



# FOLLOW UP ON ROLLING OUT **BPAL(M)** MDR-TB REGIMEN

## Zimbabwe Updates

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# PRESENTATION OUTLINE

- Zimbabwe MDR-TB Profile
- Context before Kigali meeting
- Timeline of MDR-TB Regimens evolution
  - Challenges with older regimens
- Commitments made, and roadman
- Progress made since Kigali meeting
- BPaL(M) implementation
- Key BPaL(M) implementation gaps
- Next steps

# BURDEN OF TB IN ZIMBABWE

190  
per  
100K

## Incidence

TB incidence: **204** per  
100,000 population (**2022**)



6:4

## M: F ratio

Males bear the brunt of  
TB disease



50  
%

## HIV Co- infection

**50%** of TB patients are  
HIV+ (**2022**)



7%

## Death rate

**7%** of patients with TB  
died (**2022**)



# COUNTRY MDR TB PROFILE



**i** Expansion of TB diagnostic network from 2 Xpert machines in 2010, to 188 machines, including 18 Xpert MTB/XDR + 20 Treunat

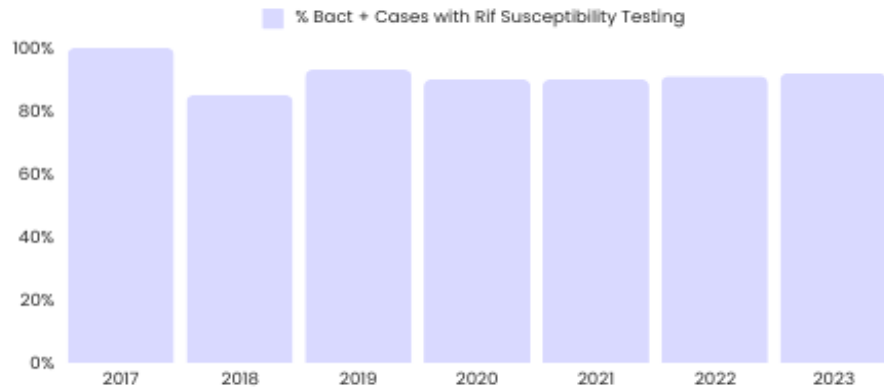
## Cumulative TB Notifications (2011 - 2023)



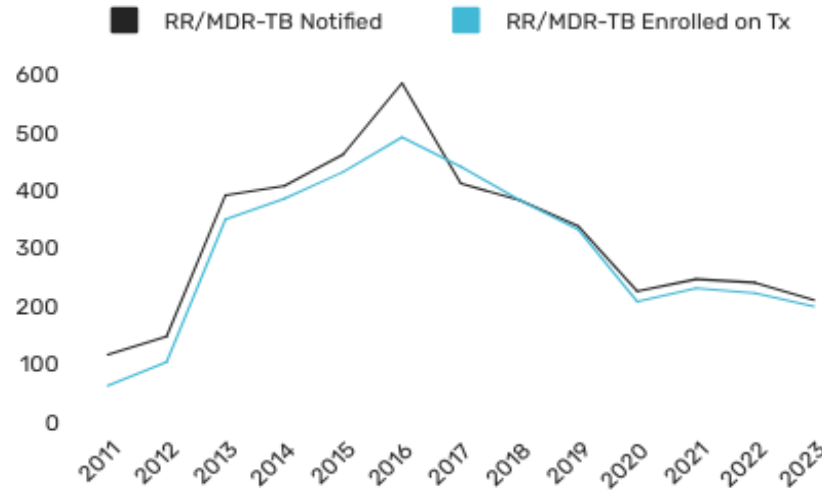
**345,616**

**i** Since 2011, TB cases have been on a decline, which accelerated during the COVID-19 pandemic but has been rising again since 2022. Despite these achievements, a case diagnosis gap continues to exist

## DST to at Least Rifampicin



## RR/MDR-TB Cases and Tx Initiation



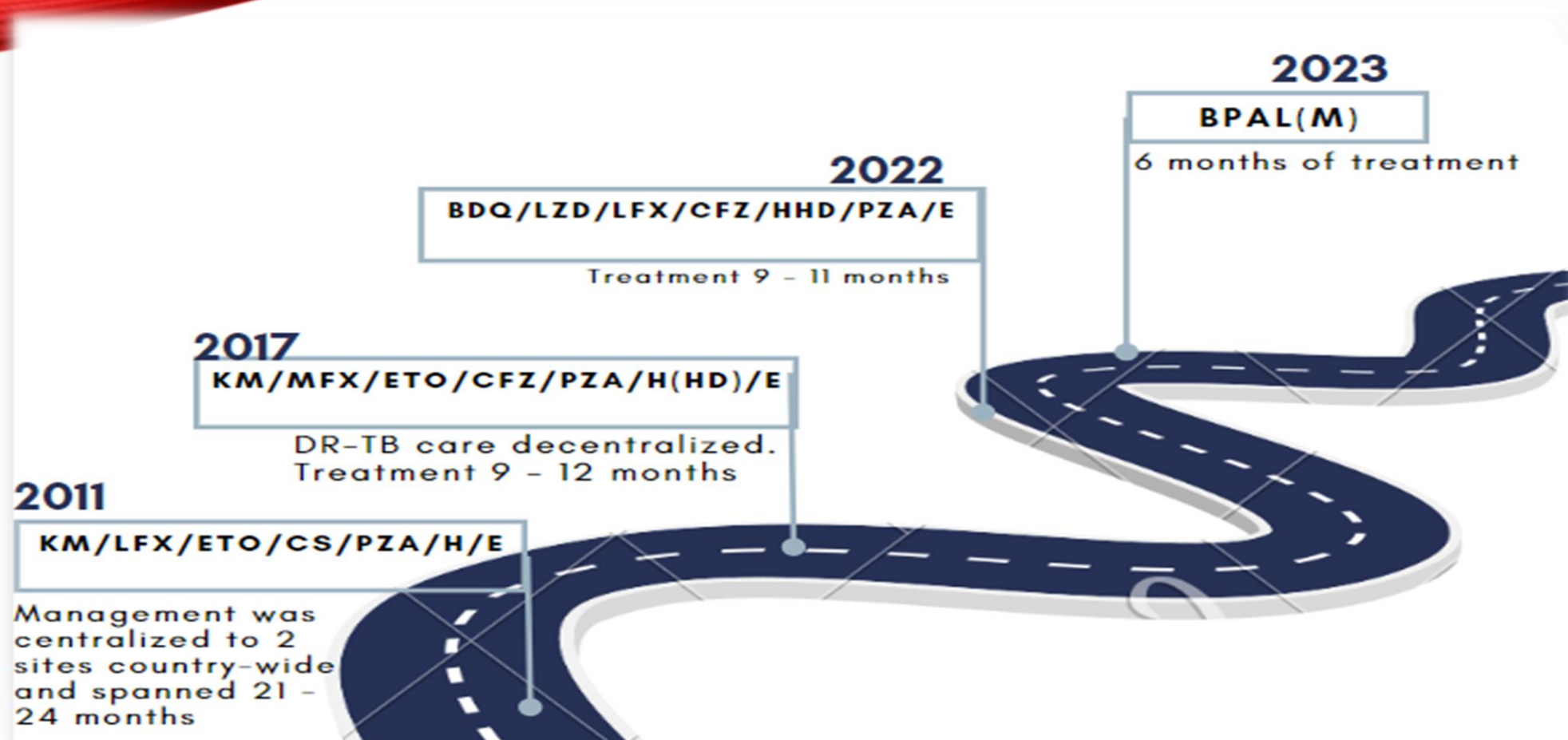
**i** Initial loss to follow-up continues to be a challenge in MDR-TB control  
ILTFU of 5% in 2023 vs 46% in 2011

# CONTEXT BEFORE KIGALI MEETING

- BPaL(M) implementation roadmap developed
  - Outlined pathway from policy updates, communication strategy, demand creation, capacity building, operationalization of BPaL(M) and M&E
- Zimbabwe had started process of updating DR-TB guidelines
  - Key updates were to include:
    - Introduction of Xpert MTB/XDR into the diagnostic algorithm for Hr & FQ resistance identification
    - WHO recommendations to adopt BPaL(M) as the treatment regimen of choice for RR/MDR-TB



# MDR-TB REGIMENS – 2011 TO CURRENT



- Zimbabwe has followed global trajectory and best practices regards adoption of DR-TB treatment regimens
- Guidelines for CMDT updated in December 2022
  - Finalized and adopted in June 2023 following WHO updates
- Operationalization ongoing and at various stages across the country

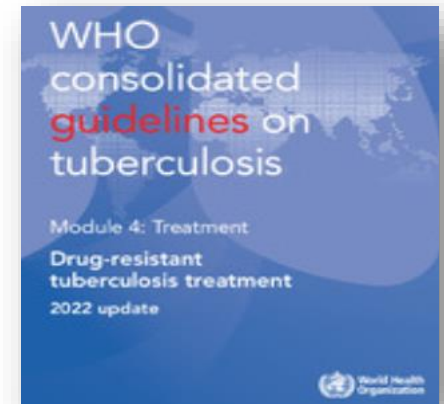


# MAIN CHALLENGES FACED WITH THE PREVIOUS TREATMENT PROTOCOLS

- Long treatment periods using medicines with intolerable side effect profiles
- Inadequate treatment monitoring and aDSM in over-decentralized sites (+163)
  - Audiometry testing and interpretation access inconsistently available
  - Limited site coverage for ECGS, including inadequate operator training
  - Challenges of erratic availability of some test reagents in the public system
    - Especially renal function, liver function, TSH
- Challenges in medicines stock management
- Generally, needed ancillary medicines were not readily available apart from Pyridoxine and CPZ
- Patient treatment evaluation suboptimal limiting DR-TB CQI

# COMMITMENTS AND ROADMAP

- At the Kigali Meeting in 2023, Zimbabwe made commitments to operationalize the use of BPaL(M) following adoption and contextualization of the December 2022 WHO consolidated guidelines
- This hinged on demand creation and awareness raising for BPaL(M)
- Build human and logistics capacity to operationalize the use of the newer all oral regimens
- Provide for scientific stewardship for DR-TB CQI through technical working group





# PROGRESS MADE SINCE KIGALI MEETING

- Adoption of new guidelines integrating use of the BPaL(M) regimen as of June 2023
- Training and capacity building of healthcare personnel on the new diagnostic and treatment approaches
  - Leverages on National TB ECHO platform
  - CMDT trainings: Classroom based TOTs and on-site to DR-TB concilia
  - Part of TB Case Management trainings
    - Focus on advancements
- Establishment of the necessary infrastructure to support the new regimen
  - Procurement of more 10-colour module machines (18 across 10 provinces)
  - Provincial pharmacy hubs formed
- Preliminary statistics and data on the results obtained

# COMMITMENTS AND ROADMAP

Commitments made	Roadmap implemented	Progress to date
Adoption of country adapted WHO recommendations	Yes	<ul style="list-style-type: none"><li>• Zimbabwe CMDT guidelines updated and adopted for countrywide use in June 2023</li></ul>
Roll-out of BPaL(M)	Yes	<ul style="list-style-type: none"><li>• Guidelines printed en masse,</li><li>• BPaL(M) earmarked (quantification) for 85% of DR-TB patients annually from 2024</li></ul>
Build capacity among HCWs to use BPaL(M)	Yes	<ul style="list-style-type: none"><li>• ALL ten (10) provinces in the country trained on BPaL(M) use including treatment monitoring and aDSM</li></ul>
DR-TB Technical Working Group	Yes	<ul style="list-style-type: none"><li>• DR-TB TWG operational</li><li>• National and Subnational DR-TB Concilia in place</li><li>• Setting up and building capacity within DR-TB treatment site concilia</li></ul>

# DRTB TREATMENT OUTCOMES AUDIT (6 – 20 MAY 2024)

## **Objective**

To identify factors associated with poor outcomes in DR-TB in Zimbabwe context

## **Methodology**

- Selected provinces, districts, facilities with highest unfavorable outcomes
- Review of patient records (checklist)
- Healthcare worker interview
- Caregiver interview (including community level volunteers)

## **Key Findings**

- *Disseminated at Stakeholder debrief meeting*
  - Documentation in patient records sub-optimal
  - Regular clinical and laboratory monitoring not strictly adhered to
  - Gaps in psychosocial support casting recipients of care into poverty and condemning to unfavorable treatment outcomes

# DR-TB MANAGEMENT RECENTRALIZATION

## Background

- The PMDT program was decentralized to over 163 DR-TB sites
- This move saw declining treatment outcomes
- Decentralization had been made to sites with no adequate DR-TB lab and clinical capacity
  - Non-existent multidisciplinary collaboration

## Primary objective

- To recentralized DR-TB care to fixed DR-TB treatment sites with both lab and clinical capacity to offer “start-to-finish” DR-TB case management.

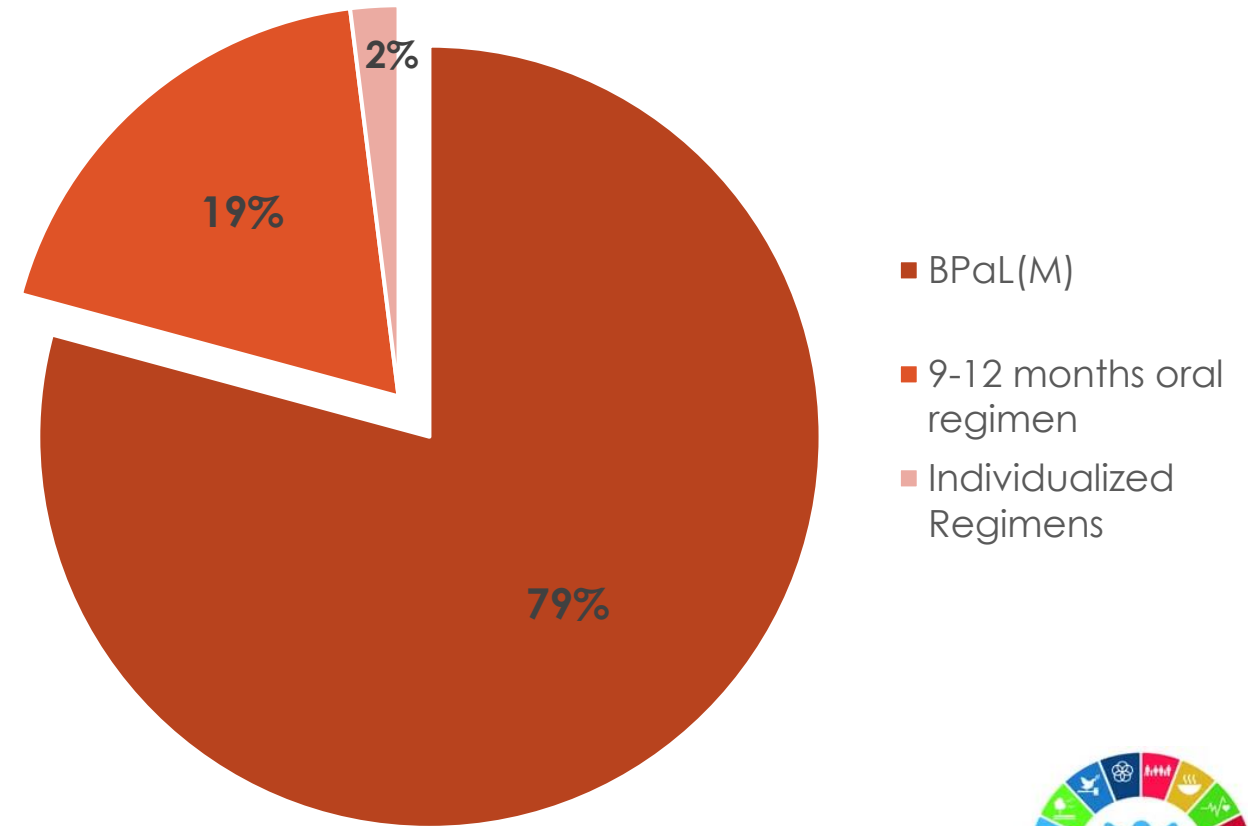
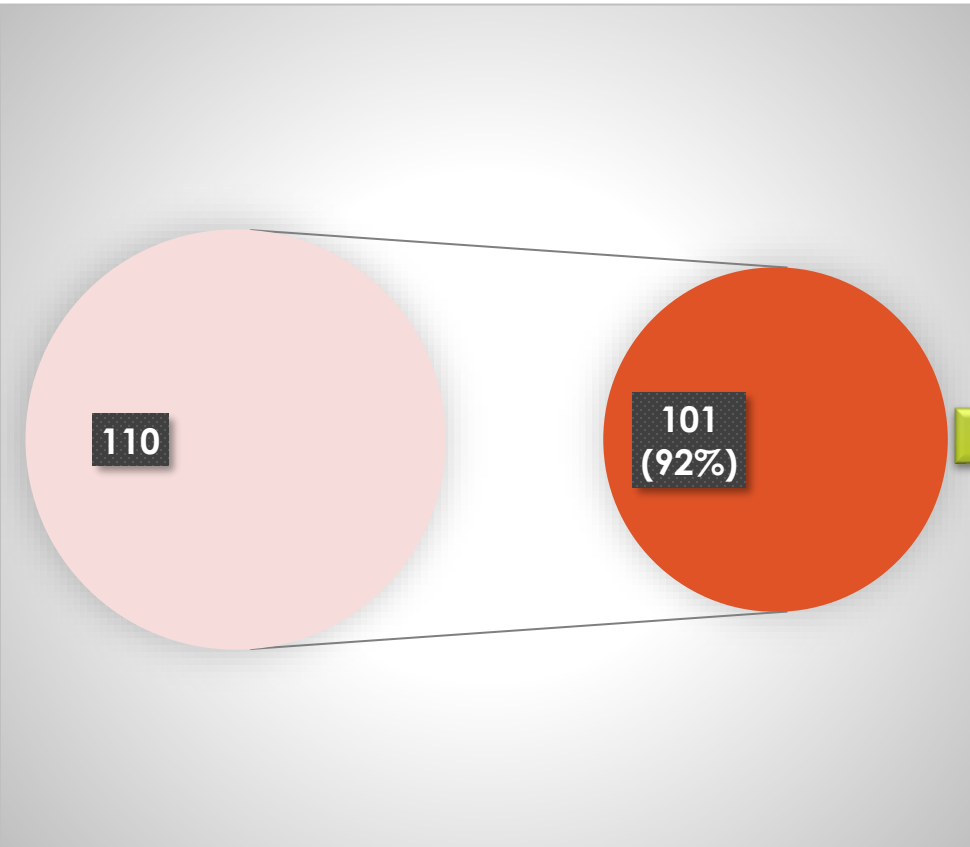


# RECENTRALIZATION: MILESTONES

Action	Status
1 Recentralization sites selected across the country	Done
2 Communication with sub-national levels on the recentralization plan and processes	Done
3 Line listing of DR-TB patients at old DR-TB sites and allocating them to new sites (recentralization sites)	Ongoing
4 Forming and sensitizing DR-TB concilia at the 64 new sites to prime for recentralization	Ongoing
5 Training site concilia to provide and support person-centered care for all enrolled DR-TB patients (from simple to complex/difficult)	Ongoing
6 Training of CHWs to support ambulatory DR-TB recipients of care	Pending

# ENROLMENT IN BPAL(M) REGIMEN

Chart Title



# CHALLENGES AND OBSTACLES SINCE BPAL/M ADOPTION

	Challenges and obstacles	Strategies
Case Finding	Suboptimal case finding: 212/720 <b>(29%)</b> of expected cases diagnosed in 2023	<ul style="list-style-type: none"> <li>• Intensified case finding with emphasis on increasing bact. confirmed cases</li> <li>• Second Zimbabwe DR survey ongoing to realign estimates</li> </ul>
	Equitable access to FQ resistance testing	<ul style="list-style-type: none"> <li>• Resources mobilization, increasing coverage of Xpert MTB/XDR from 5 in January 2023 to 18 by March 2024</li> </ul>
Case Holding	Medicine stock challenges	<ul style="list-style-type: none"> <li>• Spoke (district pharmacy) and hub (provincial pharmacy) model for DRTB medicines</li> </ul>
	Low access to monitoring tests	<ul style="list-style-type: none"> <li>• Ringfencing of funds for treatment monitoring laboratory tests</li> </ul>
	Sub-optimal patient nutrition and general support	<ul style="list-style-type: none"> <li>• Improved efficiencies in cash transfers</li> <li>• Increased cash support for patients in DRTB care from \$25.00/month to \$50.00/month</li> <li>• More accessible food collection points</li> </ul>

# ADDITIONAL NEEDS IDENTIFIED FOR MORE EFFECTIVE IMPLEMENTATION

- Strengthening aDSM and pharmacovigilance
  - Improve access to treatment monitoring tests
  - Build capacity among HCWs to identify, report and manage ADRs
- Surveillance on DR-TB regimens to better inform medicines quantification and forecasting
  - Currently BPal(M) does not have 100% coverage
- Electronic patient tracking system needed
  - Strengthen documentation and records keeping for DR-TB recipients of care and allow for swift evaluation of care
  - Need for real-time monitoring for quick course correction
- Optimize social safety nets for DR-TB recipients of care to improve treatment compliance



# NEXT STEPS

- Regular mentorship for high volume facilities in provinces with poorer treatment outcomes
  - South-to-South and TA-led
  - An opportunity for regular evaluation of care and DR-TB CQI
- Continued engagement of laboratory directorate in modeling laboratory service provision in DRTB care
- Close collaboration with National Reference Laboratories for efficient sputum monitoring and results
- Medicines quantification commensurate with demand for BPaL(M)
  - Resources mobilization for ancillary drugs
- Improved access to ECG monitoring
- Nationwide rollout on electronic patient tracker platform for ease and efficiency of evaluating patient care



# I THANK YOU

