

Overview of the TB Preventive Treatment Continuous Quality Improvement Project

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Presenting on behalf of the CDC TPT CQI Project team:

- Dr Laurence Gunde, TB/HIV Specialist, CDC Malawi
- Stephanie O'Connor, Epidemiologist, CDC Atlanta
- Dr Dumbani Kayira, Clinical Team Lead, CDC Malawi



Guidance for initiating TB Preventive Therapy

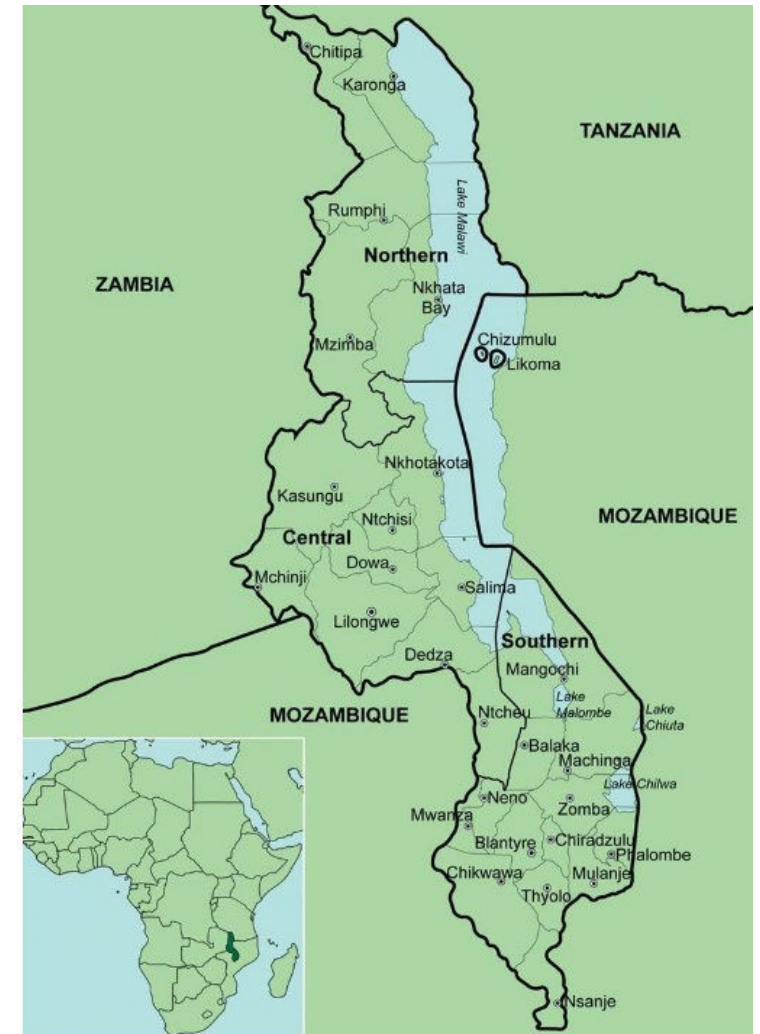
Rationale

Tuberculosis is the leading cause of death among PLHIV, responsible for approx. 35% of deaths.

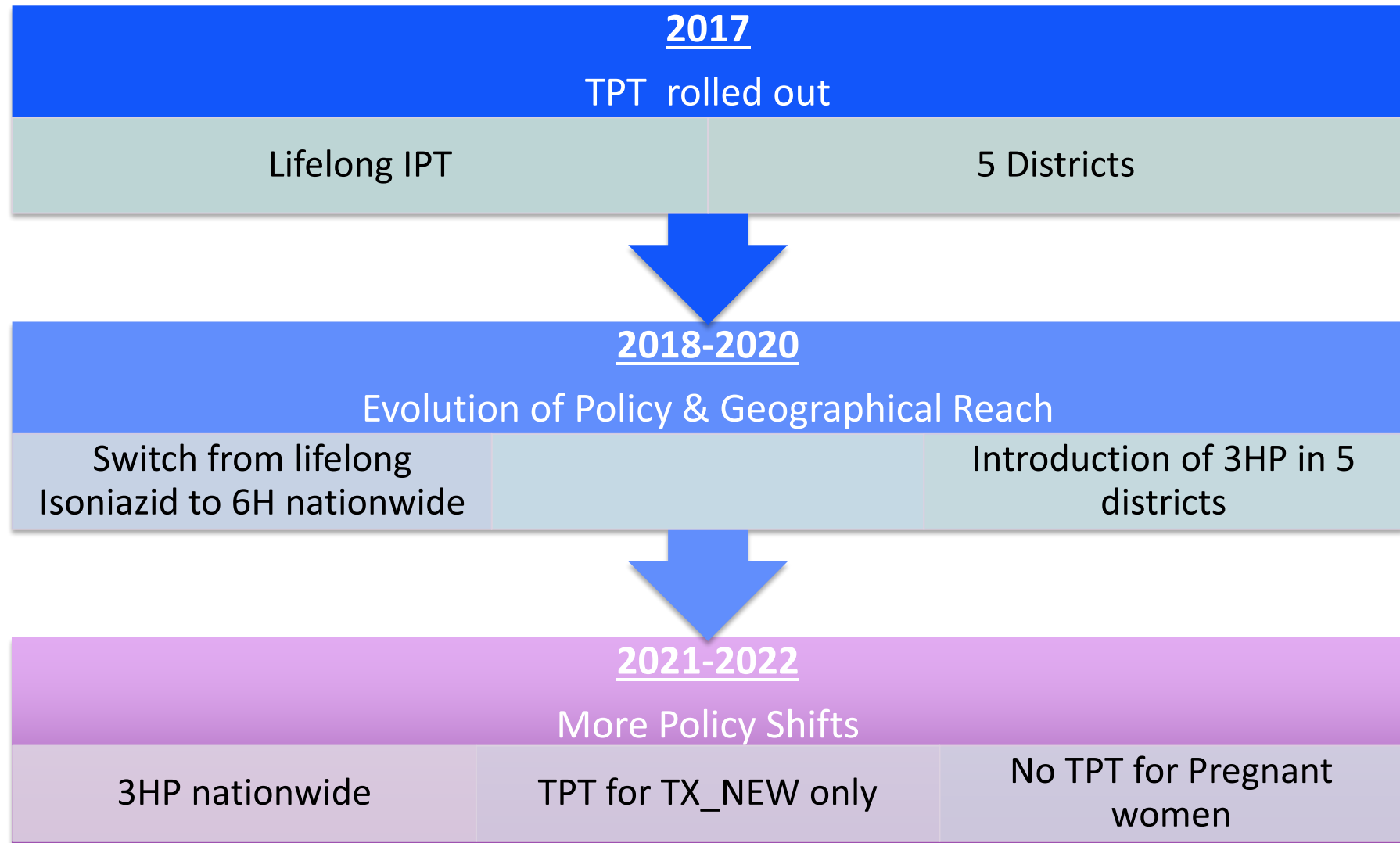
PLHIV are at higher risk for TB disease than their HIV uninfected counterparts.

ART and VLS reduce the risk – But the risk is still significantly high.

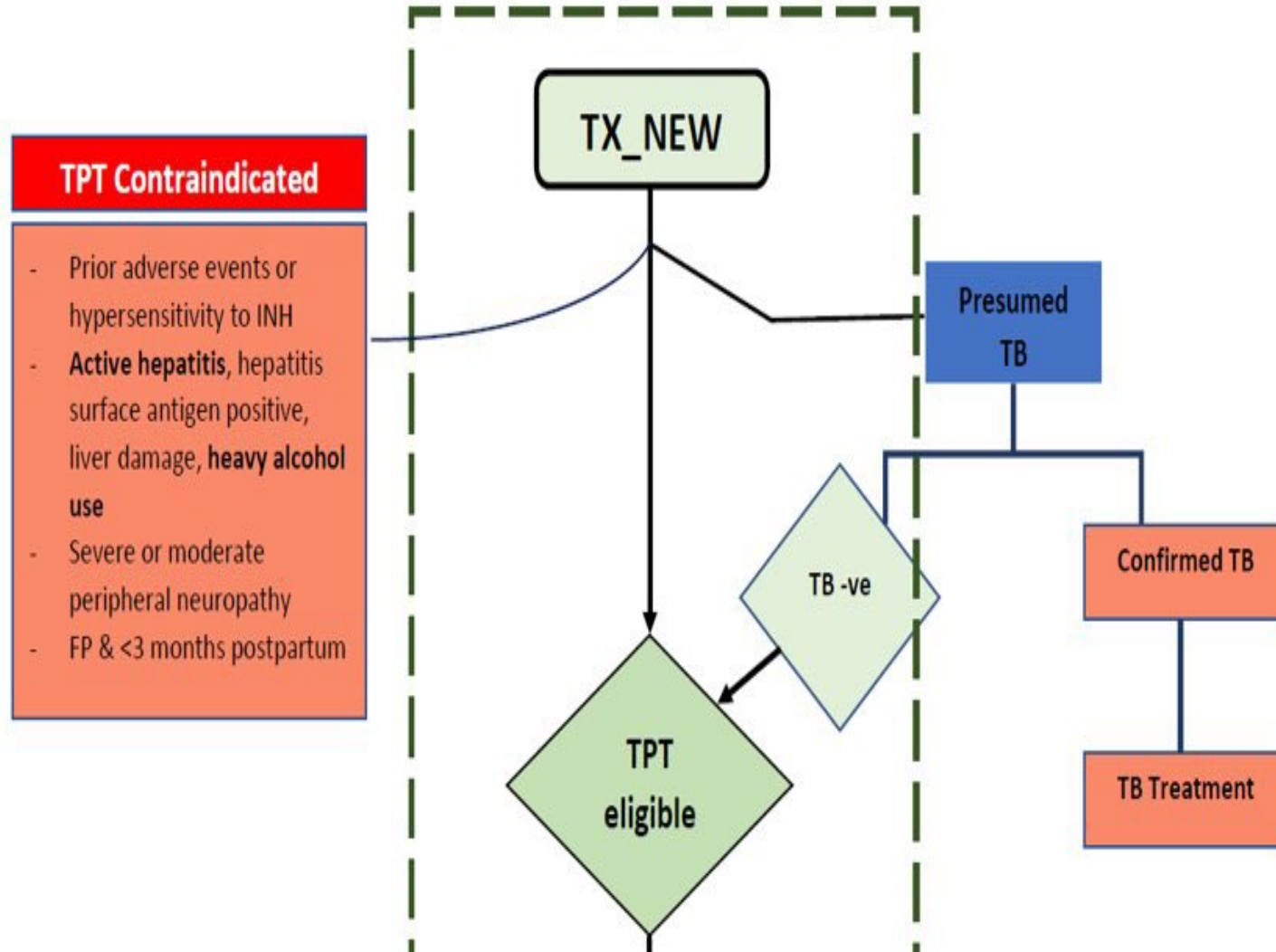
Malawi is considered a high TB/HIV burden country.



TPT policy evolution in Malawi



TPT eligibility



- TPT Contraindicated**
- Prior adverse events or hypersensitivity to INH
 - **Active hepatitis**, hepatitis surface antigen positive, liver damage, **heavy alcohol use**
 - Severe or moderate peripheral neuropathy
 - FP & <3 months postpartum

2022
Clinical Management of HIV
In Children and Adults

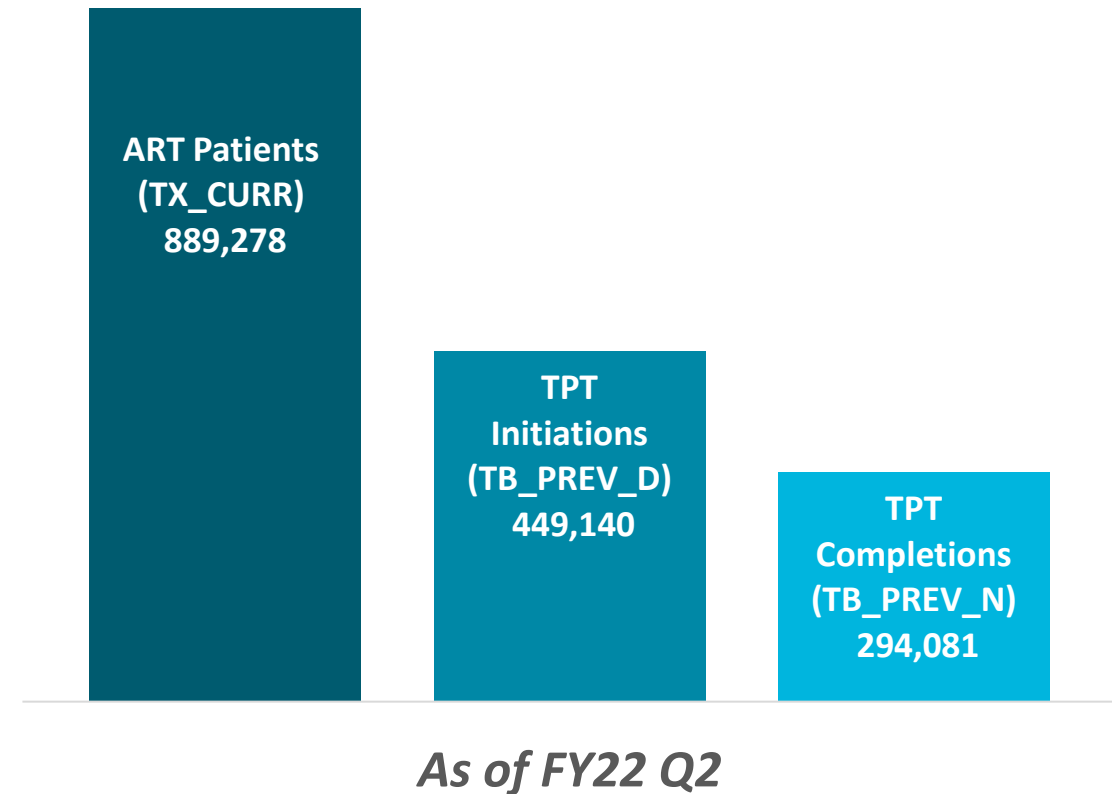
Malawi Integrated Guidelines and Standard Operating Procedures for Providing HIV Services in:

- Antenatal Care
- Maternity Care
- Under 5 Clinics
- Family Planning Clinics
- HIV Exposed Child Follow-up
- ART Clinics

Low TPT completion rates

- PEPFAR recommendation: 85% TPT initiation and 90% completion
- TPT completion rates ~50% and suboptimal initiation
- 45% of new ART clients initiated TPT and 51% completed at CDC-supported sites in FY22 Q2

TPT coverage among ART Patients in Malawi

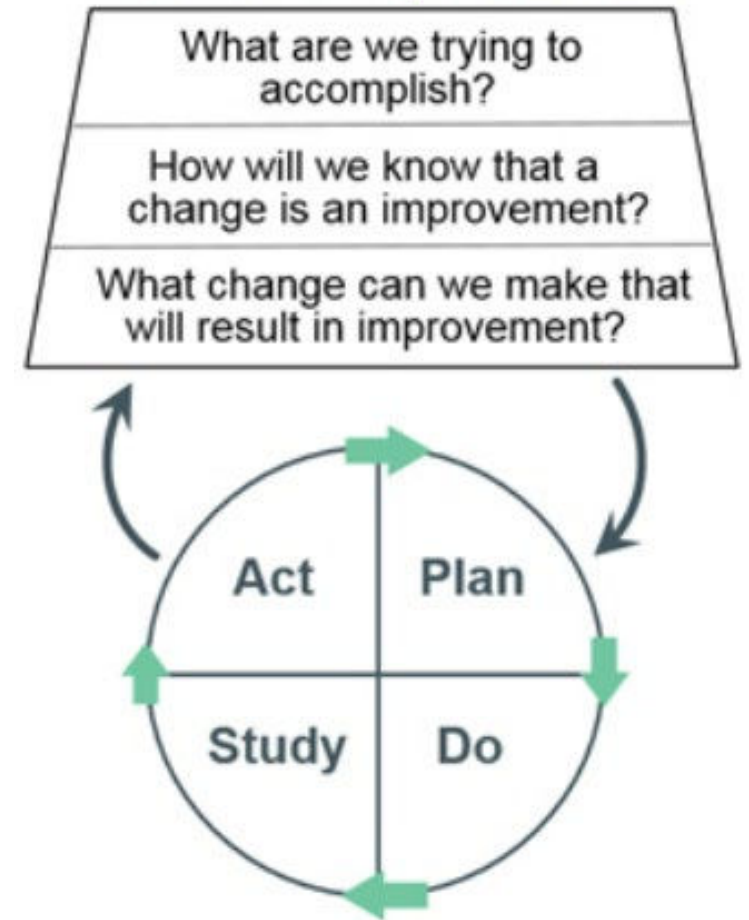


TPT CQI Project

Continuous quality improvement (CQI) project introduced to strengthen TPT implementation and monitoring of eligibility, uptake, and adherence among PLHIV by:

- Identifying and resolve challenges to optimal TPT service delivery
- Strengthening monitoring and evaluation efforts and encouraging data utilization
- Promoting best practices through peer learning
- Reinforcing existing policies and standard procedures

Model for Improvement



TPT CQI Project Site selection:

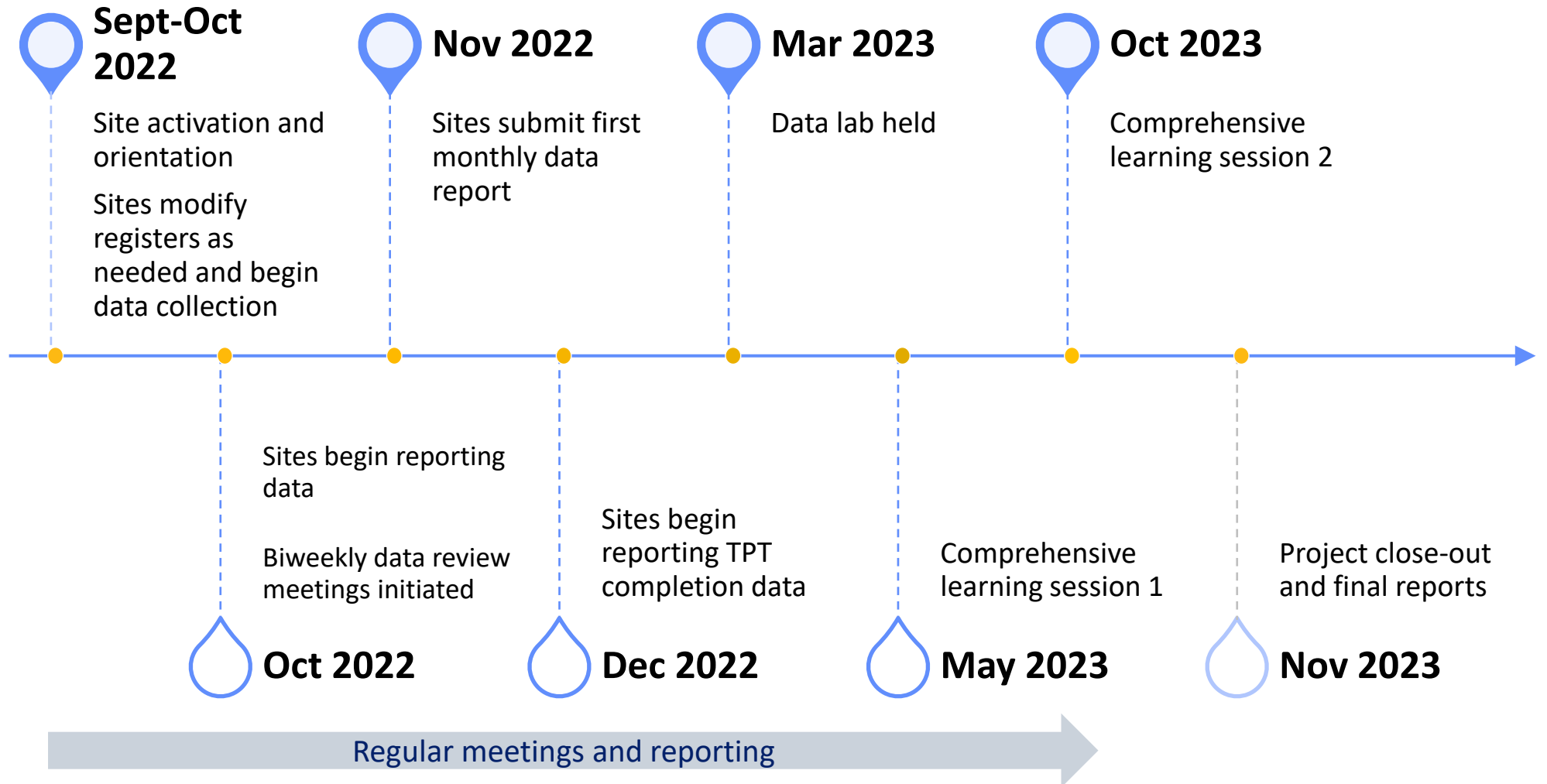
Nine high-volume ART clinics at primary, secondary and tertiary level supported by CDC implementing partners, Lighthouse* and EGPAF**

- ART cohorts >2,500
- <85% TPT initiation or completion rates among recipients of care who were new ART initiations

** Total number of Lighthouse supported sites: 12*

*** Total number of EGPAF supported sites: 177*

Timeline for the CQI Project



Key Metrics & Targets



TPT Uptake (TB_PREV_D)

- TPT initiations ÷ TX_NEW
- TPT initiations ÷ TPT eligible



TPT Completion (TB_PREV_N)

- TPT completions ÷ TPT initiations
- Real-time monitoring (biweekly reports)



TPT Commodities

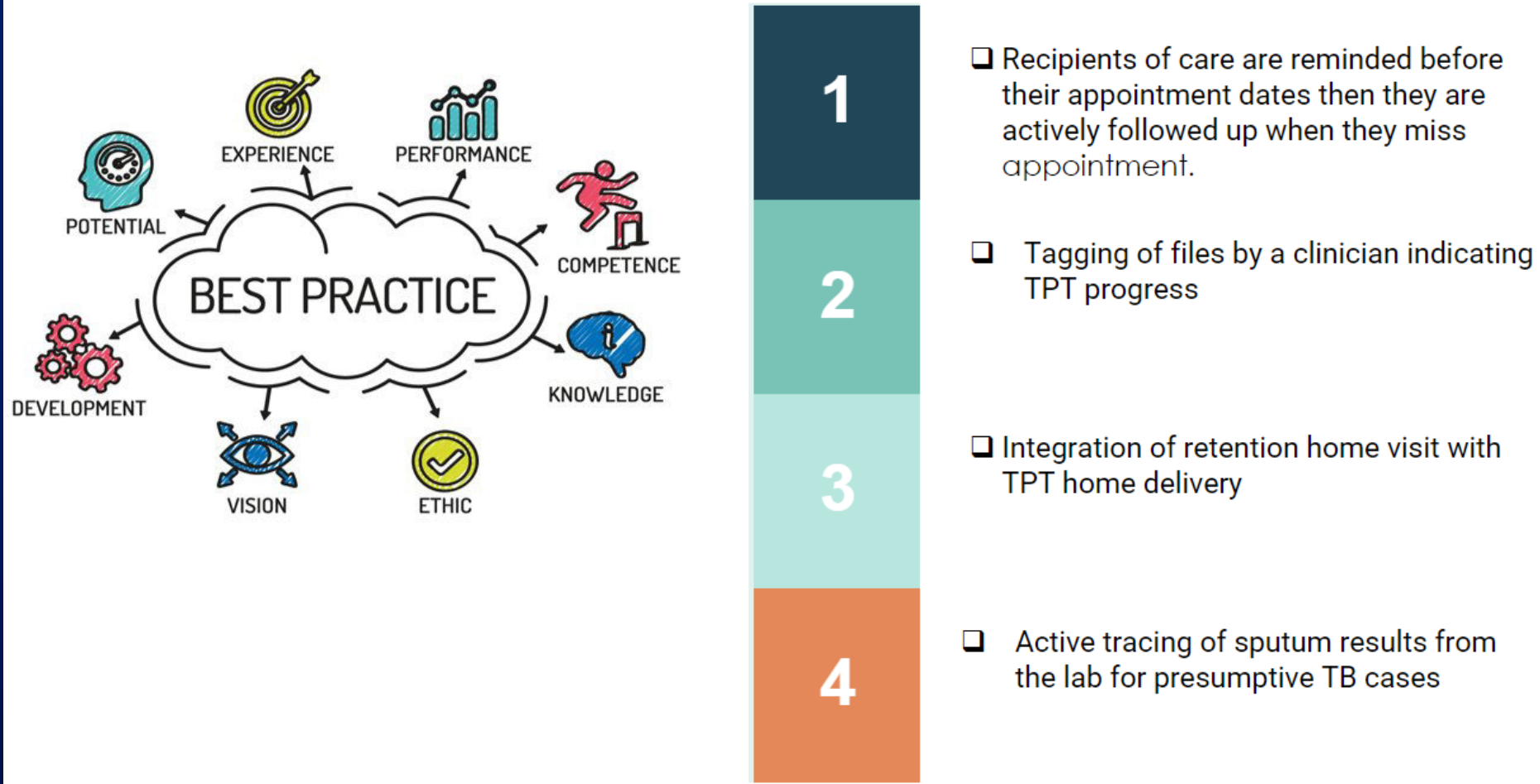
- 3HP, 6H, Pyridoxine

TPT Continuous Quality Improvement Monthly Report

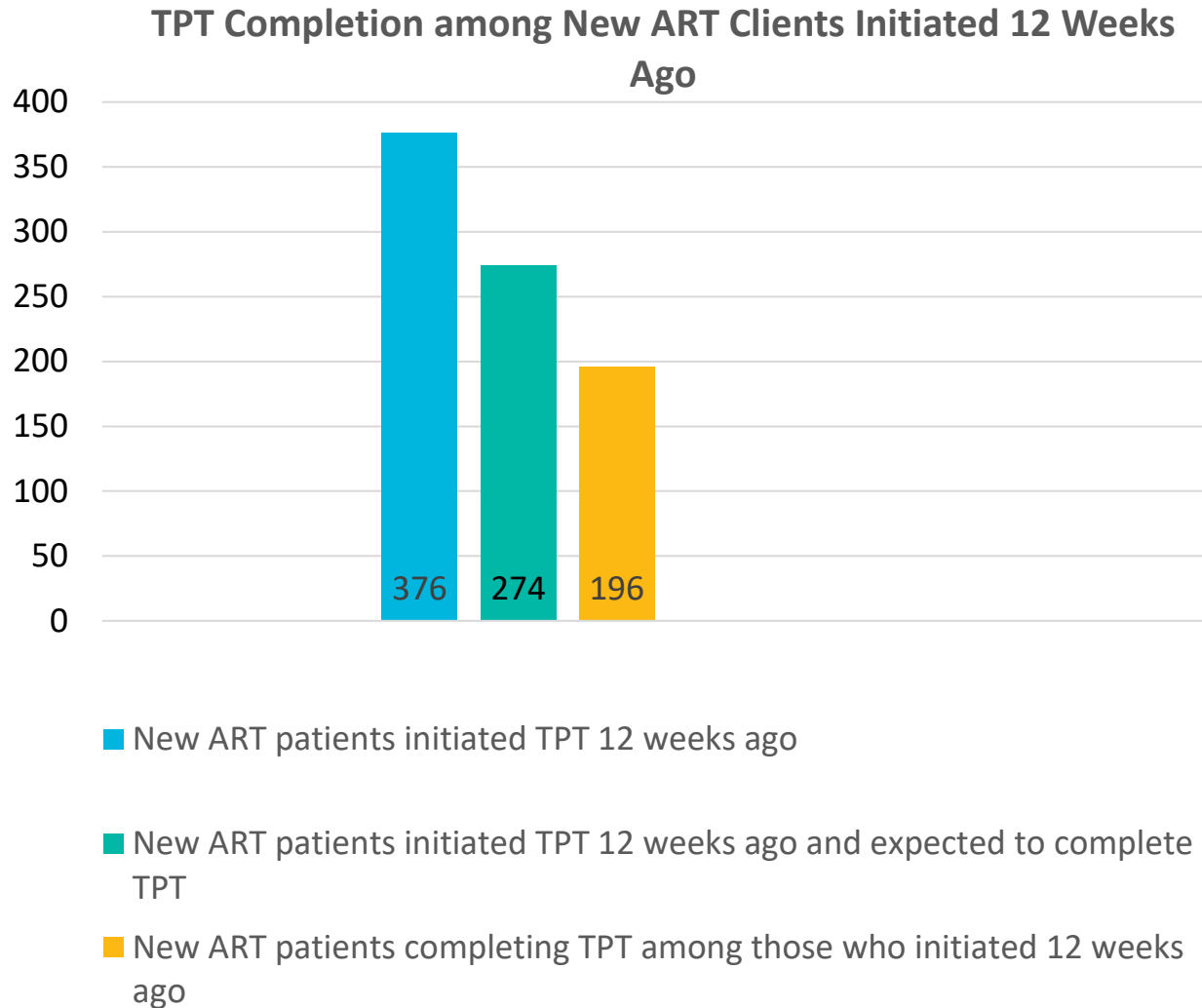
[INSERT FACILITY NAME]

[INSERT REPORT DATE]

Examples of changes tested to improve completion rates



Examples of Changes tested to improve TPT completion rates

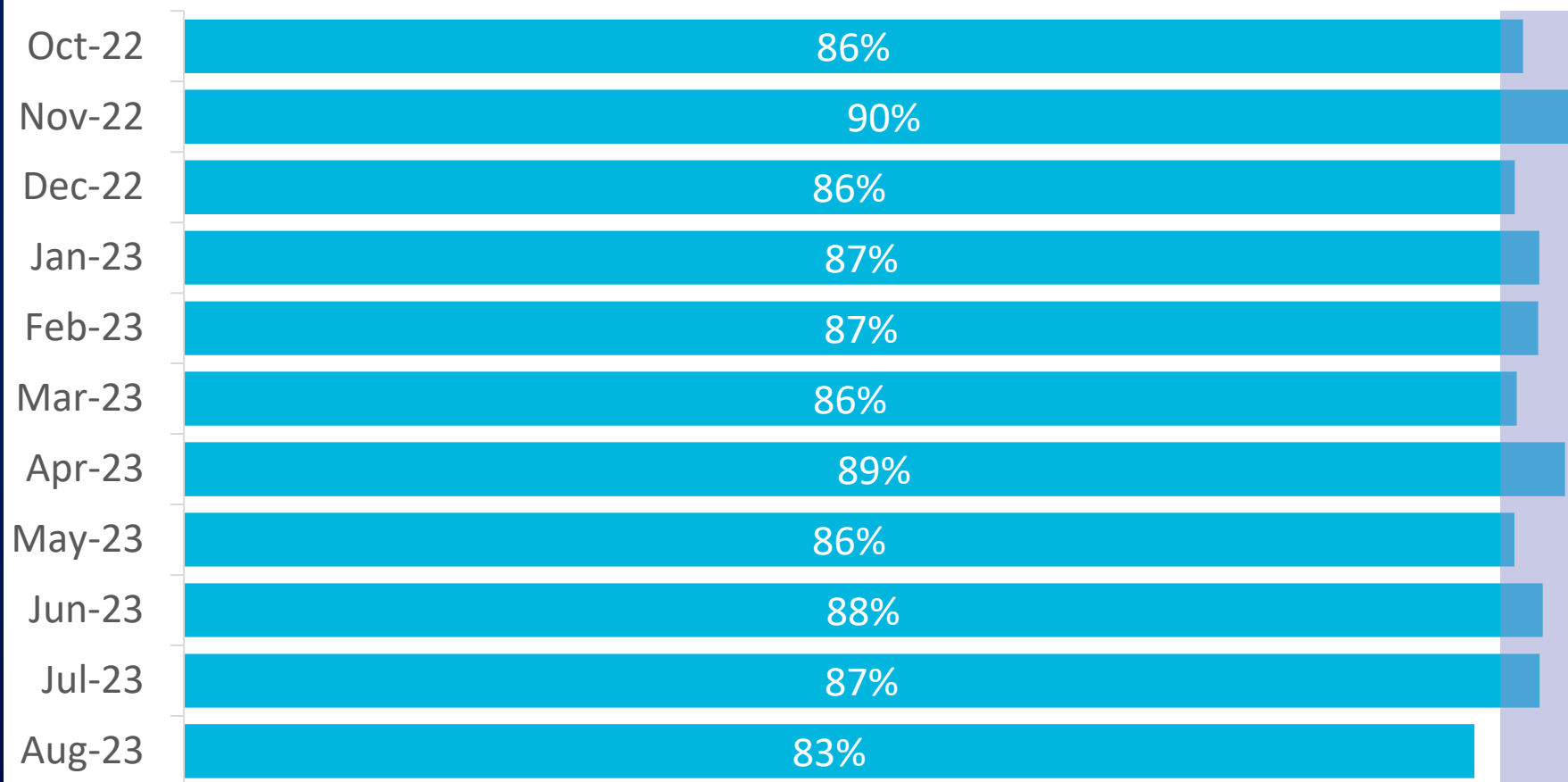


Patient follow up and documentation of outcomes:

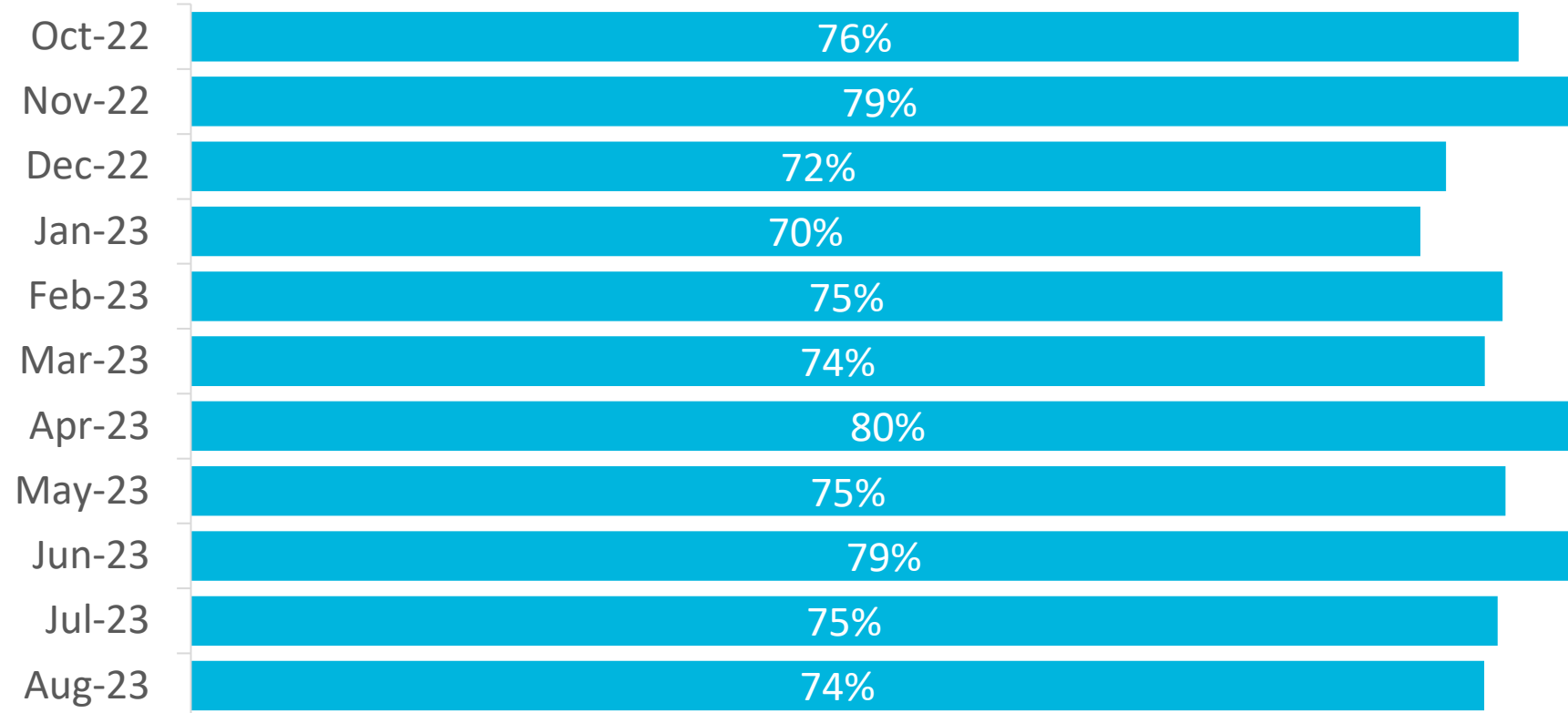
- 78 did not complete because they transferred out same day
- 7 died
- 13 were lost to follow up
- 4 experienced Adverse outcomes

Aggregate results for all 9 sites- % new ART clients screened TB-negative is within the expected range

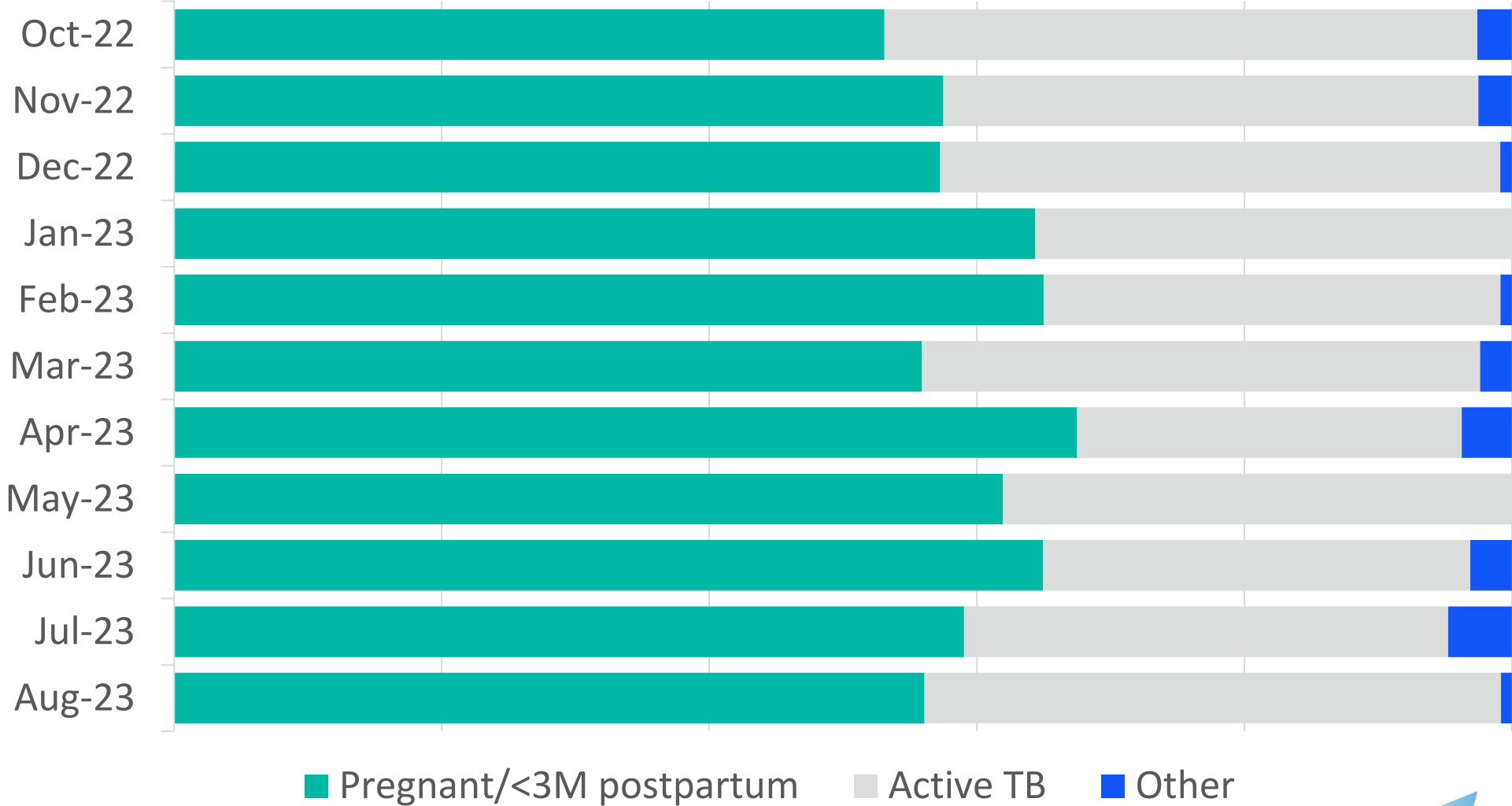
Expected 15% will screen positive (85% negative)



Aggregate results for all 9 sites- % New ART clients eligible for TPT consistently around 75%

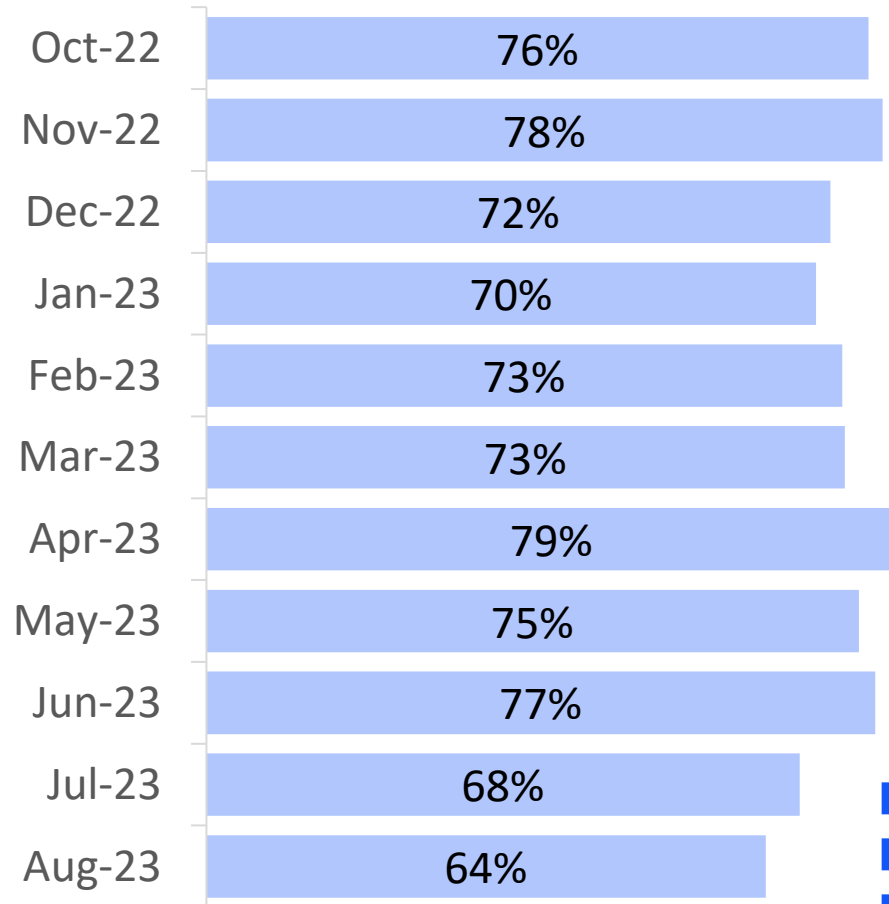


Aggregate results for all 9 sites- Reasons for TPT Ineligibility



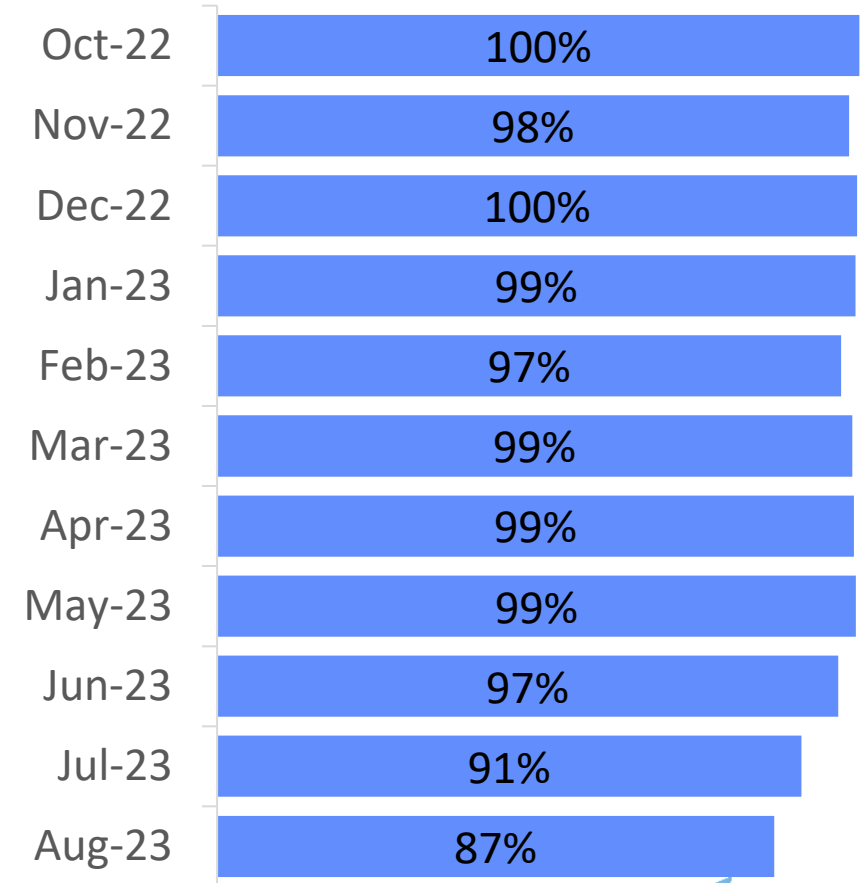
% TPT Initiation among all versus eligible recipients of care at all 9 sites

TPT initiation rates for all recipients of care newly initiated on ART ranged from **70-79%**, noting lower rates in July and August 2023

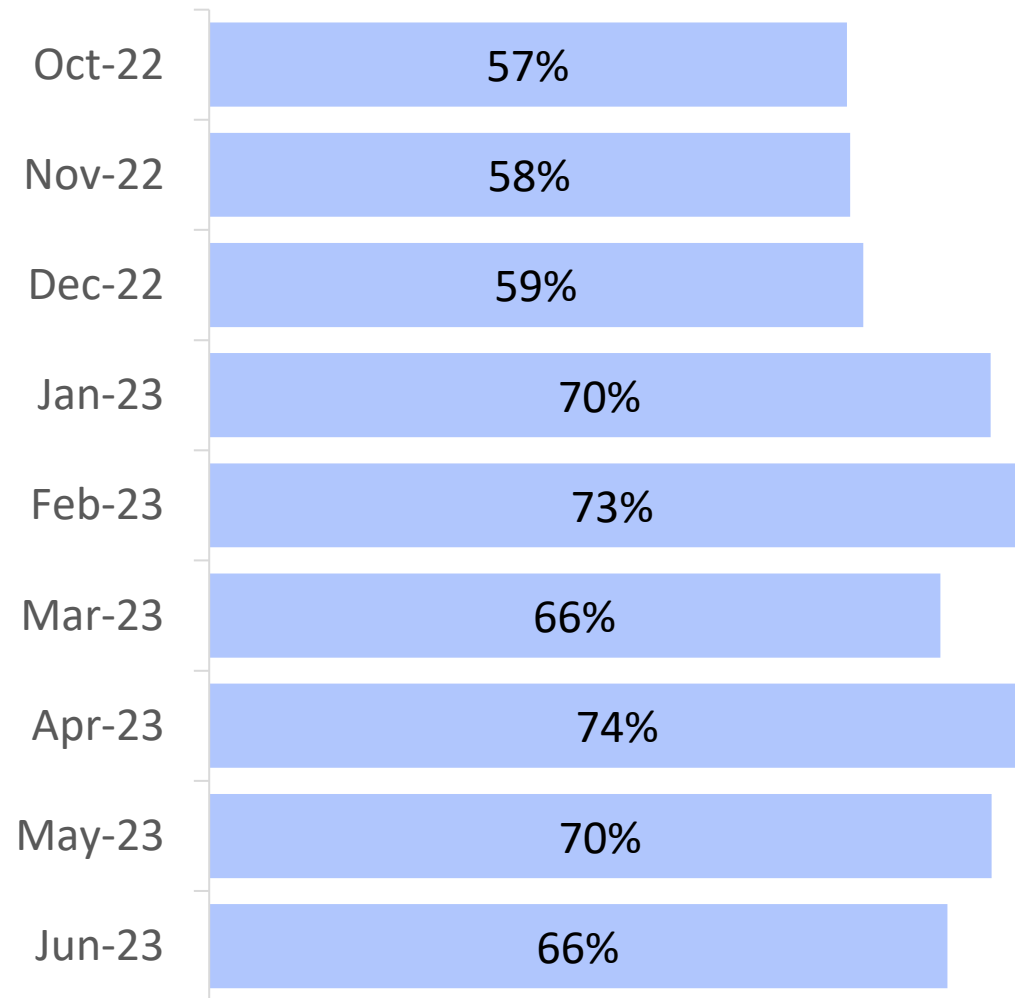


Pyridoxine stockouts

TPT initiation rates for eligible recipients of care ranged from **97-100%**, excluding July-August 2023

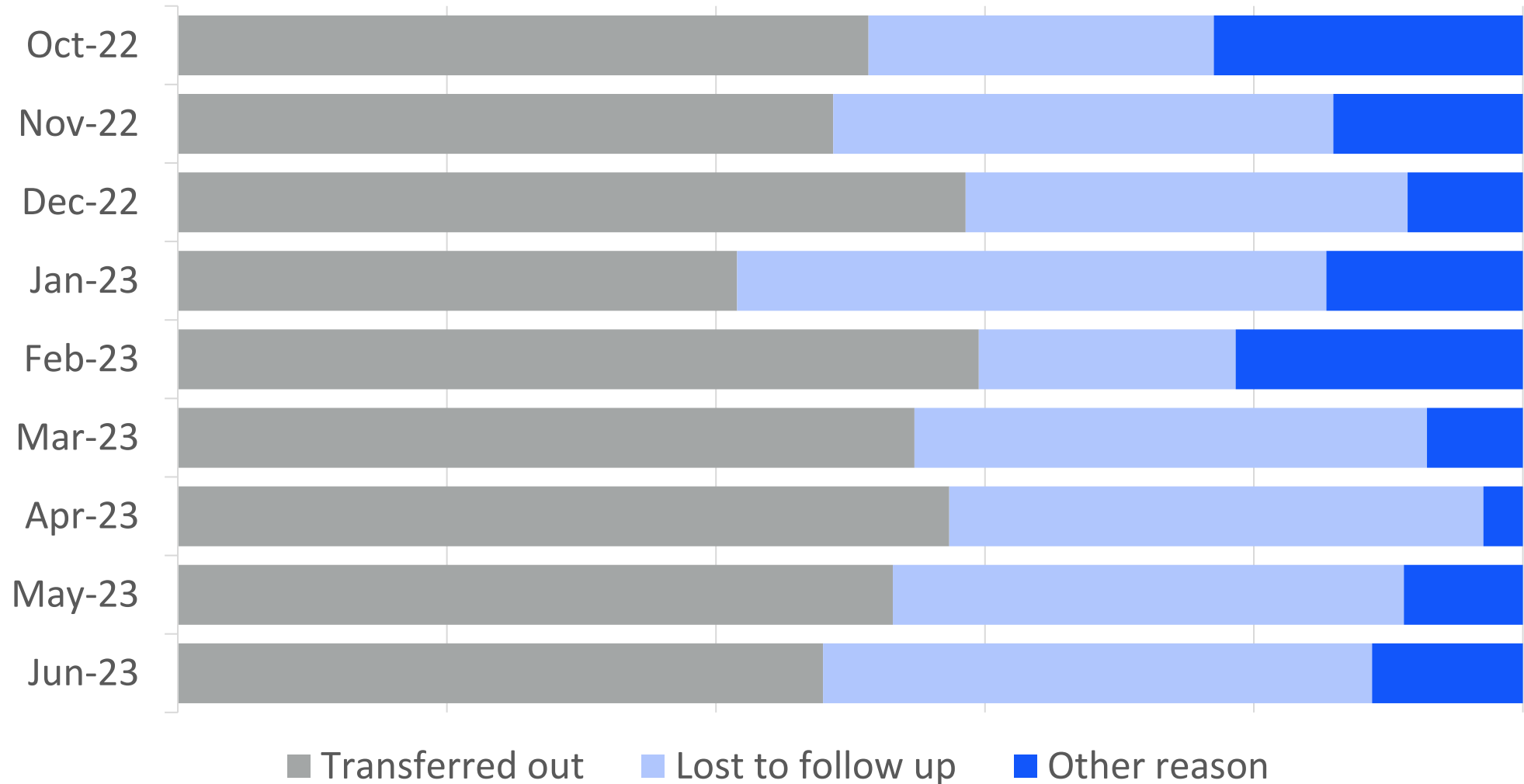


% TPT Completion rates at all 9 sites *

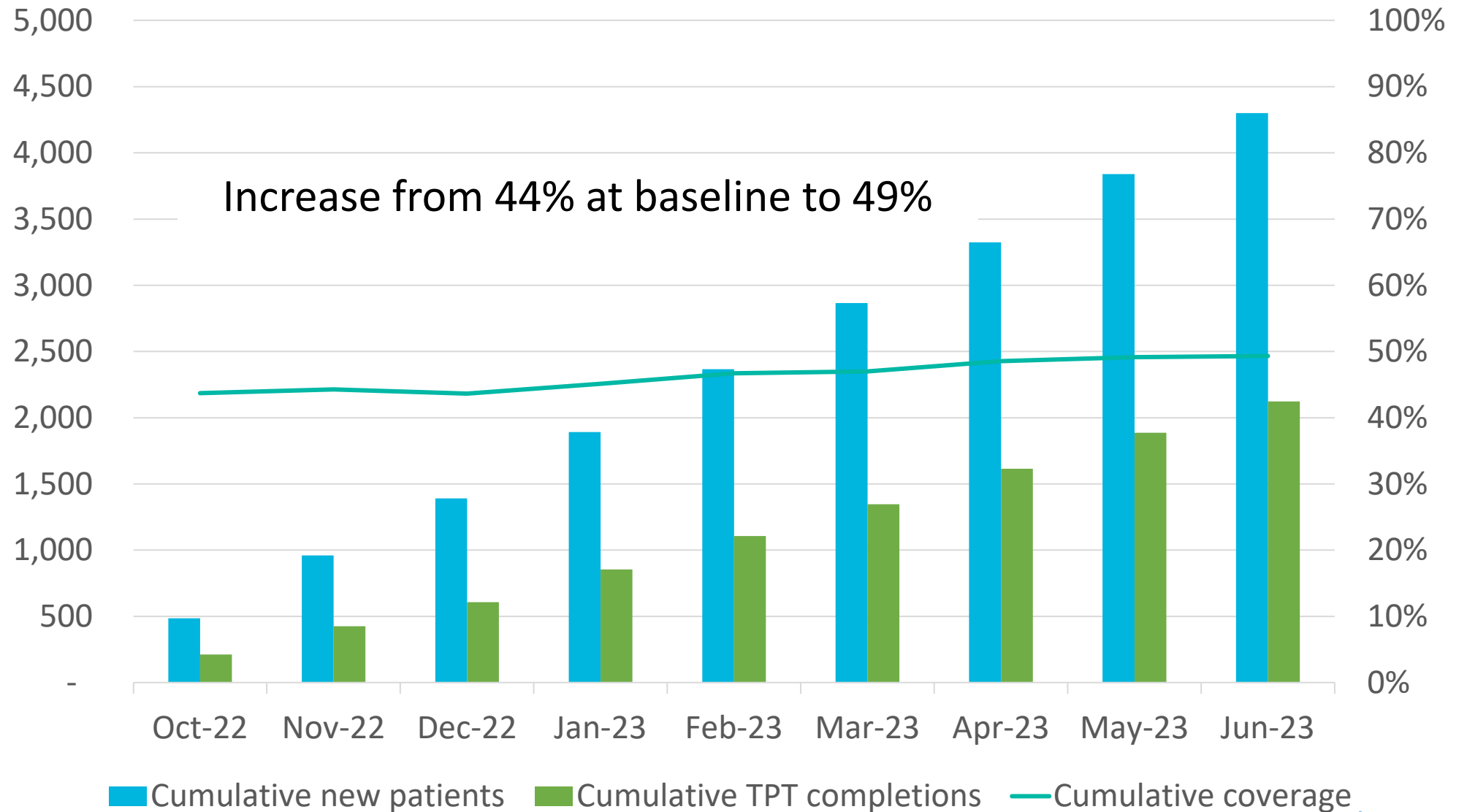


**excludes data from July-August because not all patients initiated in those months would have completed by September; completion data still considered preliminary*
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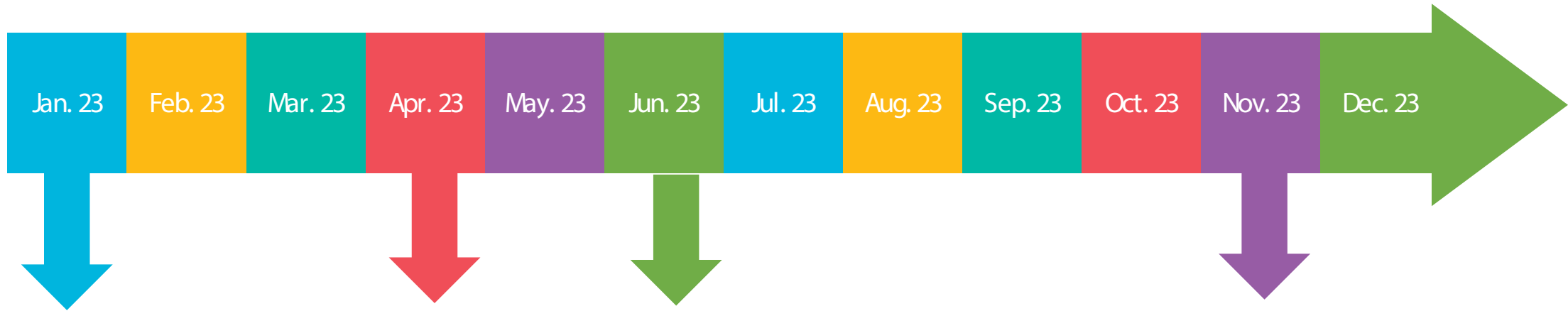
Reason for Not Completing TPT- from all 9 sites



Cumulative TPT Coverage



Spillover effect - scale up to other EGPAF supported sites



Scale-up phase 1

17 facilities added in 4 districts

- Blantyre,
- Zomba,
- Thyolo,
- Chiradzulu

Scale-up phase 2

16 facilities added, in a total of 8 districts

- Mwanza
- Ntcheu
- Dedza
- Mchinji

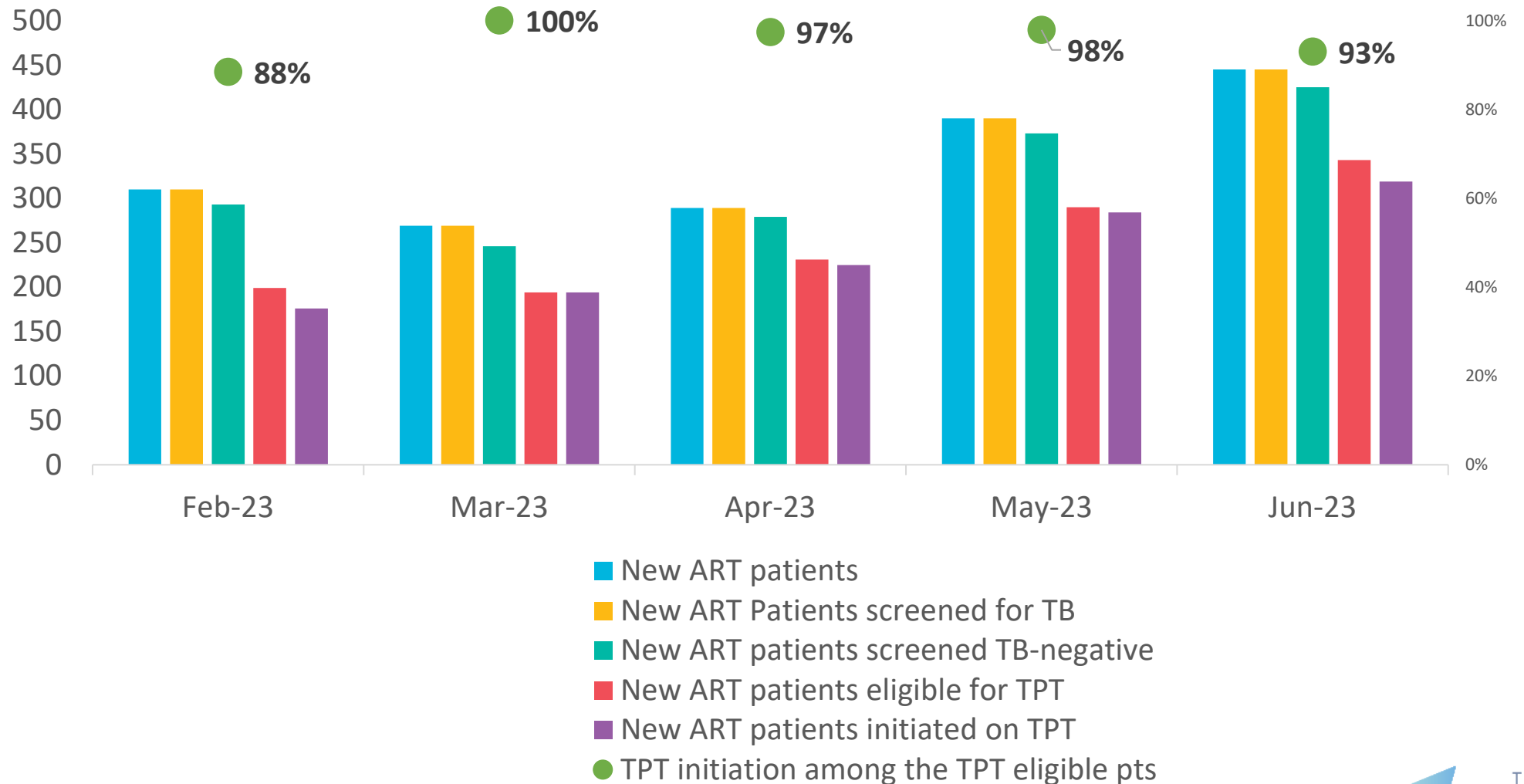
Scale up phase 3

13 more facilities added, total of 46 sites

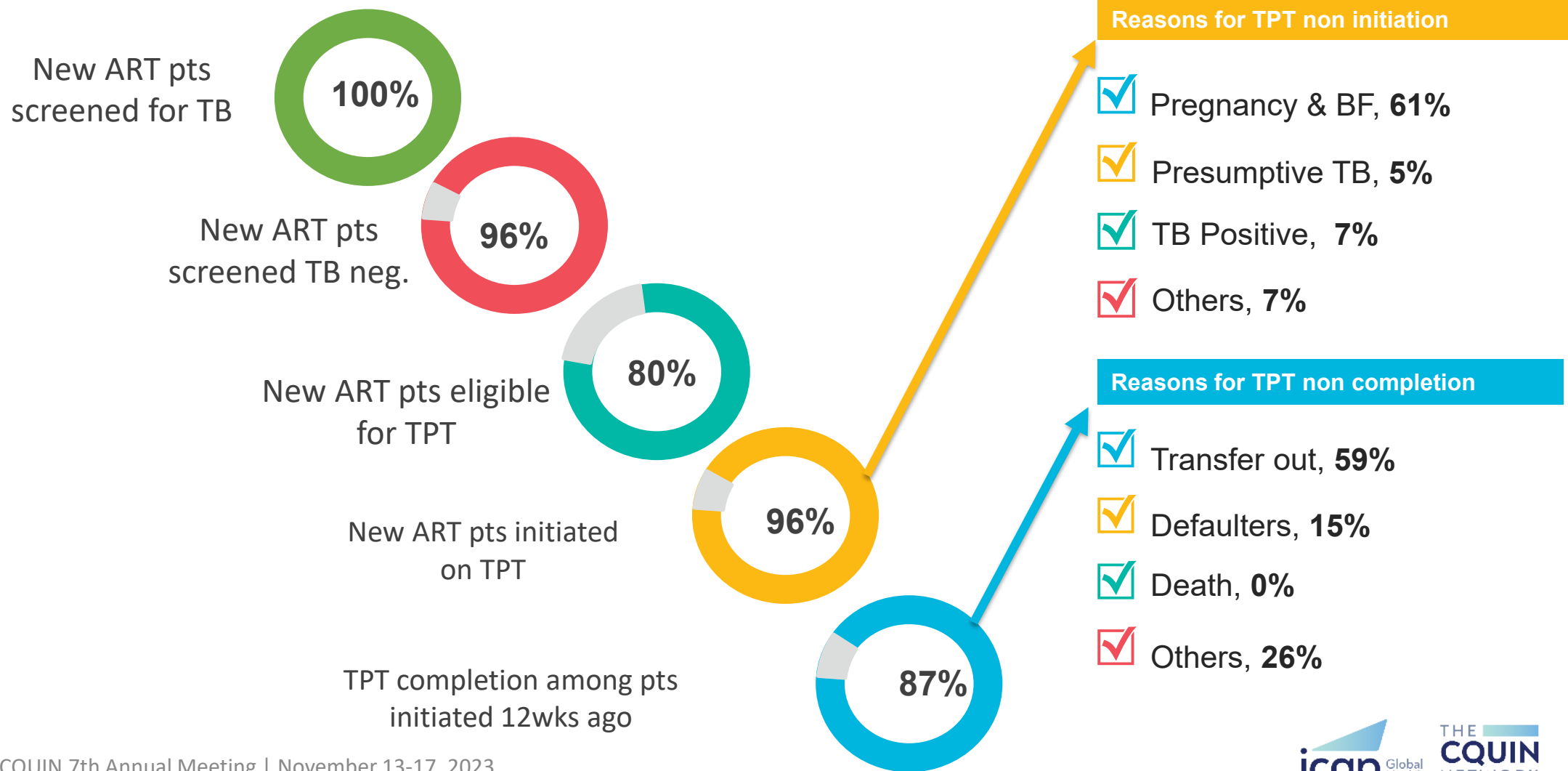
Scale up phase 4

100 facilities in total, using a modified approach- monthly follow up calls

Sustained optimal TB screening and TPT initiation in the 46 scale up facilities



Strengthening capacity to screen for TB, TPT initiation and follow up until completion in 46 sites



Next steps for the CQI project

- Survey- experiences with TPT CQI implementation
- Final report
- Presentation at national HIV technical working group:
 - Successes and challenges, highlighting pyridoxine supply chain, guidance on TPT eligibility for pregnant and breastfeeding women who are new on ART
 - M and E: TPT cascade to include eligibility screening

Acknowledgements:

Mrs. Rose Nyirenda, Director, Directorate of HIV, AIDS and Viral Hepatitis

Dr. Bilal Wilson, Care and Treatment Program Manager, Directorate of HIV, AIDS and Viral Hepatitis

Technical Directors and Program managers at EGPAF and Lighthouse Trust

CQI teams at facility level





Thank you!

