



PEPFAR

U.S. President's Emergency Plan for AIDS Relief

Adapting differentiated models of HIV service delivery for TB preventive treatment in response to COVID-19

HIV-TB Implementation for Impact Working Group
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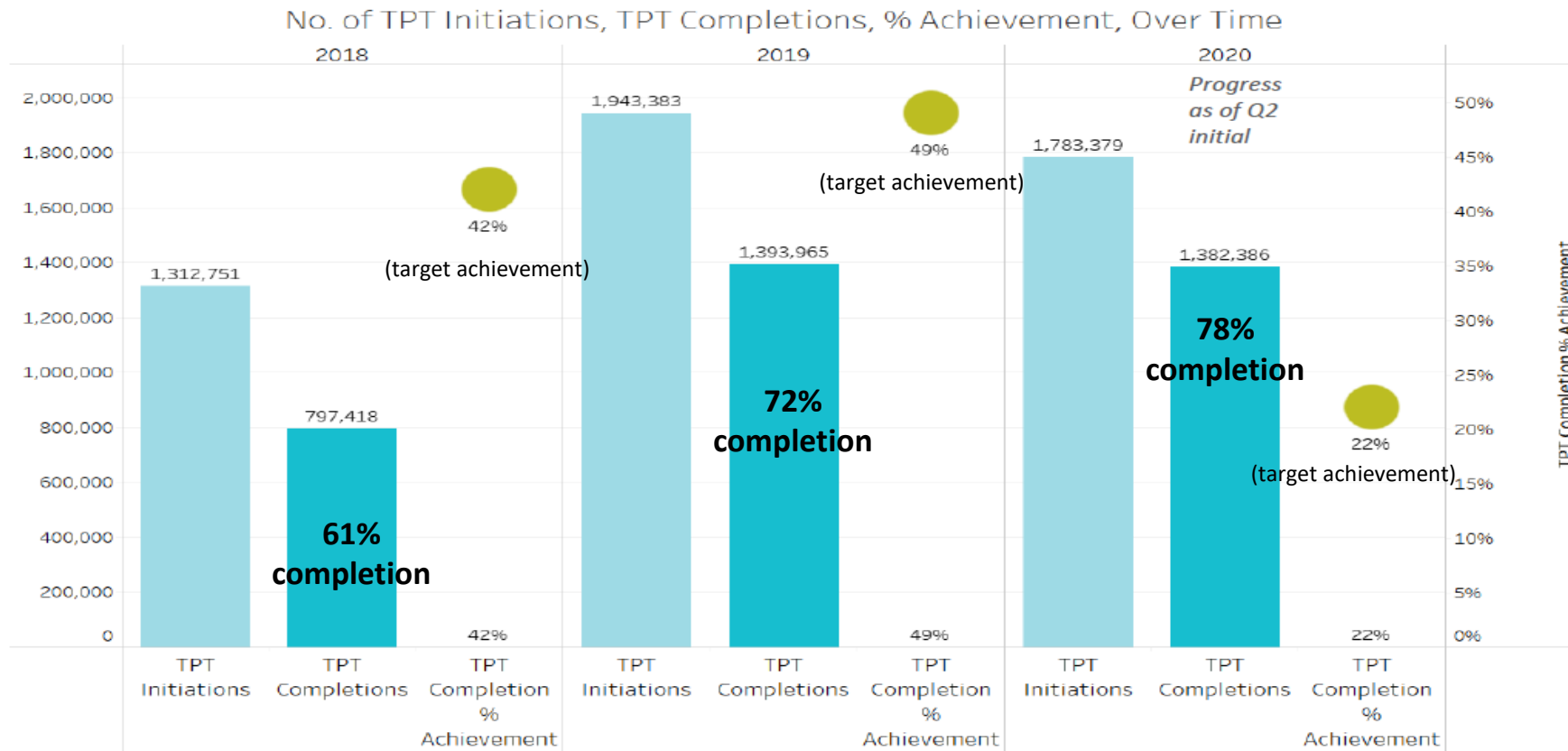
U.S. Centers for Disease Control and Prevention

17 YEARS OF SAVING LIVES THROUGH AMERICAN GENEROSITY AND PARTNERSHIPS

1. Review of progress in TPT Scale-Up
2. Expansion of DSD in response to COVID
 - HIV services
 - TB services
3. Early Country Experiences Scaling-up TPT through DSD
 - Nigeria's experience
 - Best practices and challenges across the PEPFAR platform
4. Looking Forward

PEPFAR Targets and Achievements for TPT

- In 2017, PEPFAR set an ambitious target to provide TPT to all PLHIV by end FY2021
- Since then, more than 3.5 million PLHIV have **completed** TPT



Source: ICPI PEPFAR FY20 Q2 Data Review (slide by Catherine Nichols, 24 June 2020)

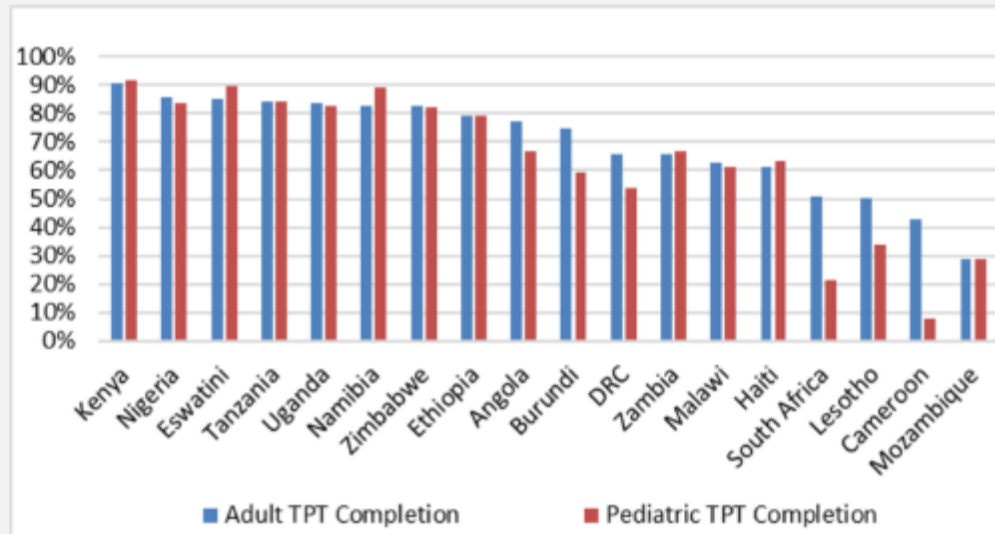
TPT Scale-Up among CLHIV and Adult PLHIV, FY2019

- Across 18 countries in FY19, 1.8M adults initiated TPT (71% completion, range 29-91%) and 100K children initiated TPT (63% completion, range 8-92%)
- Greatest age disparities for completion in Cameroon, South Africa and Lesotho

Table 1: TPT Initiation, Completion, and Completion Rates by Age, October 2018 – September 2019

	Adult (15+)			Pediatric (<15)		
	Started TPT	Completed TPT	Completion Rate	Started TPT	Completed TPT	Completion Rate
Kenya	95,567	86,519	91%	9,225	8,453	92%
Nigeria	313,783	268,201	85%	7,333	6,131	84%
Eswatini	30,589	25,999	85%	1,629	1,457	89%
Tanzania	454,365	383,334	84%	21,956	18,466	84%
Uganda	106,233	89,123	84%	13,525	11,174	83%
Namibia	20,227	16,739	83%	1,174	1,046	89%
Zimbabwe	45,522	37,616	83%	2,308	1,891	82%
Ethiopia	26,437	20,886	79%	1,820	1,440	79%
Angola	13,344	10,279	77%	762	508	67%
Burundi	5,544	4,132	75%	184	109	59%
DRC	22,051	14,511	66%	1,762	947	54%
Zambia	92,171	60,415	66%	5,395	3,596	67%
Malawi	44,070	27,711	63%	1,936	1,189	61%
Haiti	17,090	10,450	61%	456	288	63%
South Africa	328,153	166,750	51%	19,076	4,052	21%
Lesotho	14,823	7,464	50%	936	318	34%
Cameroon	16,281	6,952	43%	2,803	218	8%
Mozambique	165,823	47,510	29%	7,771	2,242	29%

Figure 1: TPT Completion Rates by Age, October 2018 – September 2019



Source: [Vinayak P, Al-Sammarai T, et al. Adult and Pediatric Tuberculosis Preventive Therapy in select PEPFAR-supported countries. In proceedings from the International AIDS Society Meeting: July 2020: Poster PEE1617](#)
 Additional analyses: [Patel M, Itoh M, et al. Assessment of the tuberculosis clinical cascade among children living with HIV on antiretroviral therapy, sub-Saharan Africa PEPFAR-supported programs, April 1, 2019 to September 30, 2019. In proceedings from the International AIDS Society Meeting: July 2020: Abstract OAB0504](#)

PEPFAR Toolkit: DSD TPT Implementation Considerations

Implementation considerations are available on PEPFAR Solutions under “TPT Implementation Tools” [here](#) (tool #16, Oct 2019), including:

Determination of TPT eligibility and initiation of TPT
Patient management and follow up:

- TPT dispensing
- Screening for TB and/or adverse events
- Monitoring adherence and completion

Recording and reporting

Related Resources:

- [IAS supplement on Leveraging Differentiated ART Delivery Models for Stable Clients to Scale-Up TPT \(2019\)](#)
- [CQUIN Framework for Implementation](#)

Differentiated service delivery models for delivery of TB preventive treatment: General programmatic considerations

Purpose
Tuberculosis preventive treatment (TPT) PEPFAR targets will not be met if TPT is only provided to newly-diagnosed people living with HIV (PLHIV). Delivery of TPT to stable PLHIV receiving antiretroviral therapy (ART) in differentiated service delivery (DSD) models must be reconciled with the less frequent health facility contact inherent in these models. In considering TPT scale-up, it is important to consider how to deliver TPT both to newly-diagnosed PLHIV and to stable PLHIV on ART in DSD models.

Background
In HIV care, DSD describes the adaptations that can be made to HIV services, including ART delivery, to meet the care needs and preferences of PLHIV, while also streamlining care in the context of limited human resources and infrastructure. DSD models vary across domains of HIV care delivery of what (ART, clinical monitoring, sampling for laboratory testing), when (frequency of contact), where (in a facility, in the community), and by whom (physician, other healthcare provider, community health worker, peer). DSD models are important in HIV care because they facilitate integration of services and ensure that all recipients of care through task-shifted roles have achieved documented viral load suppression. DSD models also allow the clinic for health professionals to be less frequent, which may improve adherence and completion of care.

Example DSD models for stable HIV information on DSD models, visit [ht](#)

[] – MONTH [Chosen regimen] DELIVERY FOR STABLE PLHIV IN [Relevant DSD Model]

What: Determination of TPT eligibility + initiation

- WHERE
- WHEN
- BY WHOM
- WHERE

Screen for TB and TPT AEs at every clinical encounter

Counsel patient and treatment supporter to screen daily for TB symptoms and potential AEs, and call hotline if they develop

If TB symptom/s:

Hold TPT

TPT DELIVERY FOR STABLE PLHIV IN DSD: EXAMPLE OF FACILITY-BASED MODEL

Legend

- ART
- TPT

Fast-track = Medication pick-up and TPT adverse events screening (AEs) by pharmacist.
TPT assessment = Screening for presumptive TB and TPT AEs.

Descriptions: In country X, PLHIV stable on ART are enrolled in a DSD model that consists of 3-month ART scripting (fast-track medication pick-up and AE screening at pharmacy) and 6-month clinic visits. When these PLHIV start TPT, TPT is given at their routine 6-month clinic visit. At that visit, PLHIV are given a 3-month supply of TPT. They return 1 month later for a TPT assessment (screening for presumptive TB and AEs) at the facility. If no presumptive TB or serious AEs are found, PLHIV are given a 2-month supply of TPT. They then return 2 months later for a fast-track visit for a TPT assessment by the pharmacist, and to collect 3 months of ART and TPT. If no presumptive TB or serious AEs are found, at the next 6-month clinic visit, a TPT assessment and evaluation for completion is conducted by the clinician. Advantage: Stable PLHIV on ART only “break” their regular cycle of 6-month facility visits once, one month after initiating TPT.

PEPFAR COVID-19 Guidance: Expand MMD for core services

- Accelerate and scale up MMD dispensing of ARVs, TB medications, and TPT for all, including children
- TPT remains a core HIV service
 - For PLHIV already on TB or TPT regimens, ensure remaining doses are provided to complete full course of treatment
 - For new patients, up to a full course of TPT (INH or 3HP) could be dispensed
 - Ensure sufficient commodity for all PLHIV initiated on treatment
- Align ARV & TB visits and medication dispensing
- Ensure that adverse event monitoring can be done via telephone, SMS, or electronically

[Source: PEPFAR Technical Guidance in the Context of COVID-19](#)

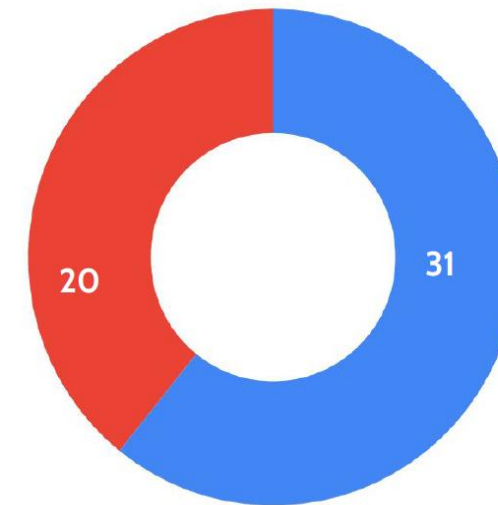


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PEPFAR Programs Respond: Massive Expansion in DSD

- Between Q1 – Q3 2020, 60% of programs have changed policy and practice to accelerate MMD/DSD models for ARVs
- In many countries, the number of clients in a DSD model has nearly doubled:
 - In a majority of countries, between 60-90% of adults receive care through a DSD model
 - While, 30-90% of children are in a DSD model (*more variable and overall trending toward 45%*)

COVID-related changes to MMD (ART) Policy among PEPFAR-supported Countries with Care & Treatment Program



PEPFAR has knowledge or record of 31 of 51 (~61%) PEPFAR-supported countries with C&T programs amending MMD policy or implementation to increase MMD coverage during the COVID-19 response.

- PEPFAR countries that changed MMD policies and/or implementation of MMD since 03/2020 due to COVID-19
- PEPFAR countries that we do not have record of changing MMD policy due to COVID as of 6/30/2020

Source: Al-Samarrai T. Scaling up TPT in PEPFAR: Experience and Lessons Learned. Presented at Proceedings of the International AIDS Society; July 2020; On Demand Session: Leveraging Differentiated Service Delivery to Enhance Coverage and Completion of Tuberculosis Preventive Treatment (TPT).

COVID-19 Impact on TPT Uptake

- Declines in patient volume at health care facilities
- Declines in HIV case finding
- TB Programs and staff diverted to COVID-19 response
- Declines in TB case finding
- TPT scale-up significantly impacted
 - Multiple countries are at high risk of INH stock-out which may limit MMD
 - Delays in 3HP shipments
- *However, MMD for TPT and TB treatment has expanded (table as of June 2020)*

Country	MMD TB	MMD TPT
Botswana	Na	Na
Cameroon	Yes	Na
Cote d'Ivoire	Na	Na
DRC	Na	Na
Eswatini	Na	Yes
Ethiopia	Yes	No
Haiti	Yes	Yes
Kenya	Yes	Yes
Lesotho	Yes	Yes
Malawi	Na	Paused TPT
Mozambique	Na	Yes
Namibia	Yes	Yes
Nigeria	Yes	Yes
Rwanda	Na	Yes
Uganda	Yes	Yes
Tanzania	Na	Yes
South Africa	Yes	Yes
Vietnam	Na	Na
Zambia	Yes	Yes
Zimbabwe	Yes	Yes

Source: Al-Samarrai T. Scaling up TPT in PEPFAR: Experience and Lessons Learned. Presented at Proceedings of the International AIDS Society; July 2020; On Demand Session: Leveraging Differentiated Service Delivery to Enhance Coverage and Completion of Tuberculosis Preventive Treatment (TPT).



PEPFAR Country Call: Early Lessons from Integrating TPT into DSD Models amidst COVID-19

18 August 2020

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Nigeria: Integrating TPT services into HIV DSD models during COVID

- Various TPT DSD models are available in Nigeria and the program has operationalized TPT in these models during COVID through:
 - Building **community awareness** through campaigns at service delivery points
 - Developing a **screening tool** that physicians use to determine TPT eligibility and a monthly tracking tool to document the TPT cascade among clinic attendees
 - **Decentralizing TB screening points** for TPT eligibility, dispensation, screening, and sputum collection and implemented flexible hours for increased TPT uptake
 - Using a “**kitting**” **method** to ensure enough commodities for enrolled TPT clients (which has led to over 90% completion rate) and harmonized TPT and ART pickup
 - Improving monitoring with coded SMS reminders & **virtual adherence support**
 - Monthly **case manager/peer educator visit** to clients in community/home
- Monthly TPT uptake declined during COVID lockdown, but numbers increased after
 - April/May 2020 uptake grew 15-20% in 3 and 5-month MMD

Source: Dennis Onotu (CDC Nigeria) presentation to OGAC TPT Cooperative, 18 August 2020

Country Feedback: Integrating TPT into DSD amidst COVID-19

Poll question 1 - *Has the push for MMD for ART helped scale-up integration of TPT into DSD?*



Poll question 2 - *What are the current barriers for integrating TPT into DSD models?*



Other: Supply chain stability

Poll question 3 - *What are the three most important ingredient for integrating TPT into DSD models?*



Best Practices

- “Surges” or acceleration campaigns have closed early gaps (as long as commodity is secured)
 - Kitting full courses of treatment helps preserve supply chain/enhance clinician confidence
- Development of dashboards to monitor performance of different models have been critical, especially in monitoring adherence/AE and documenting completion
- Use of TPT Focal Points/mentors for supportive supervision has increased TPT uptake and integration into DSD
- Incorporating mobile or digital technologies to facilitate AE and adherence monitoring

Common challenges

- PEPFAR MER indicators cannot track/compare different models or TPT by service delivery model
- Lack of data systems to track completion
 - Partial or no use of standard TPT registers
- Policy issues: Do not allow adoption of TPT DSD
 - HCW resistance and policy barriers to same day ART/TPT initiation
- Supply chain constraints
 - Supply chain can't support aggressive surge
 - Supply chain disruption due to COVID

Summary

- Local and international lock downs have impacted service delivery and supply chains
- PEPFAR programs and countries are adapting policies & implementation rapidly to ensure ongoing care & treatment for TB/HIV while ensuring patient and health care worker safety
 - Innovations around medication/service delivery in community have been well-received
 - Use of mobile technology for SMS reminders, adherence support, and AE monitoring has been critical to appropriate implementation
 - Supply chain management issues and lack of coordination between programs continue to hamper rapid scale-up
- Current PEPFAR indicators are insufficient to comprehensively track performance of DSD programs for TPT and require additional monitoring and evaluation measures

Looking Forward: Scaling Up & Evaluating DSD for TB & TB

CDC is launching a targeted, intensified effort in five countries (Ethiopia, Haiti, Kenya, Nigeria, Uganda) over 18-month period to scale-up and evaluate innovations in TB/HIV service delivery to mitigate impact of COVID-19

Includes focus on:

- Bi-directional TB and COVID testing among symptomatic clients
- Utilization of Xpert networks for decentralized Covid-19 testing (optional, dependent upon commodity)
- **Systematic implementation and evaluation of TPT and TB care in DSD models including facility and community multi-month dispensing, community-based and/or digital adherence support and AE monitoring**

Prep and protocol development underway with implementation in early 2021

Acknowledgements

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Additional Resources

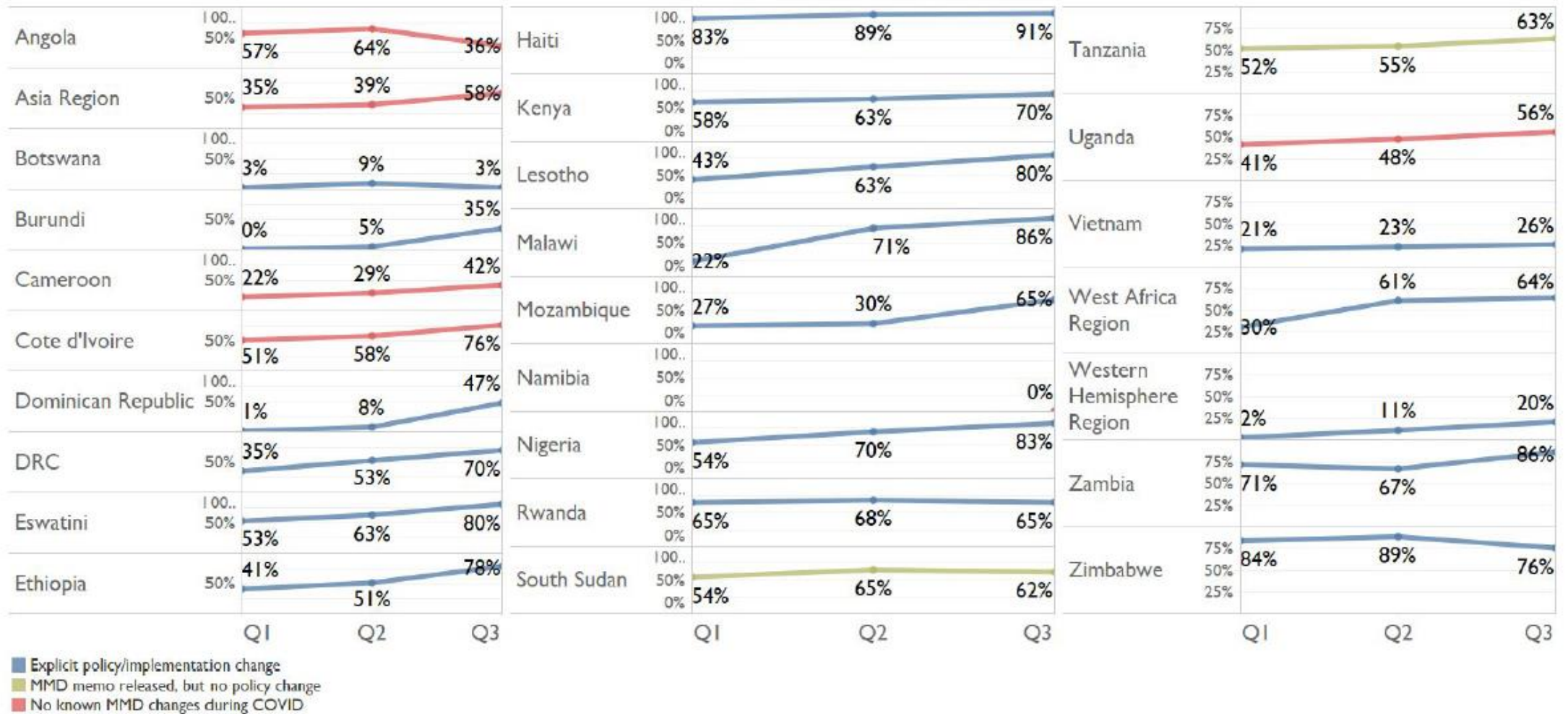
- PEPFAR Technical Guidance in Context of COVID-19 Pandemic: <https://www.state.gov/wp-content/uploads/2020/09/9.9.2020-PEPFAR-Technical-Guidance-During-COVID.pdf>
- PEPFAR Solutions TPT Implementation Tools: <https://www.pepfarsolutions.org/tools-2/2018/9/25/tpt-implementation-tools>
- IAS supplement on Leveraging Differentiated ART Delivery Models for Stable Clients to Scale-Up TPT (2019):
<http://www.differentiatedservicedelivery.org/Portals/0/adam/Content/3qTmUzah5kWCdeEogdiJ5A/File/IAS TPT supplement 8-Pager DIGITAL.pdf>
- CQUIN Integrating Intensive TB Case Finding and TPT Services into Differentiated ART Models: Framework for Implementation: https://cquin.icap.columbia.edu/wp-content/uploads/2020/01/CQUIN-TPT-Toolkit_Jan-2020_Final_Cover.pdf
- CDC Healthcare Provider and Facility Operational Considerations for Non-US Settings: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/non-us-settings/index.html>
- WHO Technical Guidance—Coronavirus disease (COVID-19): <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance>
- STOP TB Partnership: How TB Programmes can change to a virtual mode due to COVID-19 situation:
http://www.stoptb.org/assets/documents/covid/Digital%20Technology%20Solutions%20for%20TB%20Programs%20during%20the%20time%20of%20COVID-19_v11.pdf



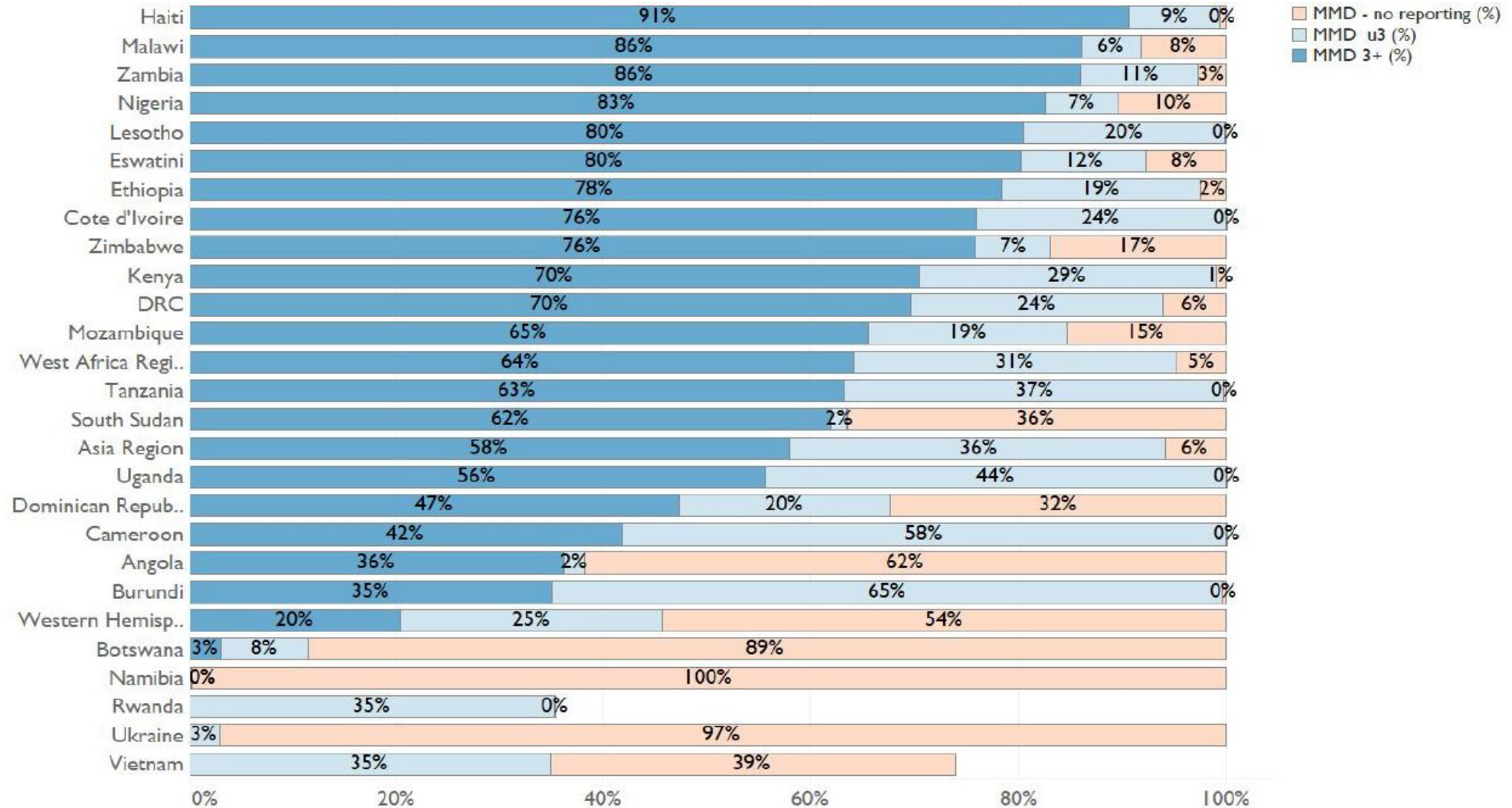
Thank You!

Quarterly Growth in 3+ MMD by OU

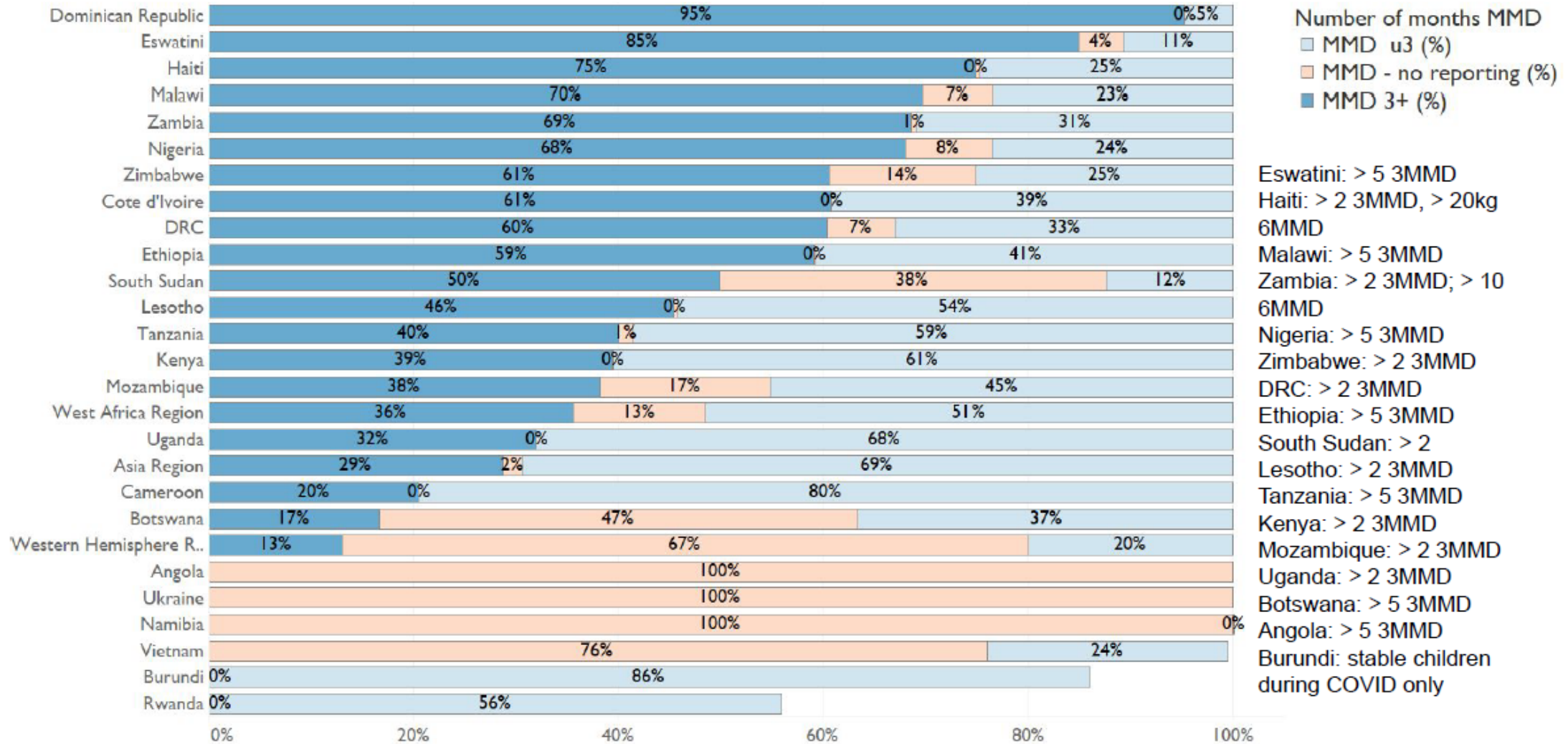
Trends in TX_CURR MMD (3+ months)



Adults on Treatment by Months of ARVs Dispensed, Q3 2020

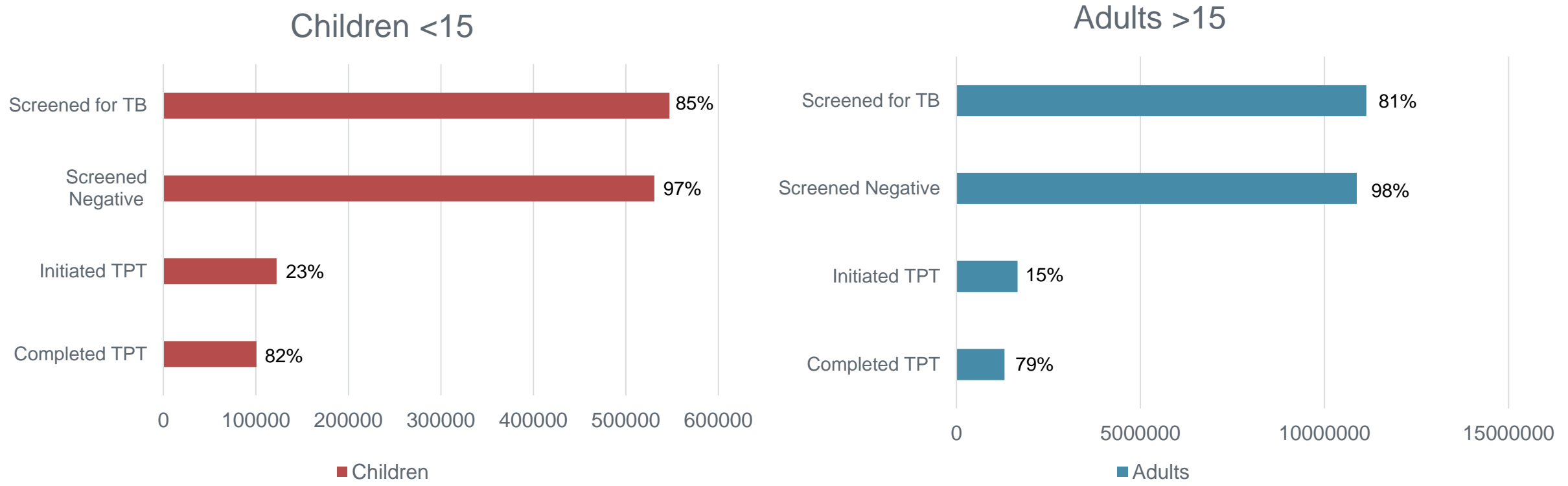


Children on Treatment by Months of ARVs Dispensed, Q3 2020



Eswatini: > 5 3MMD
 Haiti: > 2 3MMD, > 20kg 6MMD
 Malawi: > 5 3MMD
 Zambia: > 2 3MMD; > 10 6MMD
 Nigeria: > 5 3MMD
 Zimbabwe: > 2 3MMD
 DRC: > 2 3MMD
 Ethiopia: > 5 3MMD
 South Sudan: > 2
 Lesotho: > 2 3MMD
 Tanzania: > 5 3MMD
 Kenya: > 2 3MMD
 Mozambique: > 2 3MMD
 Uganda: > 2 3MMD
 Botswana: > 5 3MMD
 Angola: > 5 3MMD
 Burundi: stable children during COVID only

TPT cascade among children and adults in PEPFAR-supported programs, Q2 2020



Source: PEPFAR Panorama TPT and TB Screening Global Dashboard Q2 2020; Accessed 13 Sep 2020.

More detailed analyses: [Patel M, Itoh M, et al. Assessment of the tuberculosis clinical cascade among children living with HIV on antiretroviral therapy, sub-Saharan Africa PEPFAR-supported programs, April 1, 2019 to September 30, 2019. In proceedings from the International AIDS Society Meeting; July 2020; Abstract OAB0504.](#) & [Vinayak P, Al-Sammarai T, et al. Adult and Pediatric Tuberculosis Preventive Therapy in select PEPFAR-supported countries. In proceedings from the International AIDS Society Meeting; July 2020; Poster PEE1617.](#)



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