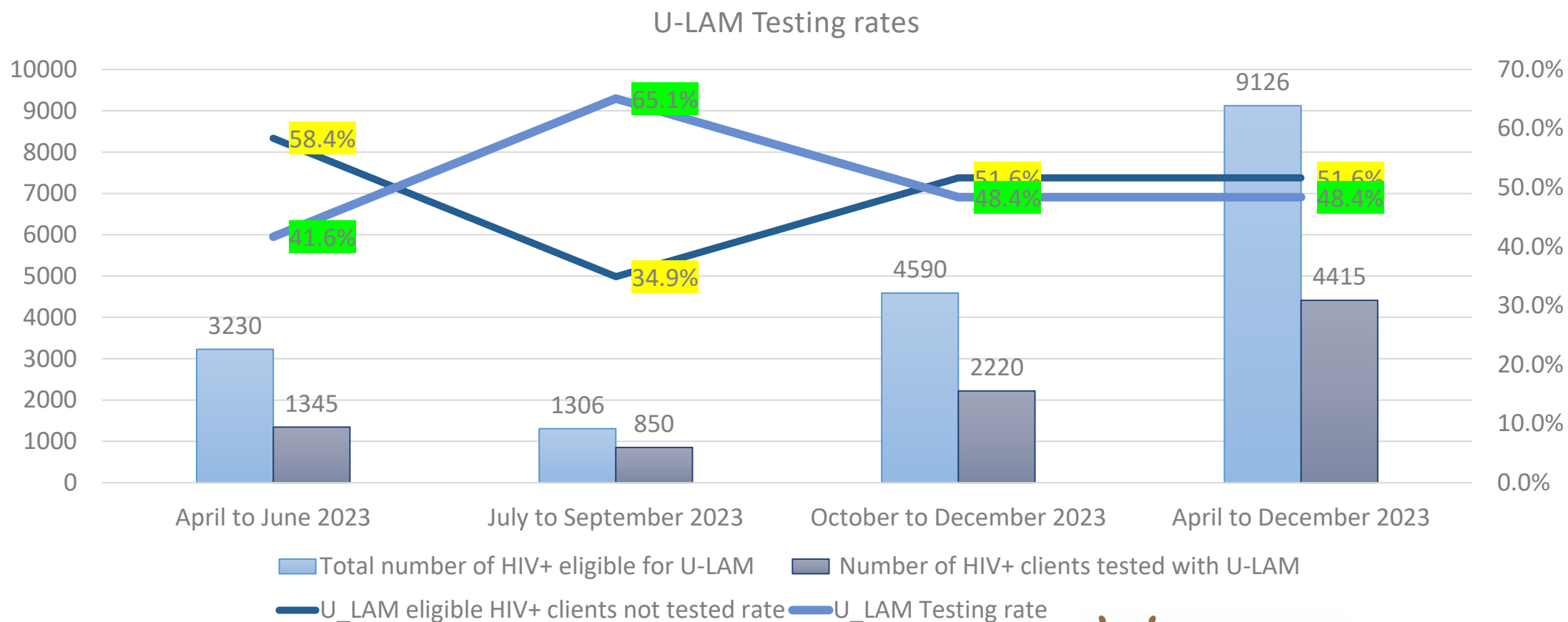
Results analysis



Results analysis



Results analysis



Conclusion

- This implementation data highlights the importance and relevance of Urine LF-LAM in enhancing TB case detection in advanced HIV disease.
- The observed Urine LF-LAM effectiveness in the severely ill PLHIV corroborates the vital role of LF-LAM in identifying TB cases that could easily be missed by traditional nucleic acid amplification testing methods.
- ***Urine LF-LAM testing should be included in the National Indicator Dataset (NIDS) to improve monitoring and reporting for continuous quality improvement, planning, and decision-making.***
- Future research should focus on the **cost effectiveness analysis** of employing Urine LF-LAM in TB case detection among all PLHIV to inform resource mobilization, budget allocation and scale-up.
- Further research should evaluate the outcomes of Urine LF-LAM positive PLHIV with a negative GXP who were treated with 1st line anti TB drugs

Acknowledgements



**Ri a livhuwa
Re a leboga
Baie dankie
Thank you
Maita bhasa**

