

Optimising the delivery cascade for tuberculosis preventive treatment among people living with HIV



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INSTITUTE**

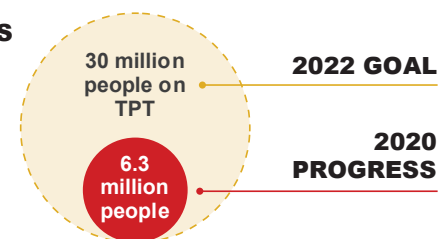
A multi-country program evaluation (Opt4TPT)

Background

Tuberculosis (TB) remains a major cause of illness around the world, and in 2021 1.6 million people died from the disease and 187 000 deaths among HIV positive people. TB preventive treatment (TPT) can reduce the risk of individuals progressing from infection to active TB disease. To close the gaps in TB prevention all people at high risk of TB need to have affordable access to the new short TPT regimens. New innovations, such as a shorter regimen that combines two antibiotics used to treat TB - Isoniazid and Rifapentine - taken once a week for 12 weeks (known as 3HP), has provided expanded access to TPT among PLHIV. Equally important are adherence to and completion of treatment the shorter regimens have potential to improve these. However, to sustain the implementation of these new TPT regimens in PLHIV, it

is critical that we understand the barriers and facilitators to implementation. Lessons learnt from this population can be used to expand access to other high risk groups such as household contacts. Achieving global targets, including those set at the September 2018 UNHLM on TB and more recently renewed in 2023, not only requires scaling up affordable and safe TPT regimens, but also collecting evidence to guide future implementation and policies.

PROGRESS TOWARD TPT



About Opt4TPT

The Opt4TPT study is a three-year programmatic assessment of TPT delivery in Ethiopia, South Africa, and Zimbabwe.

Legend Study_sites

name	
Ethiopia (KNCV TB Foundation)	
South Africa (The Aurum Institute)	
Zimbabwe (CHAI)	
Country Boundaries	



Collaborations

The Opt4TPT Study is building on existing projects and global investments. This includes the Aurum Institute's IMPAACT4TB project, which was aimed at catalysing 3HP initiation among approximately 2 million people, focusing on PLHIV and children under five, and subsequently all those in close contact with TB patients in 12 high-burden countries. Therefore, Opt4TPT is building on the IMPAACT4TB infrastructure to gain deeper insights into patient- and clinic-level processes, experiences and preferences for TPT regimens.

How is data being collected?

Patient Level

Prospective cohort study at three health facilities per country among PLHIV ≥ 18 years receiving HIV care either newly initiating OR on long-term ART

- Clinical care and management of patients are provided routinely by health care staff
- Participants followed-up to 24 months post-enrolment into the study (n=2097)
 - Interviews, case note abstractions
 - TB investigations at 12- and 24-months post enrolment
- Adherence monitoring using a digital adherence tool in a subset of participants (n=1500)
- In-depth interviews with a subset of participants based on treatment completion status (n=135)
- Data on costs to patients for adverse events experience
 - Patient incurred costs of adverse events
 - Incremental costs per DALY averted, patient year and TB cases averted due to TPT

Clinic Level

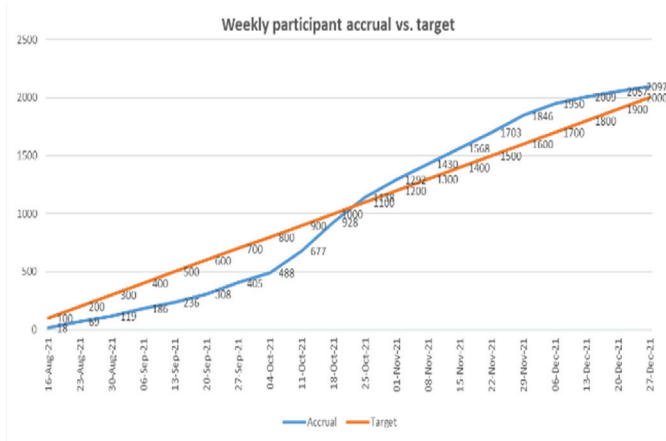
What are the structures and processes in the delivery of TPT?

- Data collected from 10 health facilities per
- Analyse all steps involved for each patient
 - Recording of patient consultations with healthcare providers (n=150)
 - Review of pharmacy records and interviews with pharmacy managers on drug stock management
 - In-depth interviews with healthcare providers to understand the facilitators and barriers to TPT prescribing

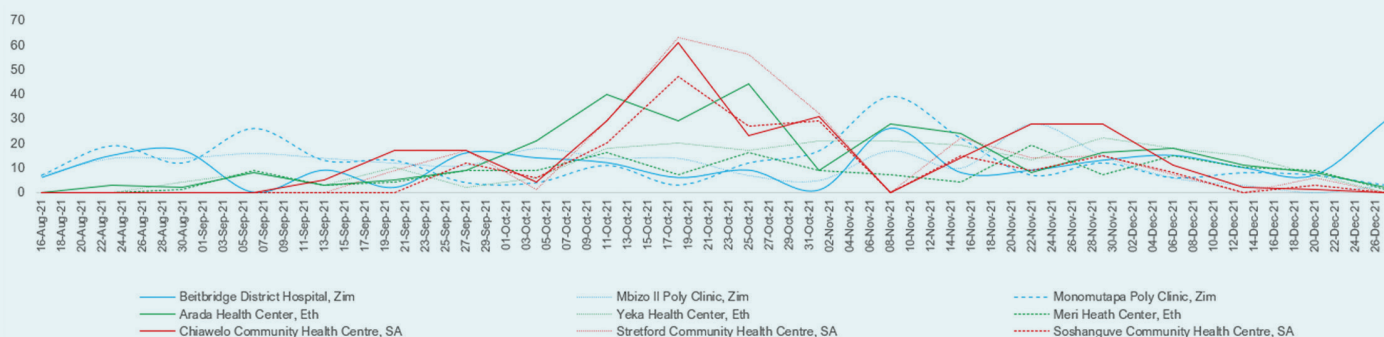
Significance

By following a cohort of PLHIV prospectively and directly observing service delivery in health facilities, Opt4TPT's approach will provide valuable new knowledge regarding routine use of TPT, as well as outcomes during, and following, TPT. This study will create an important understanding of TPT uptake and completion from the patient perspective and delivery from the health system perspective. These results will provide actionable information for improving service delivery and the scale-up of TPT.

Implementation progress



The Opt4TPT study was open to enrolment in August 2021. Our overall target for the study was 2000 and at country level, 667 participants each. At the end of 2021, our field teams enrolled 2,097 (participants, distributed as follows: 667 (Ethiopia), 733 (South Africa) and 697 (Zimbabwe). On 27 December 2021, the last participants were enrolled across all our facilities in Ethiopia, South Africa, and Zimbabwe. The overall progress is shown in the graph above. The start to enrolment was slow due to COVID-19 lockdown restrictions (16 August 2021 - 05 October 2021) and as sites became more familiar with the study procedures this improved with time peaking between mid-October and early November 2021.



Data collection will be finalised in November 2023. Dissemination is ongoing from March 2023 scheduled and will continue after study closure (February 2024) through the following platforms:

- Local Dissemination in Zimbabwe - **October 2023**
- CQUIN Research Meeting - **November 2023**
- Local Dissemination in South Africa - **November 2023**
- Local Dissemination in Ethiopia - **December 2023**
- Local and international conferences - **2023/2024**

Please visit us at the following sessions to learn more about selected preliminary findings.

Dr Lindiwe Tsope: Barriers and facilitators to TB preventive treatment (TPT) among people living with HIV in three sub-Saharan Africa countries.

Mr Kenny Sithole: Nuances, complexities, and opportunities of TPT delivery in cross-border communities: The case of Beitbridge District Hospital



Name and Surname	Role	Telephone (Office)	Telephone (mobile)	Email address
Prof Violet Chihota	Principal Investigator (South Africa)	(+27) 010 590 1495	(+27) 082 319 1559	VChihota@auruminstitute.org
Dr Lucy Chimoyi	Project Director (South Africa)	(+27) 010 590 1360	(+27) 072 797 6465	LChimoyi@auruminstitute.org
Dr Ahmed Bedru	Country PI (Ethiopia)	(+251) 116 63 0146	(+251) 911 40 54 05	ahmed.bedru@kncv.tbc.org
Ms Nicole Kawaza	Country PI (Zimbabwe)	(+263) 719 742 383	(+263) 774 742 383	nkawaza@clintonhealthaccess.org

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