NWM2025

JOHANNESBURG, SOUTH AFRICA • 3–7 NOVEMBER 2025

Thursday, 6 November 2025

Session 4

Please Scan the QR code to view the online Program Guide.

NWM2025

JOHANNESBURG, SOUTH AFRICA • 3–7 NOVEMBER 2025

Oral Abstracts & Discussion: Innovations and Challenges in HIV Prevention, Treatment, and Resistance

Moderators: Dr. Patricia Rhoda Ntege Nahirya, Dr. Carrie Cox

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JOHANNESBURG, SOUTH AFRICA • 3–7 NOVEMBER 2025

Texas Children's Global Health Network

Integrase Strand Transfer Inhibitor Resistance Among Children and Young People Living with HIV in Sub-Saharan Africa:

A descriptive case series from 4 pediatric HIV Centres of Excellence

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Background

Introduction of dolutegravir (DTG)-based antiretroviral therapy (ART) for children, adolescents and young people living with HIV (CAYLHIV) has dramatically **improved regional rates of virologic suppression** in sub-Saharan Africa.

However, **surveillance data demonstrate a higher incidence of HIV drug resistance (HIVDR)** mutations to Integrase Strand Transfer Inhibitors (INSTIs) in CAYLHIV at rates higher than in adults.

We **describe resistance patterns and associated clinical factors in CAYLHIV with documented INSTI resistance** from Baylor International Pediatric AIDS Initiative (BIPAI) Centres of Excellence (COEs).

Methods

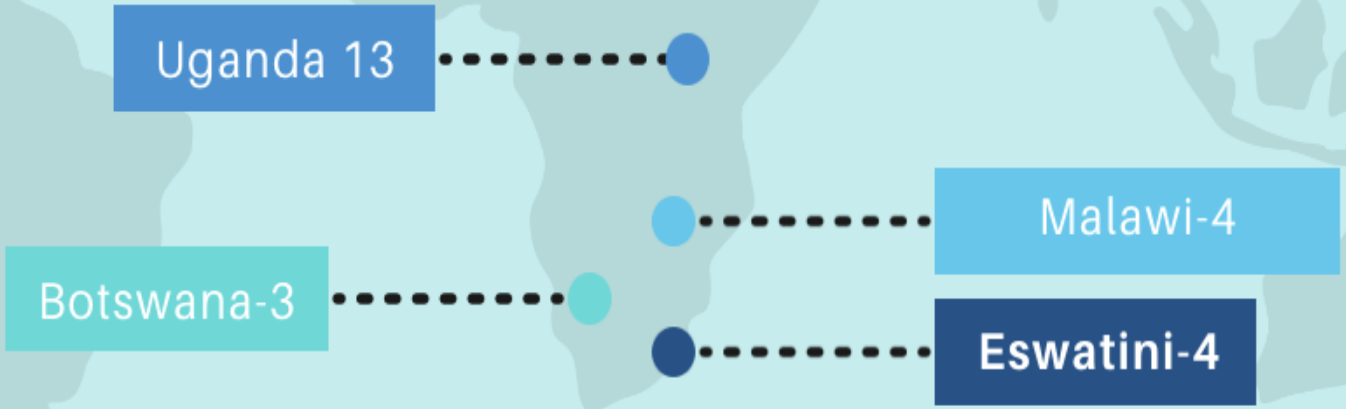
A retrospective review of electronic medical records from **CAYLHIV 0-24** years old receiving care in COEs across **4 countries** identified clients with genotypically **confirmed INSTI resistance**.

Genotypes were performed on **dried blood spot and plasma specimens** in regional laboratories (in line with country specific national guidelines).

Stanford HIVdb was used to calculate drug resistance scores and predicted HIVDR.

Results

24 Clients with Intermediate/High DTG Resistance



63% MALE (15/24)
37% FEMALE (9/24)

AVERAGE 4 VL ≥1,000 COPIES/ML PRIOR TO INSTI HIVDR DETECTION
MEAN VL 9,015 COPIES/ML (IQR 3326, 34294)

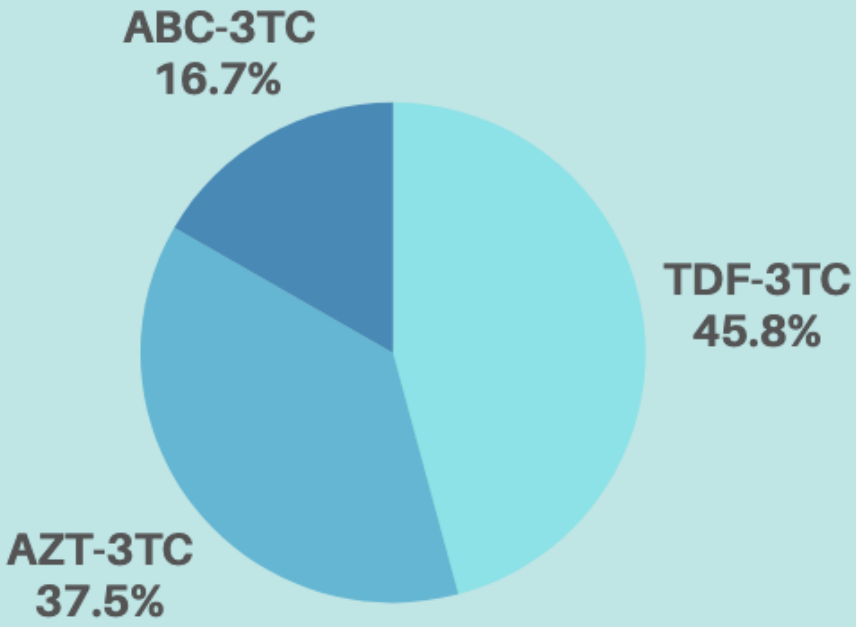
12.5% (3/24) ANTI-TB TREATMENT (ATT) ON INSTI

MEAN AGE 19.1 YEARS AT GENOTYPE (IQR 9.3,20.6)

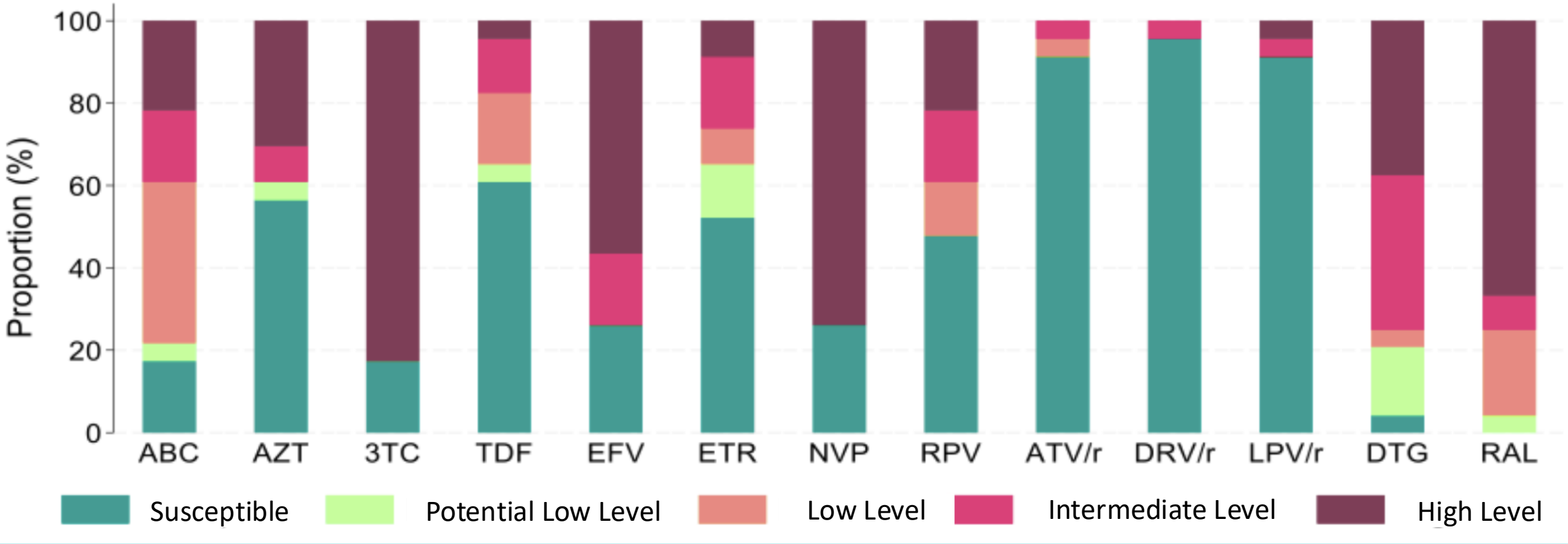
MEDIAN TIME ON ART 9.8 YEARS (IQR 6.7, 14.3)

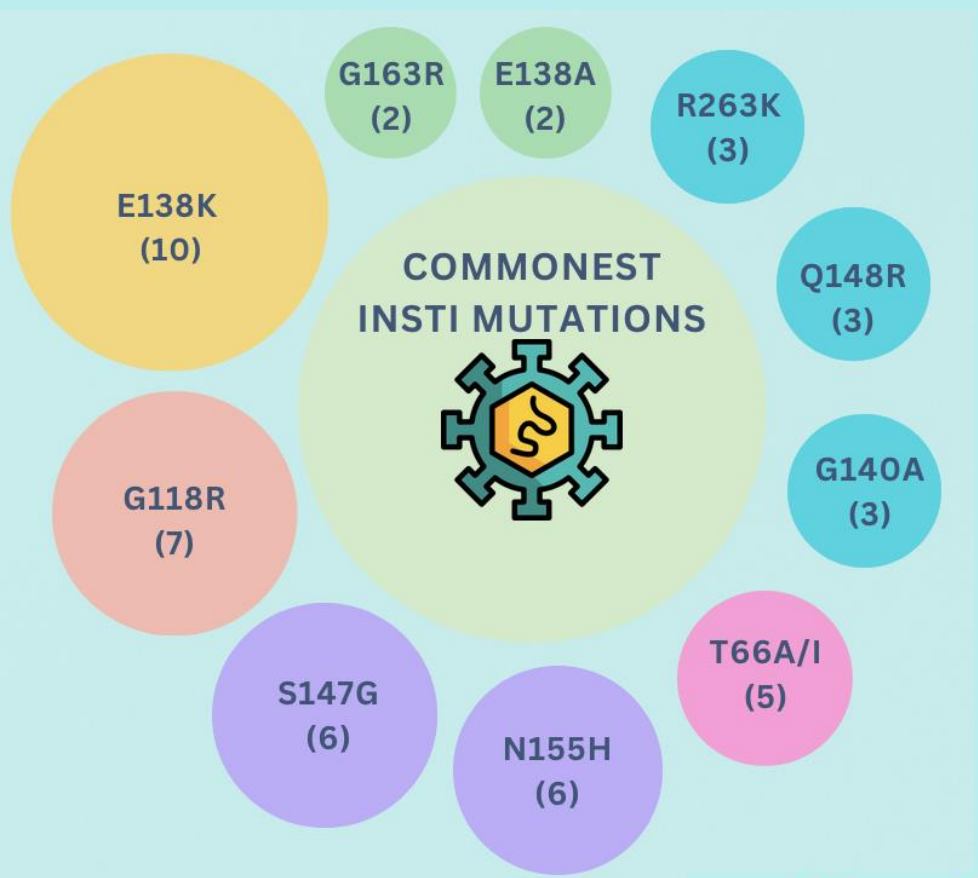
AVERAGE ON INSTI 3.5 YEARS (2.3-4.8)

NRTI BACKBONE AT GENOTYPE



HIV Drug Susceptibility by Stanford Scoring System Among INSTI resistant CALHIV at Baylor COE Uganda, Malawi, Botswana and Eswatini (n=24)





- The most frequently identified INSTI mutations included E138K, G118R, S137G and N155H
- 12.5% of samples with DTG resistance also showed intermediate/high level resistance to PIs

Conclusion

- In this cohort of CAYLHIV, INSTI resistance was identified in **24 patients** across four countries.
- All individuals had **resistance to at least 2 major ART drug classes with intermediate or higher-level resistance to INSTIs.** Notably, two individuals also demonstrated resistance to all available Protease Inhibitors.
- Routine viral load monitoring and **genotyping for CAYLHIV** with treatment failure must be **prioritized** for third line programming and HIVDR surveillance activities to inform advocacy efforts for **novel treatment** strategies in this population.

26TH NETWORK MEETING

NWM2025

JOHANNESBURG, SOUTH AFRICA • 3–7 NOVEMBER 2025

Texas Children's Global Health Network

Prevalence and Factors associated with Dolutegravir resistance among Children and Adolescents living with HIV in Mid-Western Uganda: A Cross-Sectional Analysis.

Presenter: Dr. Lubulwa Shafick

Co-authors: Epidu Calvin, Denise Birungi, Dithan Kiragga

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Baylor College of Medicine Children's Foundation Uganda

Introduction

HIV drug-resistance (HIVDR) reduces the efficacy of Anti-Retroviral Therapy (ART), thus the WHO recommends routine surveillance for HIVDR.

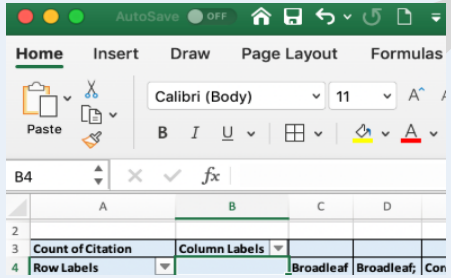
Clients with **two consecutive high-viremia** results are eligible for the HIVDR test under the 2022 Uganda ART guidelines. The Uganda National Laboratory-based Surveillance 2021-2022, showed **dolutegravir (DTG) resistance at 6.6% among Children and Adolescents** living with HIV (CALHIV) with high-viremia (>1,000copies/ml), but didn't identify client-level factors.

Objective: Estimate the proportion of CALHIV with DTG resistance at repeat viral load (VL) test and associated client-level factors.

Methodology

Data Extraction and Analysis

CALHIV (0-19years) from **40 of the 95 ART** Health facilities with two consecutive high-viremia results and an amplified DTG resistance profile from the HIVDR database **between Jan-2021 and Mar-2025** were downloaded as an Excel file for this cross-sectional study



Establishment of Prevalence Ratios

Data Variables

Variables: ART history, virologic profile, adherence barriers, clinical assessments, and drug mutations. **Missing data was added from the Health facility client records**. Resistance to (DTG), (NRTIs), (NNRTIs), and (PIs) was defined as the presence of any major class mutation using the Stanford HIVDR database.

Factors associated with DTG resistance from previous studies and those **with a p-value <0.2 at bivariate analysis** were included in the Logistic Regression model using Stata 14.0

Results

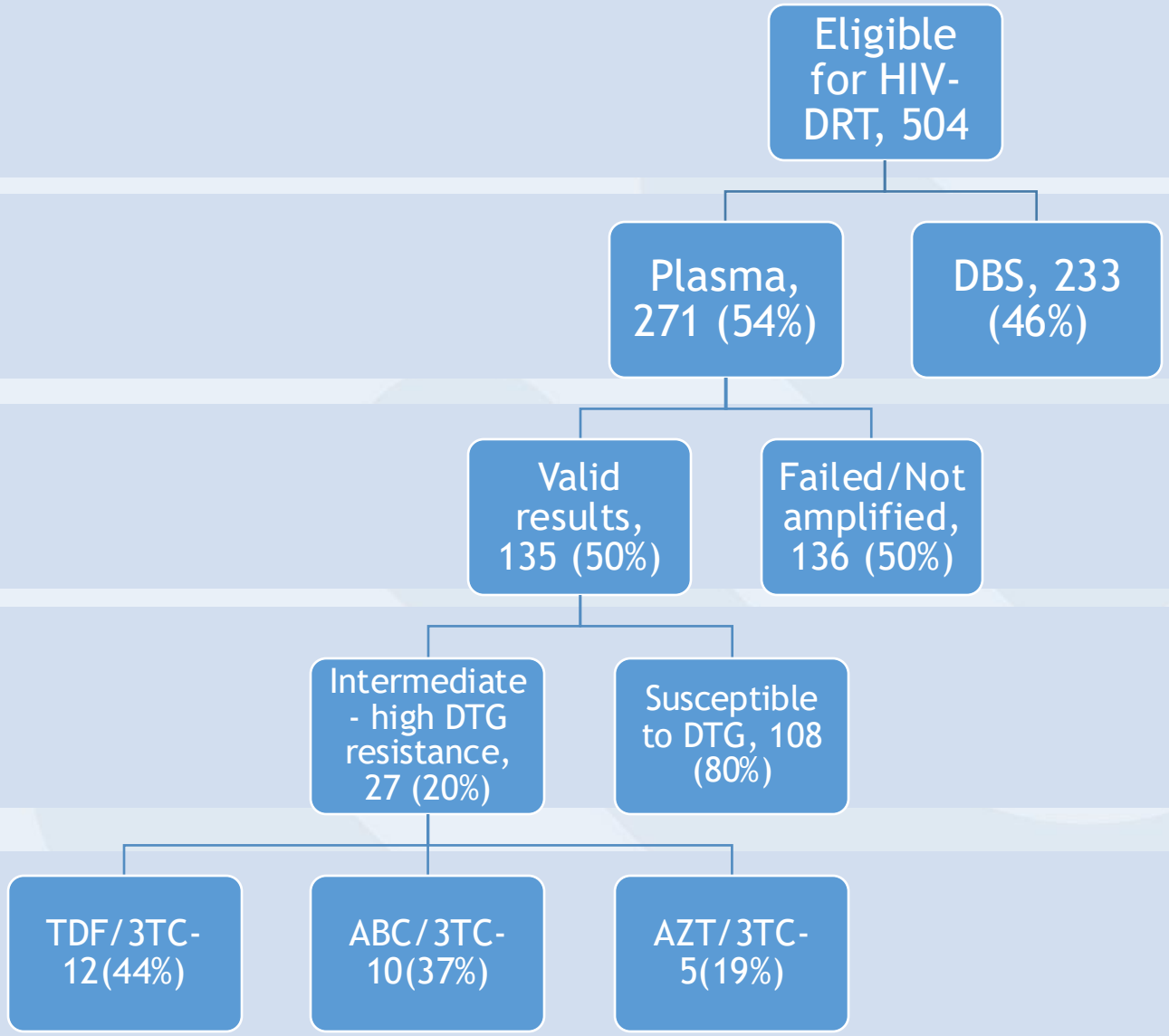
Clients with two consecutive high-viremia results

Type of sample collected for HIV-DRT

Of the valid results, 51% were males, median age was 13(IQR 12-14) years and 71% were ≥5years on ART.

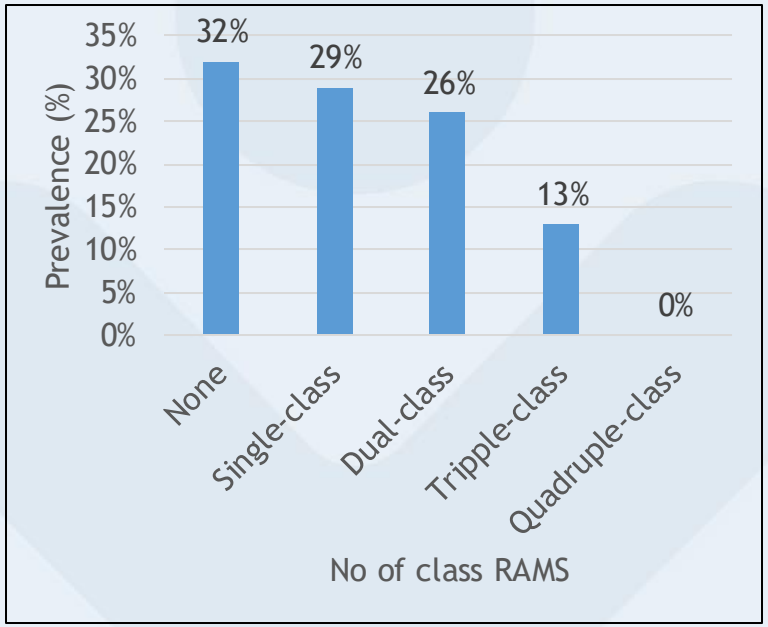
For DTG resistance, 19(70%) were males, median age was 12(IQR 10-15) years and 63% were ≥5years on ART. Commonest DTG RAMs, E138K, G140S and Q148HRK

Back borne regimens among the CALHIV with DTG resistance. Commonest NRTIs were M184VI, M41L and T215FY.

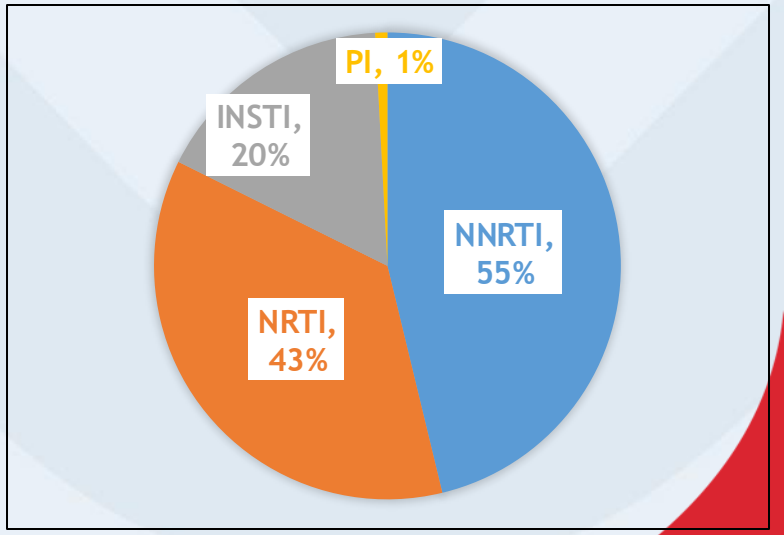


Results

Factor	DTG resistance		Crude PR (CI)	Adjusted PR (CI)	P-value
	Yes	No			
Sex					
Male	19 (27%)	51 (72%)	0.99 (0.08-1.9)	0.09 (-0.05-0.24)	0.24
Female	8 (29%)	58 (53%)	Ref		
NRTI RAMs					
None	7 (9%)	70 (91%)	Ref		
Any	20 (34%)	39 (66%)	1.63 (0.69-2.58)	0.12 (0.26-2.28)	0.014
Duration on ART					
<6 mo	0 (0%)	3 (100%)	Ref		
6mo- 1yr	1 (100%)	0 (0%)	1 (0.99-1)	0.91 (-0.02-1.85)	0.54
1-2yrs	1 (11%)	8 (89%)	0.11 (-0.095-0.32)	0.08 (-0.43- 0.6)	0.75
2-5yrs	7 (28%)	18 (72%)	0.28 (0.1-0.45)	0.23 (-0.25-0.71)	0.35
>5yrs	15 (17%)	74 (83%)	0.17 (0.09- 0.2)	0.19 (-0.62-0.07)	0.42



Prevalence of class RAMs



Conclusion

The prevalence of DTG resistance among CALHIV was high and linked to NRTI resistance. **This highlights the need to strengthen adherence support**, early detection, and management of CALHIV failing on NRTIs.

Additionally, **improving access to HIV-DR testing** by enhancing laboratory infrastructure is essential.

26TH NETWORK MEETING | NWM2025

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Texas Children's Global Health Network

U=U: A Simple Equation Changes Patients' Lives

Authors: Elena Melinte-Rizea, Ştefania Mihale, Negivan Septar, Iuliana Costaş, Alexandra Androne, Elena Costi, Andreea Emilia Popa, Andreea Mușat

The Clinical Center of Excellence of Baylor Black Sea Foundation, Constanţa, Romania

Abstract category: Program Description

November 2025

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Agenda

Background

Description & methods

Evaluation & outcomes

Lessons learned

Next steps

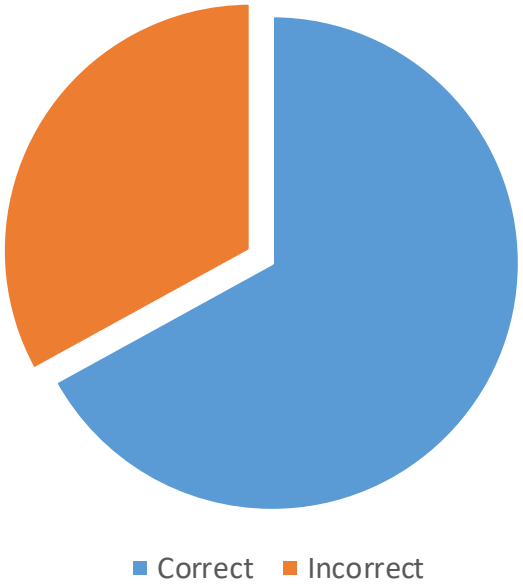
Background

Key points:

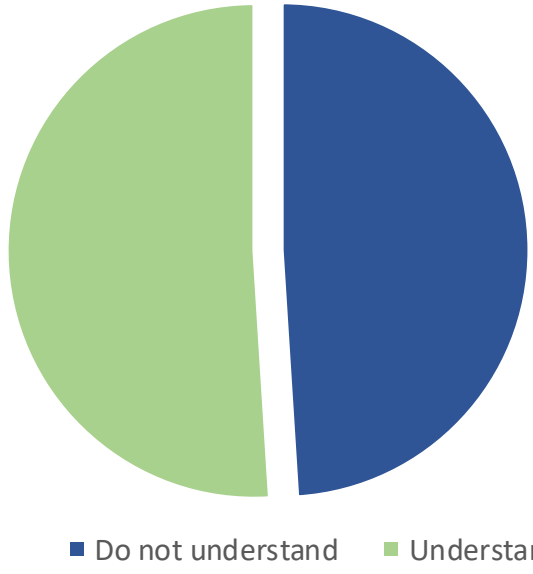
Patients still face challenges in adherence and understanding viral suppression:

- 33% of PLWHA struggle to **correctly administer treatment** (e.g.: miss doses, do not respect time of administration) and do not have an undetectable VL at 6 months intervals
- 49% had a viral load test in the past year – many **don't know the result**

Treatment administration



Viral load result



Description

Campaign Overview

What?

U=U Information Campaign

Why?

Improve health literacy as a foundation for patient empowerment
Transmit complete information about the conditions needed for the U=U

When?

Unfolded bewteen June 2023 – June 2024

Who?

Conducted by medical & psychosocial teams

How?

Standardized counselling script & visual support
Used *"teach-back"* method to confirm understanding
Real-time data entry for accuracy

Counselling process:

Info → Teach-back → Recheck → Data Entry

Methods

Key points:

Beneficiaries

Total: 717 people counselled

Demographics:

- 79% aged 18–49 (sexually active adults)
- 51% men
- 93% heterosexual
- 45% in serodiscordant relationships

Evaluation & outcomes

Findings:

- 51% had *never heard* of U=U before
- Only 41% correctly repeated all 3 criteria for U=U on first attempt
- No significant difference in info retention between groups ($\chi^2 = 0.14$, $p > .05$) – already knew the information vs naive group

Evaluation and outcomes

Impact & feedback:

- 72% of patients declare „U=U” is a *“Life-changing information”*
- 19%: understood message but still fear sexual transmission

Next steps

Planned actions:

- ❑ Integrate U=U counselling every **18 months** into routine care
- ❑ Continue real-time data collection
- ❑ Share model for replication in other clinics

Thank you!

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Baylor Black Sea Foundation

Those who strive can be helped!

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Texas Children's Global Health Network

Integration of Targeted Next Generation Sequencing(tNGS) into Routine Diagnostic and Clinical care: Lessons learnt from Eswatini.

Debrah Vambe, Mangaliso Ziyane, Thulani Jele, Leonardo de Araujo, Sphiwe Ngwenya, Anna Mandalakas, Alexander Kay, Stefan Niemann, Sindisiwe Dlamini.

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Outline

- Background
- Evaluation and Outcomes
- Lessons Learned
- Conclusion& Next Steps

Background

Rifampicin-resistance profiles in Eswatini

- Eswatini faces an increasing prevalence of multidrug-resistant (MDR) *Mycobacterium tuberculosis* (Mtb) strains carrying the rifampicin resistance (RR) *rpoB* I491F mutation, undetected by standard diagnostic methods like GeneXpert® MTB/RIF Ultra (Xpert Ultra) and line probe assays (LPA) and even MGIT
- This was first detected in 2009 drug resistance Survey-30% prevalence
- The prevalence increased to **~58% in 2018 TB DRS**
  - 58% of true RR-TB individuals are incorrectly diagnosed as RS-TB by GeneXpert.
    - *An important indicator for strains harboring this mutation is that most of them are resistant to isoniazid when tested using MGIT culture, Xpert MTB XDR Assay or LPA*

- Of substantial public health significance is the fact that a notable proportion of this strain also carries mutations associated with resistance to bedaquiline and clofazimine

- This highlighted a significant issue for the quality of multidrug-resistant/rifampicin-resistant TB (MDR/RR-TB) treatment, as current regimens could be compromised by undetected resistance.
- We present the implications of this mutation and the programmatic response.

Eswatini DR-TB Regimens

Oral MDR TB regimens	Regimen composition	Eligible group and a brief guide for regimen use
BPaL	6-9 Bdq-Pa-Lzd	An alternative treatment regimen for Pre-XDR-TB patients ≥15 years old. (Note: pregnant and lactating women are not eligible.)
BPaLM	6 Bdq-Pa-Lzd-Mfx	The primary treatment regimen for MDR-TB/RR-TB/PDR-TB ≥15 years old. (Note: pregnant and lactating women are not eligible.)
6 Bdq-Dlm-Lfx-Lzd-Cfz	**6 Bdq-Dlm-Lzd-Lfx-Cfz** **Can change as below when the FQ DST result is available.** **If the DST result shows.** **FQ susceptible, omit Cfz and continue with Bdq-Dlm-Lzd-Lfx.** **FQ resistant, omit Lfx and continue with Bdq-Dlm-Lzd-Cfz.**	Alternative regimen to BPaLM for RR/MDR with/ without FQ resistance. Children and pregnant and lactating women are eligible for this regimen. **For clients with known FQ resistance, this regimen by omitting Lfx is preferable (ie. Bdq-Dlm-Lzd-Cfz) to BPaL.**

Eswatini DR-TB Regimens

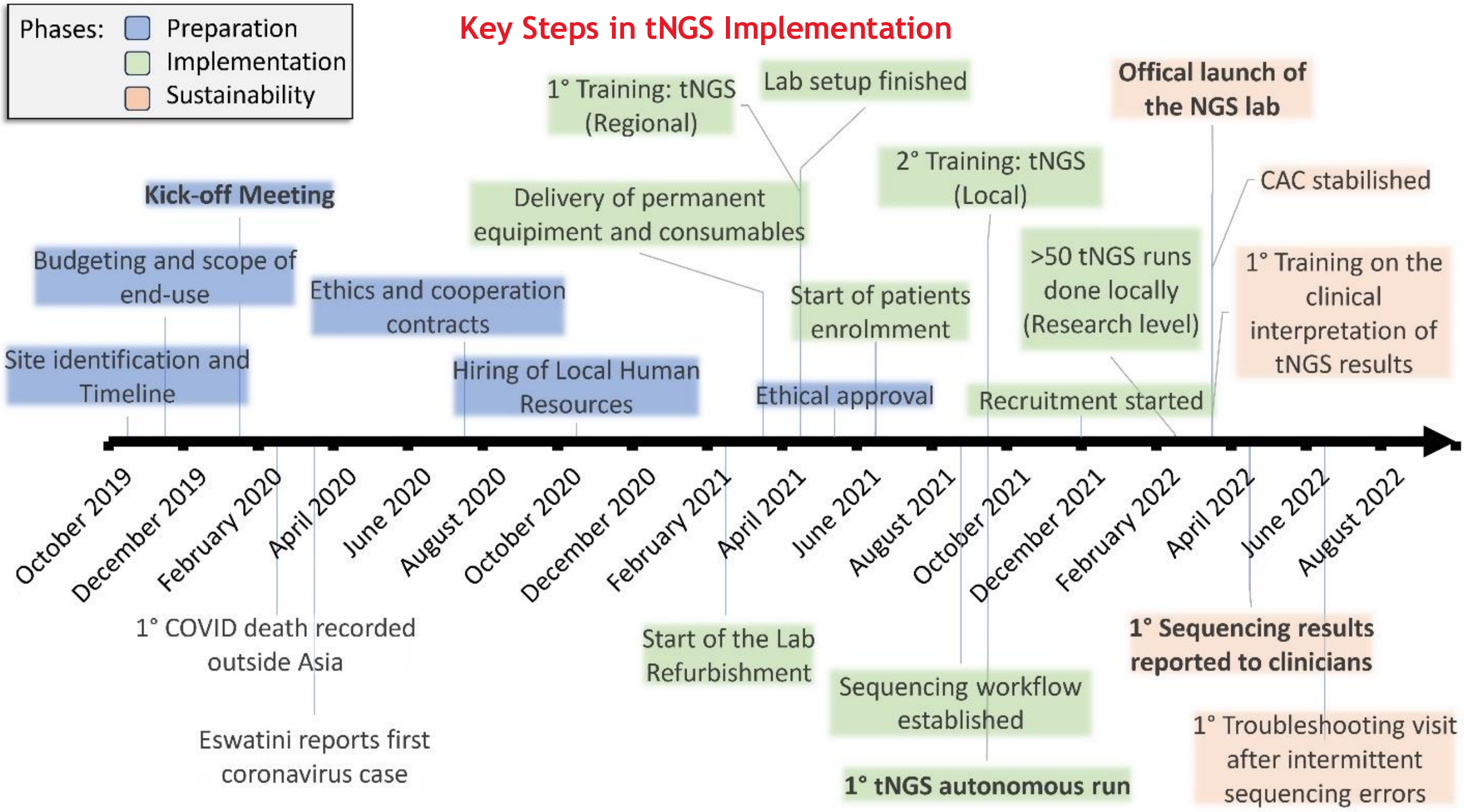
9-month regimens	**a. 9 Bdq-Lzd-Mfx-Z#** **b. 9 Bdq-Lzd-Lfx-Cfz-Z** **c. 9 Bdq-Dlm-Lzd-Lfx-Z** **(# priority regimen among the three 9 mth regimens)**	MDR/RR-TB without FQ resistance who are not eligible to BPaLM or 6 Bdq-Dlm-Lfx-Lzd-Cfz regimens
LTR (standardized - STDTR or individualized-ITR)	**STDTR** **18-20 Bdq/Lzd/DLM/Cfz/Trd(Cs)** **ITR: composed of 4-5 likely effective drugs containing Group A&B drugs as a priority**	For those who are not eligible for the BPaL or mSTR, XDR, Severe EP TB (meningitis, Osteoarticular, pericardial), disseminated or military TB
Hr-TB Regimen	**6 RHZE**	If the absence of Rifampicin resistance cannot be confirmed (i.e., lack of rifampicin-resistant report by sequencing which is missed to detect by pDST and Xpert test) 6RHZE is preferable to avoid drug resistance amplification, especially for Lfx which is an important core drug in second-line treatment), If Hr-TB without any confirmed additional resistance to other drugs with the availability of full DST results, a 6 (H)RZE+Lfx regimen may be used.

What was the response?

In response, the Eswatini Ministry of Health decided to introduce targeted next-generation sequencing (tNGS) in 2019 with support from Global Health Protection Program (GHPP)-German Ministry of Health, Baylor Foundation Eswatini and Baylor College of Medicine.

Due to COVID-19 disruptions, procurement challenges and structural adjustments of the laboratory to accommodate sequencing, implementation was delayed to 2021.

Whilst waiting for implementation of targeted next generation sequencing, guidelines were revised for early detection & empirical treatment of patients with presumed RR/MDR-TB.


Phases:
Preparation
Implementation
Sustainability
Key Steps in tNGS Implementation
1° Training: tNGS (Regional)
Lab setup finished
Offical launch of the NGS lab
2° Training: tNGS (Local)
CAC stabilished
Kick-off Meeting
Delivery of permanent equipiment and consumables
>50 tNGS runs done locally (Research level)
1° Training on the clinical interpretation of tNGS results
Budgeting and scope of end-use
Ethics and cooperation contracts
Start of patients enrolmment
Site identification and Timeline
Hiring of Local Human Resources
Ethical approval
Recruitment started
October 2019
December 2019
February 2020
April 2020
June 2020
August 2020
October 2020
December 2020
February 2021
April 2021
June 2021
August 2021
October 2021
December 2021
February 2022
April 2022
June 2022
August 2022
1° COVID death recorded outside Asia
Eswatini reports first coronavirus case
Start of the Lab Refurbishment
Sequencing workflow established
1° tNGS autonomous run
1° Sequencing results reported to clinicians
1° Troubleshooting visit after intermittent sequencing errors

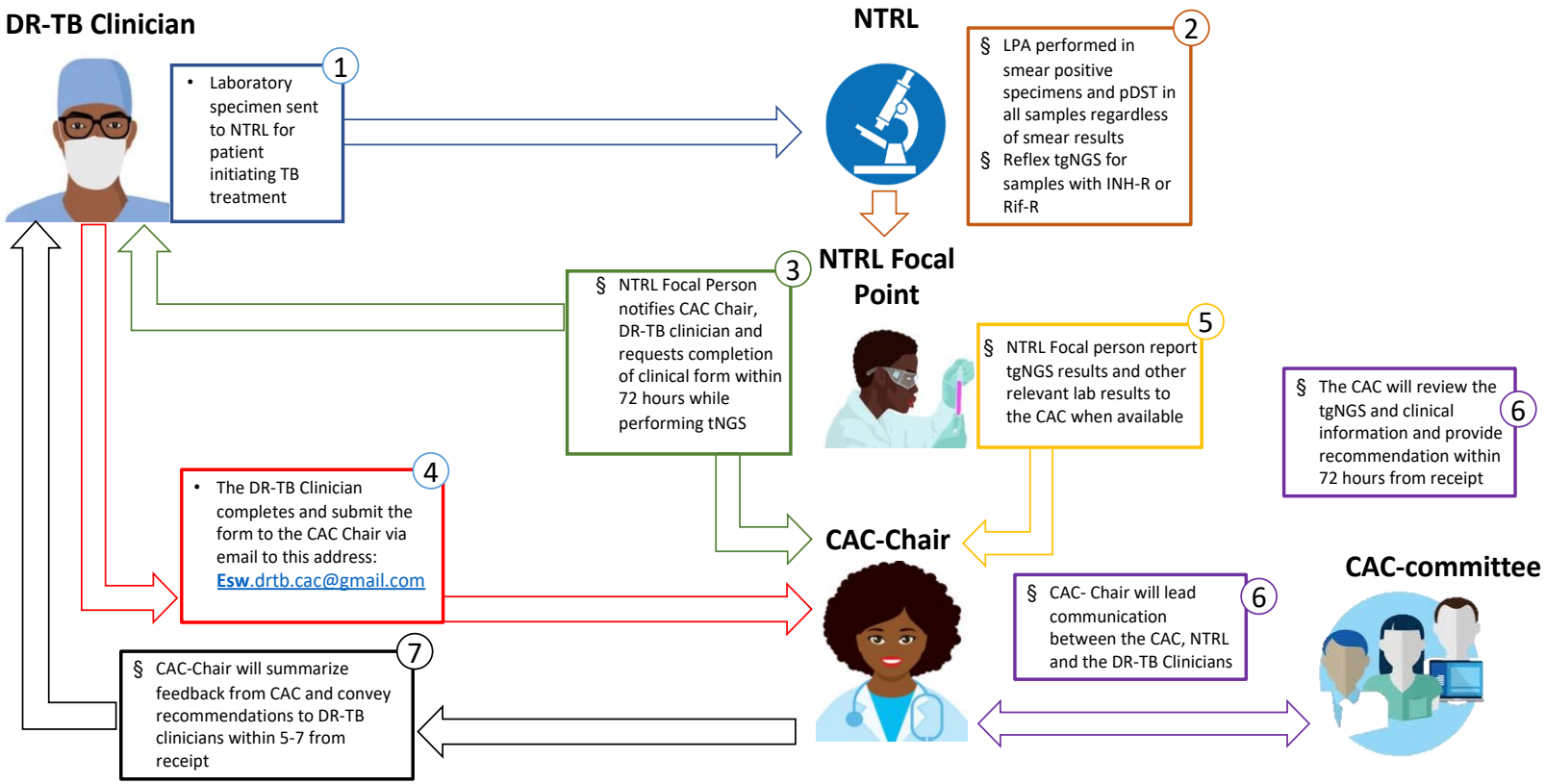
Eligible samples for sequencing

- tNGS was performed on all samples with resistance detected to isoniazid or rifampicin by Xpert Ultra, LPA, or phenotypic drug susceptibility testing in the study period September 2021 to December 2024.
- Patient specimens were tested first by Xpert Ultra and second by LPA, liquid culture and tNGS, using the Deeplex® Myc-TB assay, at the Eswatini National Tuberculosis Reference Lab.
- Clinical data were collected through programmatic structures developed to support implementation.

Clinical Advisory committee(CAC)

Was set up to provide guidance to clinicians on interpretation and management of patients with additional tNGS results.

Process for communication & Responsibilities of the Committee



Composition of CAC

- Eswatini-based drug-resistant tuberculosis clinicians
- Internal& external drug-resistant tuberculosis experts.
  -with clinical, laboratory, and public health expertise.

- Job aids and SOPs were developed to support implementation and define roles and responsibilities of the committee.

Evaluation and Outcomes

	PARTICIPANT	XPERT_ULTRA	LPA		MGIT		tNGS DEEPLEX					CLASSIFICATION	MUTATIONS
2	Participant.Numb	Xpert_MTB	LPA_RIF	LPA_INH	MGIT1_RIF	MGIT1_INH	RIF	INH	LIN	BDQ	CFZ	Classificatior	Mutations
6	Seq-01-0004	RIF Susceptible	Susceptible	Resistant	NA	NA	1	1	0	0	0	MDR	I491F
16	Seq-02-0004	RIF Susceptible	Susceptible	Resistant	SUSCEPTIBLE	RESISTANT	1	1	0	1	1	MDR(BDQ-R)	I491F|S450L
24	Seq-02-0016	RIF Resistant	Susceptible	Resistant	SUSCEPTIBLE	RESISTANT	1	1	0	0	0	MDR	I491F
28	Seq-02-0024	RIF Susceptible	Susceptible	Resistant	SUSCEPTIBLE	RESISTANT	1	1	0	0	0	MDR	I491F
29	Seq-02-0025	RIF Susceptible	Susceptible	Resistant	SUSCEPTIBLE	INDETERMINATE	1	1	0	1	1	MDR(BDQ-R)	I491F
31	Seq-02-0027	RIF Susceptible	NA	NA	SUSCEPTIBLE	RESISTANT	1	1	0	0	0	MDR	I491F
40	Seq-02-0042	RIF Resistant	Resistant	Resistant	RESISTANT	RESISTANT	1	1	0	0	0	MDR	H445D|I491F
41	Seq-02-0043	RIF Susceptible	Susceptible	Resistant	SUSCEPTIBLE	SUSCEPTIBLE	1	1	0	1	1	MDR(BDQ-R)	I491F
44	Seq-02-0049	RIF Resistant	NA	NA	SUSCEPTIBLE	RESISTANT	1	1	0	1	1	MDR(BDQ-R)	I491F
54	Seq-04-0002	RIF Resistant	Susceptible	Resistant	INDETERMINATE	INDETERMINATE	1	1	0	1	1	MDR(BDQ-R)	I491F
58	Seq-05-0003	RIF Susceptible	Susceptible	Resistant	SUSCEPTIBLE	RESISTANT	1	1	0	1	1	MDR(BDQ-R)	I491F
60	Seq-05-0011	RIF Susceptible	Susceptible	Resistant	SUSCEPTIBLE	RESISTANT	1	1	0	1	1	MDR(BDQ-R)	I491F
62	Seq-05-0015	RIF Susceptible	Susceptible	Resistant	SUSCEPTIBLE	INDETERMINATE	1	1	0	1	1	MDR(BDQ-R)	I491F
65	Seq-06-0003	RIF Susceptible	Susceptible	Resistant	SUSCEPTIBLE	RESISTANT	1	1	0	1	1	XDR	I491F
66	Seq-06-0004	RIF Susceptible	Susceptible	Resistant	SUSCEPTIBLE	RESISTANT	1	1	0	1	1	MDR(BDQ-R)	I491F
72	Seq-06-0011	RIF Susceptible	Susceptible	Resistant	SUSCEPTIBLE	RESISTANT	1	1	0	1	1	MDR(BDQ-R)	I491F
76	Seq-06-0015	RIF Susceptible	Susceptible	Resistant	SUSCEPTIBLE	RESISTANT	1	1	0	1	1	MDR(BDQ-R)	I491F
77	Seq-07-0002	RIF Susceptible	Susceptible	Resistant	SUSCEPTIBLE	RESISTANT	1	1	0	1	1	MDR(BDQ-R)	I491F
78	Seq-07-0003	RIF Susceptible	Susceptible	Resistant	SUSCEPTIBLE	RESISTANT	1	1	0	1	1	MDR(BDQ-R)	I491F
79	Seq-07-0005	RIF Susceptible	Susceptible	Resistant	SUSCEPTIBLE	RESISTANT	1	1	0	1	1	MDR(BDQ-R)	I491F
84	Seq-07-0014	RIF Susceptible	Susceptible	Resistant	SUSCEPTIBLE	RESISTANT	1	1	0	1	1	MDR(BDQ-R)	I491F
95	Seq-08-0014	RIF Susceptible	Susceptible	Resistant	SUSCEPTIBLE	RESISTANT	1	1	0	1	1	MDR(BDQ-R)	I491F
97	Seq-08-0016	RIF Susceptible	Susceptible	Resistant	SUSCEPTIBLE	RESISTANT	1	1	NA	1	1	MDR(BDQ-R)	I491F
98	Seq-08-0019	RIF Susceptible	Susceptible	Resistant	SUSCEPTIBLE	RESISTANT	1	1	0	1	1	MDR(BDQ-R)	I491F
101	Seq-09-0001	RIF Susceptible	Susceptible	Resistant	SUSCEPTIBLE	RESISTANT	1	1	0	1	1	MDR(BDQ-R)	I491F
103	Seq-09-0005	RIF Susceptible	Susceptible	Resistant	NA	NA	1	1	0	1	1	MDR(BDQ-R)	I491F
104	Seq-09-0009	RIF Susceptible	Susceptible	Resistant	SUSCEPTIBLE	RESISTANT	1	1	0	1	1	MDR(BDQ-R)	I491F
105	Seq-10-0008	RIF Susceptible	Susceptible	Resistant	INDETERMINATE	INDETERMINATE	1	1	0	1	1	MDR(BDQ-R)	I491F
107	Seq-10-0016	RIF Susceptible	Susceptible	Resistant	INDETERMINATE	INDETERMINATE	1	1	0	1	1	MDR(BDQ-R)	I491F
110	Seq-10-0040	RIF Susceptible	Susceptible	Resistant	SUSCEPTIBLE	RESISTANT	1	1	0	0	0	MDR	I491F
114	Seq-11-0001	RIF Susceptible	Susceptible	Resistant	SUSCEPTIBLE	RESISTANT	1	1	0	1	1	MDR(BDQ-R)	I491F

Sheet 1 - DATASET

tNGS DATABASE

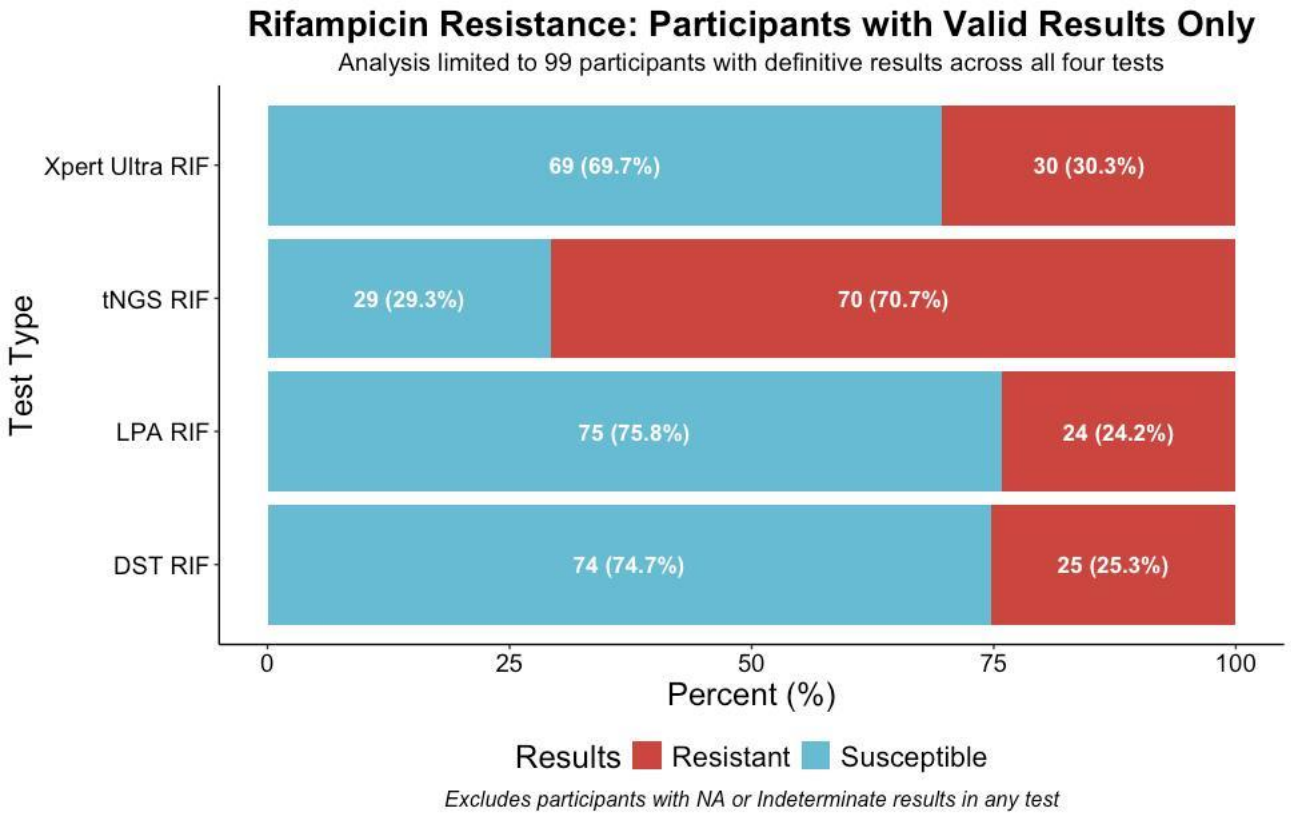
- Green: Susceptible
- RED: Resistant

- tNGS was able to detect the 1491F mutation missed by Xpert,LPA& MGIT
- Worrying: additional resistance to Bedaquiline& Clofazimine
- INH resistance seem to consistent

Prevalence of I491F and Rv0678 mutation(BDQ resistance) (N=234)

Rifampicin Resistance from all isolates(n=234)	**159/234**	**68%**
Rifampicin resistance with rpoB I491F mutation(n=159)	101/159	64%
Rv0678 mutation associated with bedaquiline resistance among all isolates(n=234)	87/234	37%
Rv0678 mutation associated with bedaquiline resistance among Rifampicin Resistance strains(n=159)	87/159	55%
Rv0678 mutation associated with bedaquiline resistance among those with rpoB I491F mutation(n=101)	86/101	85%

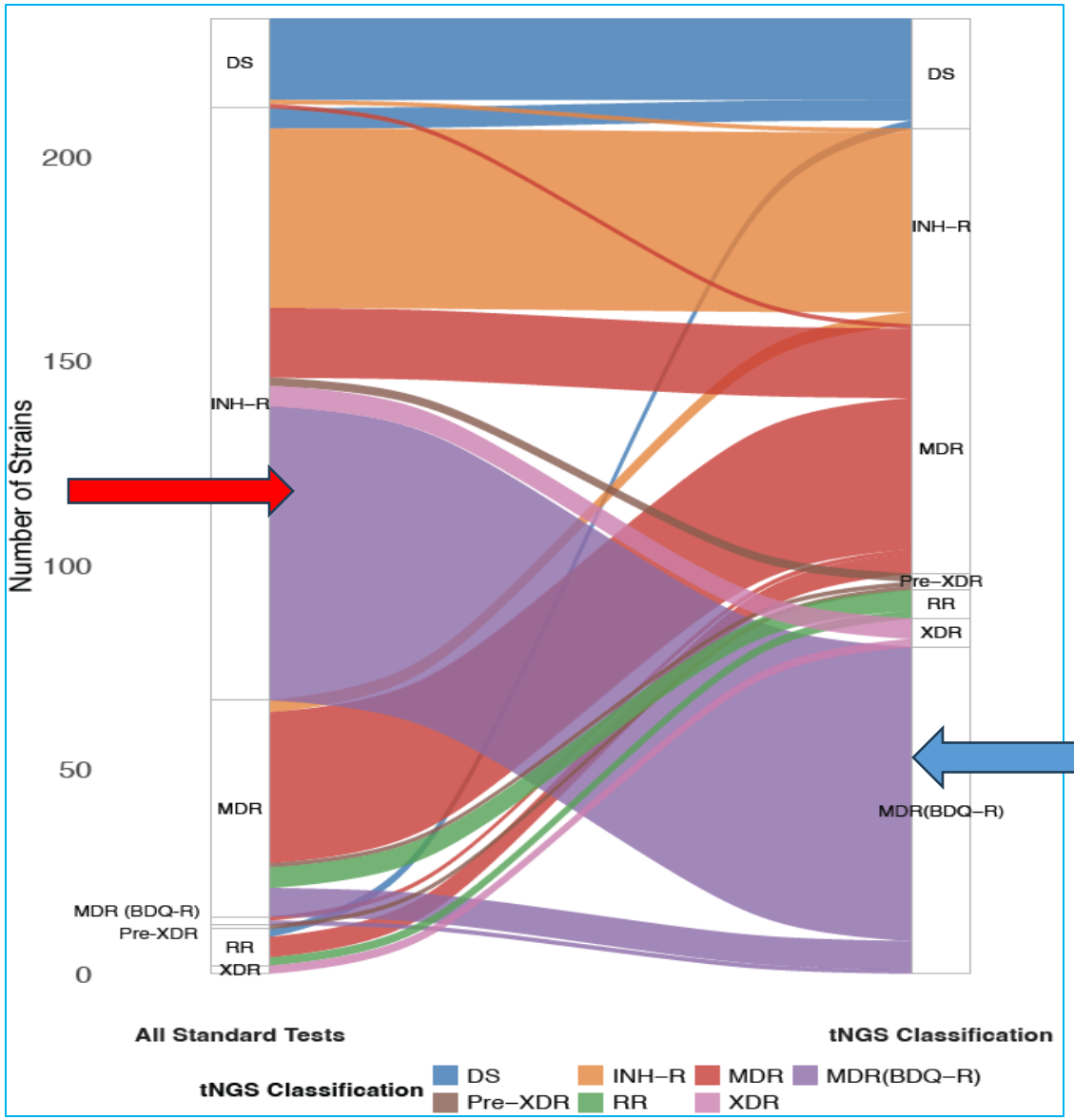
Varying performance of Rifampicin resistance detection across all four tests



- Demonstrates the varying performance on **rifampicin resistance** detection in Eswatini across Xpert ultra/LPA/pDST(MGIT) as compared to **tNGS**

40% of patients with RR/MDR-TB would have been missed

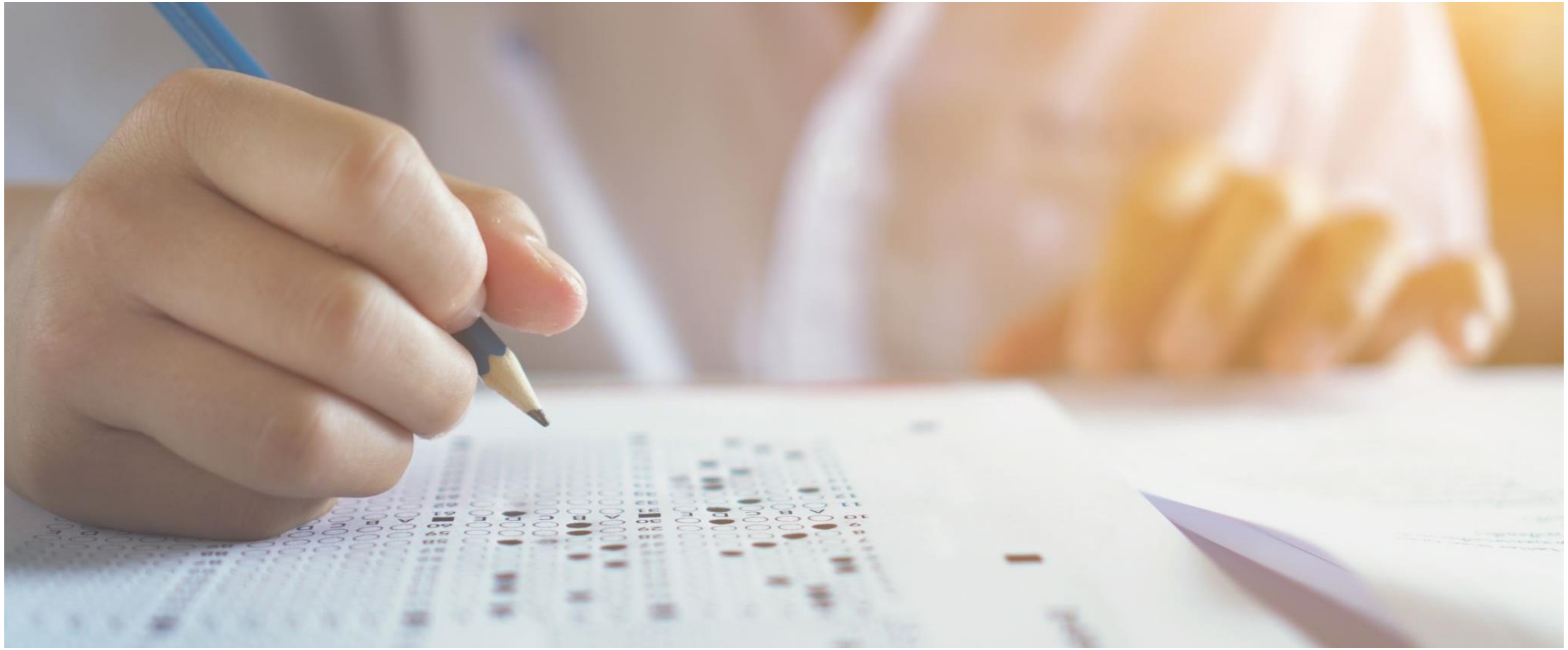
Comprehensive tNGS testing resulted in major shifts in tuberculosis resistance classifications



Major reclassification of INH Resistance to MDR+BDQ resistance.

- **Clinical Implications to our current DR-TB treatment regimens**

Use of tNGS results to inform clinical decisions.



Clinical Cohort: N=59

More individualized!

More precise!

Original Regimen	Overall (N=59)
BDQ, DLM, CFZ, TZD	1 (1.7%)
BDQ, LFX, LZD, CFZ	1 (1.7%)
BDQ, LFX, LZD, DLM, CFZ	**8 (13.6%)**
BDQ, Pa, LZD, MFX	**4 (6.8%)**
RHZE	45 (76.3%)

Empiric Regimens pre-Sequencing	N=59
BDQ, DLM, CFZ, TZD	1 (1.7%)
BDQ, LFX, DLM, CFZ, TZD	3 (5.1%)
BDQ, LFX, LZD, CFZ	1 (1.7%)
BDQ, LFX, LZD, CFZ, PTA	1 (1.7%)
BDQ, LFX, LZD, CFZ, TZD	7 (11.9%)
BDQ, LFX, LZD, DLM, CFZ	**18 (30.5%)**
BDQ, LFX, LZD, DLM, TZD	1 (1.7%)
BDQ, Pa, LZD, MFX	**16 (27.1%)**
RHZE	11 (18.6%)

tNGS informed regimen	n=59
BDQ, LFX, DLM, CFZ, TZD	2 (3.4%)
BDQ, LFX, LZD, CFZ, PTA	1 (1.7%)
BDQ, LFX, LZD, CFZ, TZD	4 (6.8%)
BDQ, LFX, LZD, DLM, CFZ	19 (32.2%)
BDQ, LZD, DLM, CFZ, TZD	1 (1.7%)
BDQ, Pa, LZD, MFX	7 (11.9%)
DLM, PTA, IMP, TZD	1 (1.7%)
LFX, LZD, DLM, IMP, TZD	2 (3.4%)
LFX, LZD, DLM, PAS, IMP, AMK, TZD	1 (1.7%)
LFX, LZD, DLM, PAS, IMP, TZD	1 (1.7%)
LFX, LZD, DLM, PTA, IMP, TZD	2 (3.4%)
LFX, LZD, DLM, PTA, TZD	4 (6.8%)
LFX, LZD, DLM, PZA	1 (1.7%)
LFX, LZD, DLM, TZD	1 (1.7%)
LFX, LZD, DLM, TZD, PZA	6 (10.2%)
LFX, RHZE	2 (3.4%)
LZD, DLM, PTA, PAS, IMP, TZD	1 (1.7%)
RHZE	3 (5.1%)

Treatment Outcomes

tNGS results led to regimen changes in 53% (31/59) of patients contributing to 88% (52/59) treatment success rate.

Program data: 86% overall treatment success rate.

Treatment Outcomes	N=59	
Completed	34	57.6%
Cured	18	30.5%
Treatment Success	**52**	**88.1%**
Died	5	8.5%
LTFU	2	3.4%
Total	59	100%

Lessons Learned

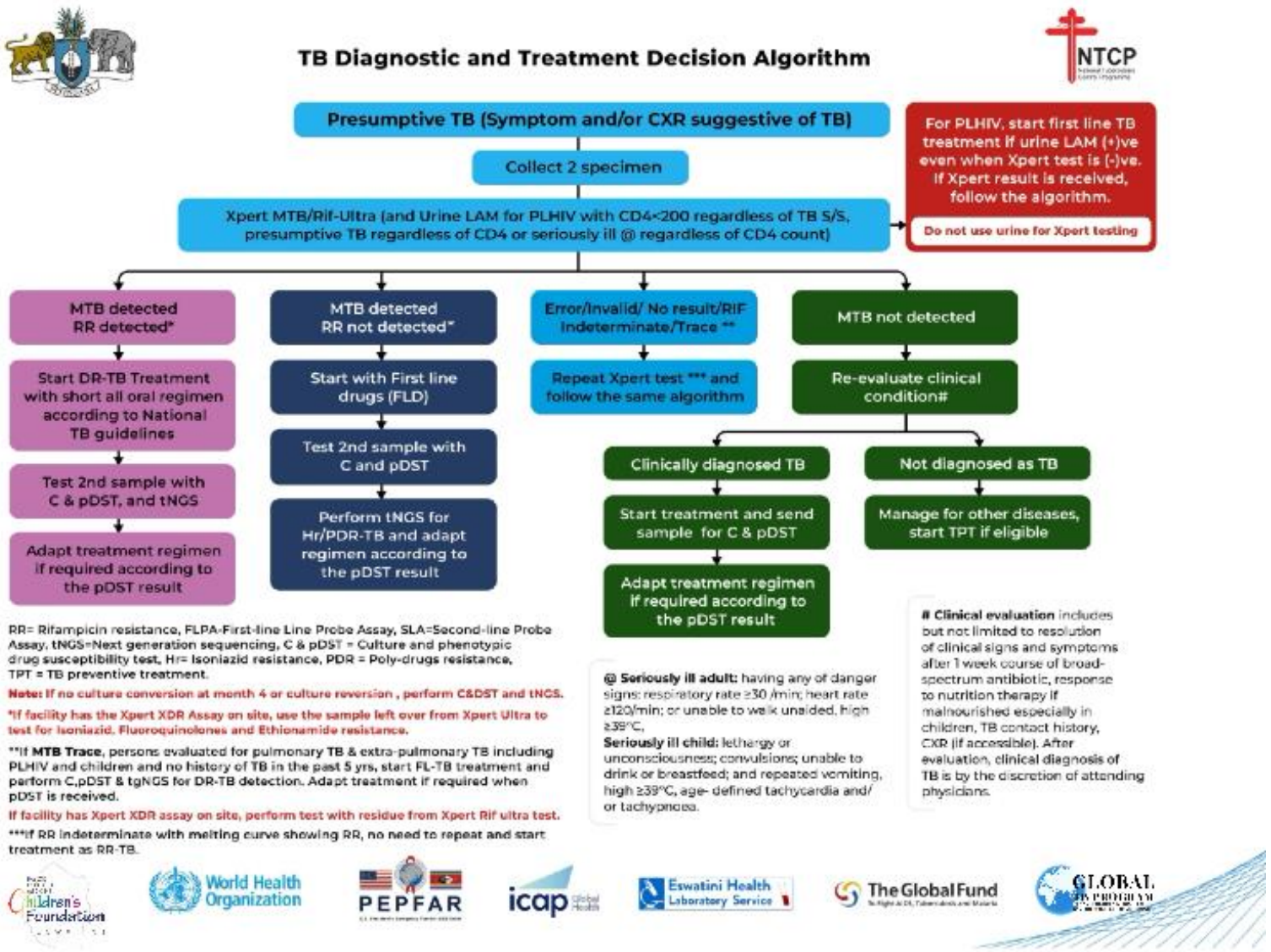
The findings demonstrate that tNGS offers valuable advantages in managing drug-resistant TB in high-burden settings like Eswatini.

tNGS successfully identified the *rpoB* I491F mutation and facilitated treatment adaptation, leading to high successful treatment outcomes.

The unexpected high prevalence of bedaquiline resistance highlighted a critical need to reconsider current TB treatment regimens such as BPaLM/BPaL.

As a result, Eswatini decided to incorporate tNGS into their National Diagnostic Algorithm.

Eswatini has Integrated tNGS into Routine diagnostic and Treatment algorithm



Next Steps

- tNGS optimization within the National TB program- to strengthen patient care
- Eswatini has been included as a site for EXDR-TB clinical trial in 2026- preparations are underway
  - our patients can have access to newer medicines
- Publishing a Manuscript

TITLE

Targeted Next-Generation Sequencing Implementation in Eswatini Identifies a High Proportion of Rifampicin and Bedaquiline Resistance Undetected by Standard Diagnostic Testing

AUTHORS

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Children's Foundation
ESWATINI

Health Care workers

Sub Saharan SeqNET

Eswatini Implementing Partners

Recipients of Care and community

THANK YOU

NWM2025

JOHANNESBURG, SOUTH AFRICA • 3–7 NOVEMBER 2025

Texas Children's Global Health Network

Using Non-Communicable Diseases' Champions to Improve Screening and Management in HIV Settings between January and September 2024: Lessons learnt from Baylor Fort Portal-Mubende Program

Presenter: David Damba

Co-authors: Micheal Juma[1], Jjuuko K. Richard[1], Albert Maganda[1], Anthony M. Mubiru[2], Juliet Businge[2] Namukanja, Phoebe Monalisa[2], Dithan Kiragga[1]

Baylor College of Medicine | BAYLOR GLOBAL HEALTH

Fundația Baylor Marea Neagră

Agenda

Background

Description

Results

Conclusion

Recommendation

Background

Uganda has had a growing Burden of NCDs and HIV epidemic that compromises ART/HIV treatment outcomes

Integration of NCDs screening and Management into HIV programming is seen as a strategy to better quality of life.

However, NCD-HIV integration faces implementation barriers in public health facilities in resource limited settings.

We present best practices and lessons from Fort Portal-Mubende HIV program in midwestern Uganda.

Description

254 Health Facilities in 16 districts targeted for the Integrated HIV/NCD Care program

January 2024

Stakeholder Engagement **Provision of clinical instruments** eg. Job aides, data collection tools Monthly **onsite mentorship**

Targeted DM, HTN, MH and Substance Abuse

Conducted **Bi weekly data** review meetings- via Zoom

Identified NCD champions – Health education, screening, refferal, Bring back to care services

Monitoring

Compared Proportions of PLHIV≥15 years screened, diagnosed and treated for NCDs

Jan-Mar 2024 & July-Sept 2024

Analysis

Results

Proportion Category	January-March 2024	July-September 2024,
Overall NCD screening	**56% (56178/100842)**	**80% (71975/90318)**
DM screening	49% (48984/100842)	81% (73608/90318)
HTN	49% (46343/94724)	82% (73524/90318)
MH	63% (62302/99414)	79% (71296/90318)
Alcohol and substance Abuse	63% (62302/99414)	77% (69473/90318).

Proportion Category	January-March 2024	July-September 2024,
NCD cases identified	3,159	5,443
NCD cases referred/Managed	77% (2442/3159)	93% (5070/5443).

NCD champions played a role in demand creation, linkages, and peer support

Conclusion and Recommendation

Engagement of NCD champions improved NCD screening and management of PLHIV.

HIV care providers should scale up this strategy to improve NCD screening

NWM2025

JOHANNESBURG, SOUTH AFRICA • 3–7 NOVEMBER 2025

Increasing Pre-Exposure Prophylaxis (PrEP) methods to widen choice for users in Lesotho: Cabotegravir long-acting injectable introduction

Authors: Mabene Tsotako, Mareitumetse Ramootsi, Mosa Molapo Hlasoa

Presenter: Dr Mabene Tsotako – Baylor Foundation Lesotho

Agenda

- ❑ Background
- ❑ Description
- ❑ Evaluation and outcomes
- ❑ Lessons learnt
- ❑ Next steps

Background

- WHO recommended use of Cabotegravir long-acting injectable (CAB-LA) for PrEP
- Lesotho adopted this guidance in 2024
- Addendum to 2022 National ART guidelines to include CAB-LA
- 3 districts chosen to pilot implementation – including Mokhotlong
- Mokhotlong chosen for increased risk for HIV acquisition – dam construction sites
- 3 health facilities serving population around the construction site used as pilot facilities

CAB-LA TOT

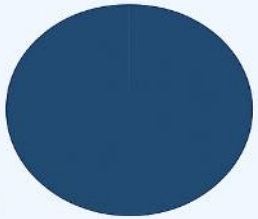
Description

- BCMCFL through LEADR project supported training of trainers and stepdown training for staff in the chosen facilities
- CAB-LA implementation through:
  - ❑ Offering PrEP method choice counselling
    - ➢ Clients to make informed decision
  - ❑ Screening for eligibility
    - ➢ Excluding HIV infection
    - ➢ Excluding pregnancy
    - ➢ Age 18 years and above
    - ➢ Weight 35kg and above
  - ❑ Giving injection to those eligible with no contraindications

CAB-LA TOT

EVALUATION AND OUTCOMES

A total of 91 clients were enrolled in the program between December 2024 and May 2025



70 (77%) reported to be still active across the 3 sites as at end May 2025

Clients initiated on CAB-LA

48 (53%)

43 (47%)

Since implementation, none of the clients enrolled were reported to have seroconverted

Lessons learnt

- Supportive supervision – to monitor program implementation and timely identify and address challenges
- Full ownership by MOH from planning to implementation and monitoring for sustainability of programs beyond donor-funded projects

Next steps

- Support MOH joint supportive supervision visits to pilot sites
- Continue mentorship to facilities piloting CAB-LA
- Support MOH scale up plan as well as future introduction of other PrEP options

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Texas Children's Global Health Network

Temporal Effects of community-based PrEP initiations

An Interrupted Time series Analysis by None Roto

Baylor College of Medicine BAYLOR GLOBAL HEALTH

Fundația Baylor Marea Neagră

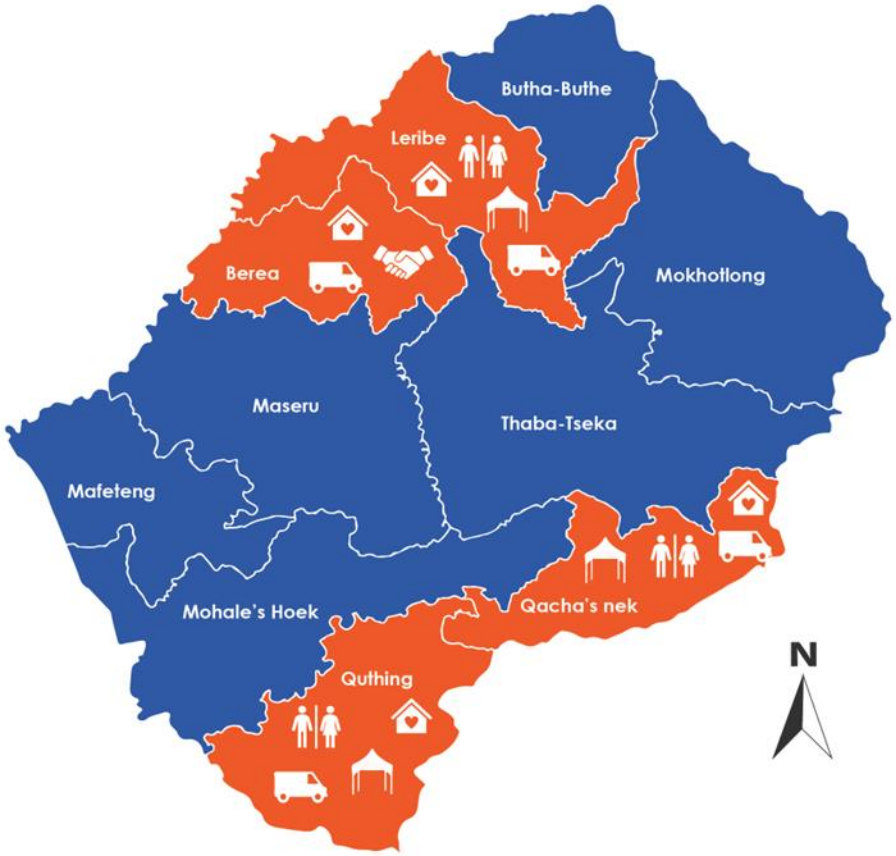
Agenda

Item 1: Background and Objectives

Item 2: Key Findings

Item 3: Conclusion and Implications

Background and Objectives



PrEP is a key HIV prevention tool as a prevention strategy in Lesotho and its uptake varies across communities .

Study used **monthly PrEP initiation data (Jan 2022 – May 2025)** drawn from Ministry of Health DHIS2 and our in-house DHIS2 (BASIDAC).

Focus: Explore changes in PrEP uptake potential **effectiveness and sustainability** of community-led PrEP delivery.

Aim: Inform **targeted mobilization and demand creation strategies**.

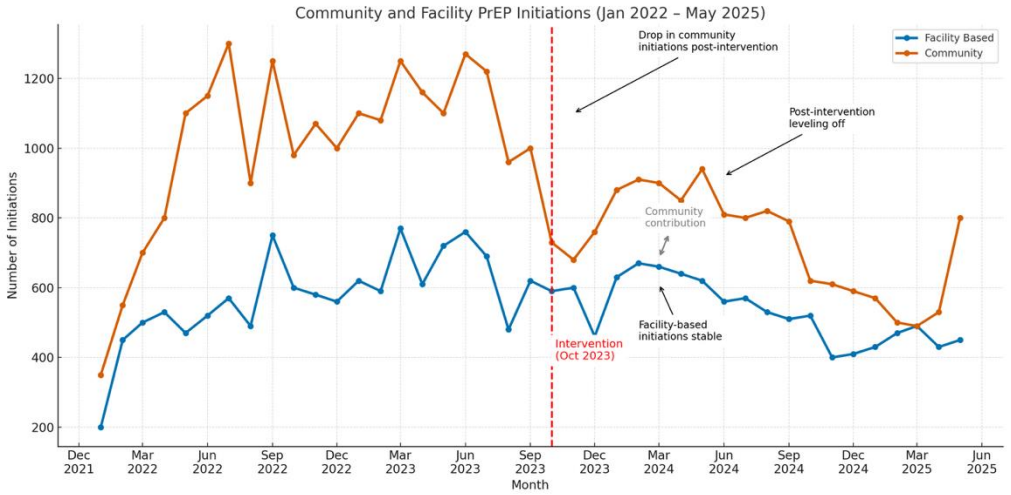
"We used interrupted time series analysis to assess changes in PrEP uptake trends after introducing community-based interventions in four districts of Berea, Leribe, Qacha's Nek and Quthing where **COHIPSEC** project is implemented. This helps us understand both immediate and long-term effects to better shape future HIV prevention strategies."

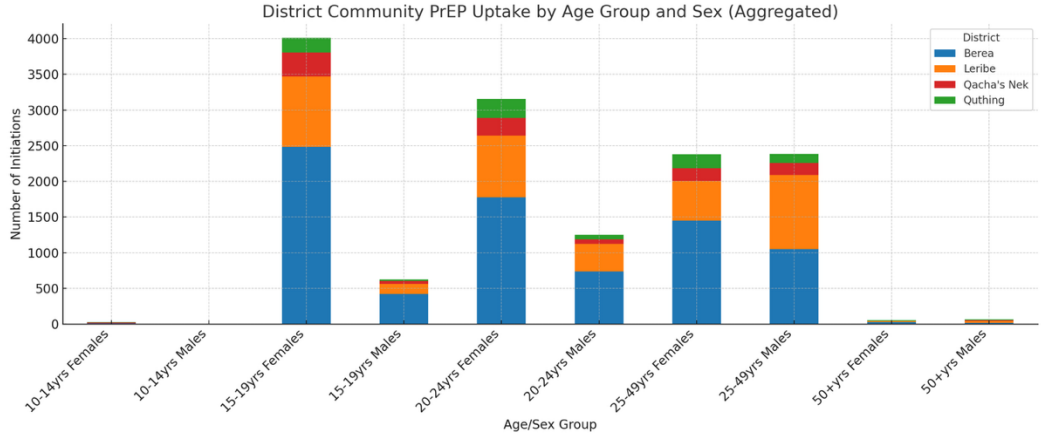
Key Findings

Trends in PrEP uptake Across districts

- Community PrEP delivery **can improve uptake**, but with delays.
- Effects **varied by district**—highlighting need for tailored approaches.
- Continuous support & **district-specific adaptations** are critical.
- Strategic **messaging and demand generation** essential for success.

"While community-based approaches show promise, our findings underline that one-size-fits-all solutions don't work. Tailored support and sustained efforts are needed to scale PrEP access effectively."



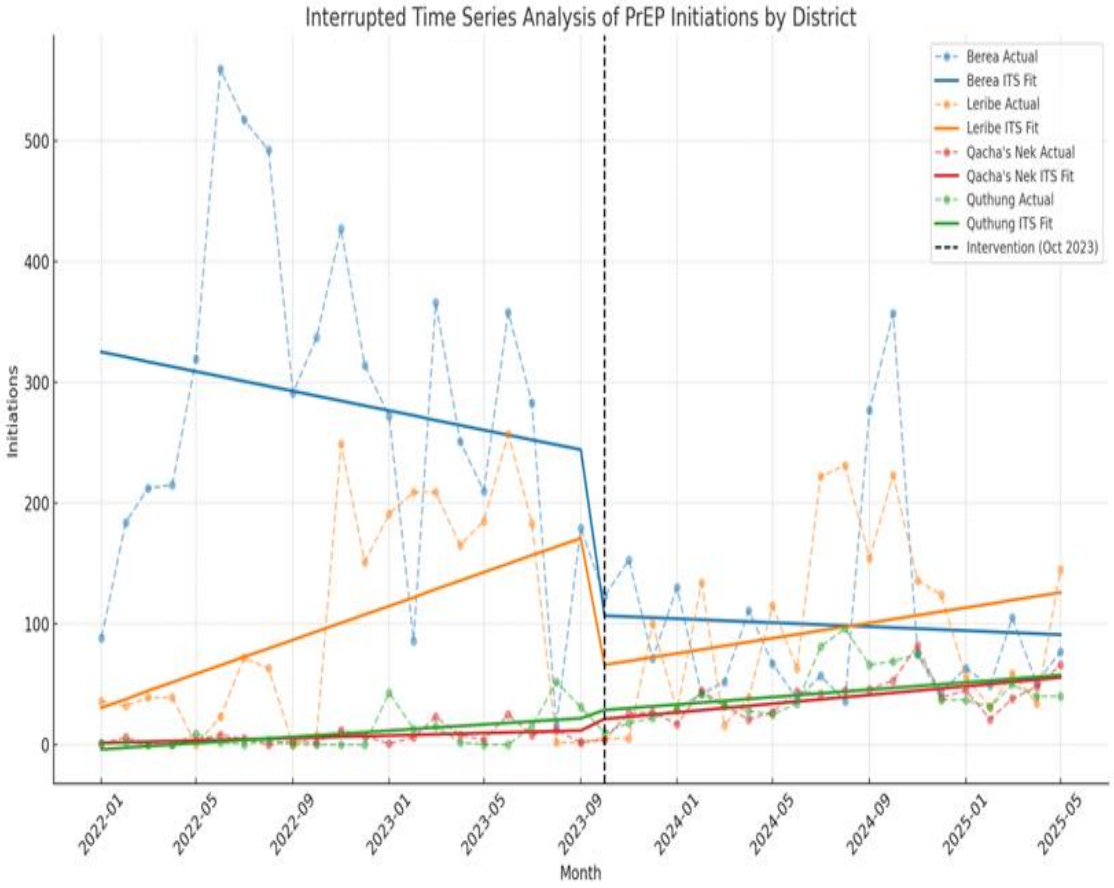


Conclusions and Implications

Implication for Scaling Community PrEP initiatives

- Community PrEP delivery **can improve uptake**, but with delays.
- Effects **varied by district**—highlighting need for tailored approaches.
- Continuous support & **district-specific adaptations** are critical.
- Strategic **messaging and demand generation** essential for success.

  "While community-based approaches show promise, our findings underline that one-size-fits-all solutions don't work. Tailored support and sustained efforts are needed to scale PrEP access effectively."



NWM2025

JOHANNESBURG, SOUTH AFRICA • 3–7 NOVEMBER 2025

Psychological impact of the temporary United States Government suspend-work order, on people living with HIV and health care workers in Mokhotlong

Authors: Mareitumetse Ramootsi,'Makatleho Sejana,'Mabene Tsotako,Limpho Seeiso, Mosa Molapo-Hlasoa.

Presented by: Makatleho Sejana

Baylor Foundation Lesotho

Agenda

1. Background
2. Methods
3. Results
4. Conclusion

BACKGROUND

· LEADR Project launch (May 2023) in Butha-Buthe and Mokhotlong by Baylor Lesotho.

· Focus on HIV/TB and NCD prevention, care, and treatment.

· Included HCW training, clinical mentorship, and supervision.

· January 2025: Project suspended due to USG Foreign Aid Review.

· 1,500 HCWs affected by either job loss or faced job insecurity.

· Service disruption in medication, counselling, and peer support.

· Changes resulted in increased anxiety, stigma, and uncertainty among PLHIV.

· HCWs faced stress, demoralization, and financial strain, undermining HIV/TB/NCD program progress.

METHODS

- A qualitative, exploratory study was conducted using semi-structured, face-to-face interviews.
- A purposive sample included 22 PLHIV and 11 nurses.
- Interviews captured both verbal and non-verbal cues.
- Data were thematically analyzed.

RESULTS

FOR PEOPLE LIVING WITH HIV INTERVIEWED

"Recalling the prolonged illness, and frequent visits to the clinic was deeply distressing. Now that my viral load is suppressed, it was disheartening to hear that we may run out of medication. If I were to return to my previous health state, I believe I would not survive,"

- All 22 PLHIV participants voiced anxiety over ART unavailability;
- Eleven (11) said this fear motivated stricter adherence to treatment.
-
- Thirteen (13) admitted to manipulating appointments to stockpile medication, reflecting desperation and revealing distrust in the health system.
- Three (3) participants showed indifference, viewing shortages as opportunities for drug holidays, while six (6) were unaware of the situation due to geographic or media isolation.
- Two (2) participants who self-disclosed being members of the Lesbian, Gay, Bisexual, Transgender, and Intersex (LGBTI) expressed abandonment after losing access to supportive, donor-funded services, intensifying their sense of stigma.

RESULTS

FOR HEALTH CARE WORKERS

- All 11 nurses reported increased workloads following the LEADR team's exit.
- This led to reduced :
  - consultation time,
  - incomplete documentation in paper and electronic systems, and
  - suspension of services such as cervical cancer screening and COVID-19 vaccination.
- Initially overwhelmed and demoralized, some nurses considered resigning due to the misalignment between workload and compensation.
- Others responded by reorganizing tasks to maintain service delivery.

A congested Mokhotlong hospital

CONCLUSION

- The findings reveal a dual crisis: emotional distress among PLHIV and operational strain on HCWs.
- There is a critical need for mental health support, integrated services, and contingency planning in the event of donor withdrawal.
- Policymakers must address misinformation, build resilience, and ensure sustainable healthcare service continuity.

Questions & Answers ❓

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Texas Children's Global Health Network

Charting the Future: Closing Session of the 26th Network Meeting

Mr. Michael B. Mizwa

Baylor College of Medicine | BAYLOR GLOBAL HEALTH

Fundația Baylor Marea Neagră

Network Meeting
Overall Evaluation

A quick, 2-minute “check in” to listen to your views. Your voice matters!

Please Scan the QR code to participate in the **Overall Evaluation**.

https://www.surveymonkey.com/r/NWM2025OverallEval

Group Photo

16:15 - 16:30

Cultural Dinner, Dance, & Awards

18:00 - 21:00

(Cultural dance and attire are optional)