Prospective **Country Evaluation** Uganda

2019-2020 ANNUAL COUNTRY REPORT

Commissioned by the Technical Evaluation Reference Group (TERG) of the **Global Fund**







DISCLAIMER

Views expressed in this report are those of the author. The author has been commissioned by the Technical Evaluation Reference Group (TERG) of the Global Fund to Fight AIDS, Tuberculosis and Malaria (the Global Fund) to conduct an assessment to provide input into TERG's recommendations or observations, where relevant and applicable, to the Global Fund. This assessment does not necessarily reflect the views of the Global Fund or the TERG.

This report shall not be duplicated, used, or disclosed – in whole or in part without proper attribution.

AUTHORSHIP

IDRC

Professor Moses Kamya Professor Peter Waiswa Shakilah N. Nagasha Carol Kamya Justine Abenaitwe Patience Kabatangare David Livingstone Ejalu Faith Namugaya Jaffer Okiring Charles Opio

IHME

Dr. Herbert Duber Caitlin O'Brien-Carelli Dr. David E. Phillips Dr. Jennifer M. Ross Audrey Batzel Emily Linebarger Erin B. Palmisano Bethany Huntley

PATH

Dr. Katharine D. Shelley Emily Carnahan

Table of Contents

List of Acronyms and Abbreviations	V
Executive Summary	vi
Chapter 1. Introduction	1
1.1 Prospective Country Evaluation Overview	1
1.2 Methods	1
1.2.2 Design	1
1.2.2 Data analysis tools, methods and analytical approaches.	3
Chapter 2: Global Fund Grant Implementation	3
2.1 HIV Grants	5
2.1.1 Grant Overview	5
2.2 TB Grants	8
2.2.1 Grant overview	8
2.2.2 Grant implementation status	8
2.2.3 Translating TB activities into outputs and outcomes	8
2.2.4 Drivers of Case Notification	9
2.2.5 Drivers of Treatment Success Rate	13
2.3 Malaria Grant	16
2.3.1 Grant overview	16
2.3.2 Grant implementation status	16
2.3.3 Translating malaria activities into outputs and outcomes	17
2.3.4 The Upsurge of Malaria Cases	18
2.4 Implications of delayed SR Selection on Grant implementation	20
Chapter 3. Global Fund Business Model in Practice	21
3.1 Resilient and Sustainable Systems for Health (RSSH)	21
3.1.1 Community Responses and Systems	23
3.2 District engagement and coordination of Global Fund grants	24
3.2.1 Budget alignment	24
3.3 Crosscutting facilitators and barriers to grant implementation	26
3.3.1 Management, Oversight and Coordination	27
3.3.2 Implementation of Grant Revisions	28
3.4 Limitations	31
Chapter 4: Summary analysis and implications of findings for course correction	32
Chapter 5: Dissemination and use of findings	34
References	36
Annexes	I
Annex 1. Districts selected for subnational data collection for TB Deep Dive.	I
Annex 2. Root cause analysis explaining the sub-optimal TB treatment success rate in Uganda	II
Annex 3. Cumulative absorption of RSSH interventions (January 2018 - June 2019), by module	III
Annex 4: Detailed Global Fund grant budgets used in the report	III
Annex 5: Performance of Achievement indicators for MoFPED, January 2018-June 2019	IV
Annex 6: Indicator Achievement ratio (UGA-C-TASO July 2018-June 2019)	IV

List of Acronyms and Abbreviations

ACT Artemisinin combined therapy
AGYW Adolescent girls and young women

ARV Antiretroviral drugs
ART Antiretroviral therapy
ATF AIDS Trust Fund

CAO Chief Administrative Officer
CCM Country Coordinating Mechanism

CSO Civil Society Organization CSW Commercial sex worker

CT Country Team

DEO District Education Officer

DHIS2 District Health Information System 2

DHO District Health Officer

DOTS Directly observed treatment, short course

DS-TB Drug-susceptible TB

DTLS District TB and Leprosy Supervisor
GOS Global Fund Grant Operating System
HC I, II, III, IV Health Center Level I, II, III, IV

HMIS Health Management Information System iCCM Integrated Community Case Management IDRC Infectious Diseases Research Collaboration IFMS Integrated Financial Management System IHME Institute for Health Metrics and Evaluation

IMM Integrated Management of Malaria

KII Key Informant Interview LFA Local Fund Agent

LLIN Long-Lasting Insecticide-Treated Net

M&E Monitoring and evaluation MDR-TB Multidrug-Resistant TB

MoE Ministry of Education and Sports

MoFPED Ministry of Finance, Planning and Economic Development

MoH Ministry of Health

MSM Men who have sex with men NMCP National Malaria Control Program

NSP National Strategic Plan

NTLP National TB and Leprosy Program NTRL National TB Reference Laboratory

OIG Office of Inspector General

OPN Revisions Operational Policy Note
PAAR Priority Above Allocation Request
PCE Prospective Country Evaluation

PEPFAR President's Emergency Plan for AIDS Relief (U.S.)

PLHIV People living with HIV

PMTCT Prevention of mother-to-child transmission

PR Principal Recipient

PSM Procurement and Supply Chain Mechanism PU/DR Progress Update/Disbursement Request

RDT Rapid Diagnostic Test

RHITES Regional Health Integrated Services

RSSH Resilient and sustainable systems for health

RR-TB Rifampicin-resistant TB

SR Sub-recipient

TASO The AIDS Support Organization
TERG Technical Evaluation Reference Group

TRP Technical Review Panel UAC Uganda AIDS Commission

UGX Uganda Shilling

UNOPS United Nations Office for Project Services

VHT Village Health Team

Executive Summary

The Prospective Country Evaluation (PCE) is an independent evaluation of the Global Fund commissioned by the Global Fund's Technical Evaluation Reference Group (TERG). Using a mixed-methods approach, the PCE evaluates how Global Fund policies and processes play out in the country in real time and aims to provide high quality, actionable and timely information to national program implementers and Global Fund policymakers. Uganda is among the Global Fund's largest portfolios, with over US\$500 million invested during 2018-2020 to support the national HIV, TB and malaria programs in achieving program targets and impact. Funds are being delivered through five grants implemented by a government principal recipient (PR), the Ministry of Finance, Planning and Economic Development (MoFPED) in partnership with the Ministry of Health (MoH), and a civil society PR, The AIDS Support Organization (TASO).

To prospectively evaluate the implementation of Global Fund grants in Uganda, the PCE draws upon process evaluation methods including key informant interviews, fact checking interviews, process mapping, document review, meeting observation and root cause analysis. These data were triangulated with grant analysis of financial allocation and expenditure, and quantitative output and outcome measurements from sources including detailed budgets and other financial data, the Uganda Health Management Information System (HMIS), and publicly available data from online data dashboards. This report builds on the earlier work of the PCE through continued focus on tracking grant implementation progress for all three disease programs and examining how country contextual factors and the Global Fund business model help or hinder implementation. Our report is organized into disease-specific chapters including a grant overview and implementation update and translating grant activities to outputs and outcomes. Additionally, we present a synthesis of evidence across grants for several cross-cutting topics. In 2019, the PCE collected subnational data to support two areas of in-depth exploration: (1) Drivers of the observed trends in TB case notification and TB treatment success rates; and (2) District involvement in the planning and implementation of Global Fund grants.

Grant Implementation: Translating activities into outputs and outcomes

Overall, implementation of activities in 2019 has progressed well. Through the first 18 months of the 2018-2020 grant implementation, cumulative absorption across the five grants was 45.7%. Absorption in this case refers to monies advanced, spent and accounted for but does not include commitments. Therefore, the absorption figures used throughout this report may not give a true picture on progress of activity implementation. Despite low absorption, overall indicator achievement has been relatively strong for most coverage indicators across the five grants.

HIV/AIDS

In 2019, the performance of both HIV grants improved and as a result most of the indicators exceeded their targets and those still below the targets have improved compared to the previous reporting periods. This improved performance is attributed to increased availability of the HIV commodities, implementation of the accelerated work plans, PR continuous engagement and strengthened oversight of SR activities. However, there were some delayed activities that registered low or no absorption and these include activities related to adolescent girls and young women (AGYW), community response related activities, and human rights related barriers to access HIV services as well as some prevention programs for the general population. The delays are partially attributed to the lengthy in-country procurement processes, delays in harmonizing the policy position of new leadership within some SRs whose work plans differed from the grant prioritized activities and delay in onboarding of some SRs. Additionally, onboarding of SRs at different times hindered timely SR orientation on key Global Fund processes (financial, procurement and reporting processes, as well as risk mitigation). These challenges were resolved and most of the activities were reported as implemented in Q4 2019.

Overall, with the increased investments in HIV from the Government of Uganda, Global Fund, PEPFAR and other partners, Uganda has made substantial progress towards the 90-90-90 goals. Estimates from the Uganda DHIS2 in September 2019 show that 89% of people living with HIV (PLHIV) were aware of their HIV status, 88% of PLHIV who knew their status were on treatment

and 70% of people on treatment were virally suppressed. However, Uganda still relies heavily on donor funding for Antiretroviral drugs (ARVs) and there are increasing concerns about the persistent funding gaps for ARVs. There is a need to increase government funding towards ARVs and to speed up the operationalization of local initiatives like the AIDS Trust Fund (ATF) to mobilize resources to fill the gap.

Tuberculosis

In the first half of the 3-year cycle (Jan 2018-June 2019), MoFPED's TB grant had the highest absorption (73.3%) relative to other grants and the average expenditure across TB modules within TASO's HIV/TB grant was over 100% by 30th June 2019, with Multidrug-Resistant TB (MDR-TB) related activities reporting the highest expenditure. Despite TB being the least funded disease program, as the largest donor in Uganda, the Global Fund's contribution toward achieving national TB program targets is substantial. This includes US\$8.7 million investment in GeneXpert machines, which have contributed to the increase in case detection and case notification. The number of TB case notifications increased by 35.5% from 13,757 (Q1 2018) to 18,636 (Q3 2019). This was largely facilitated by improvements in TB case reporting, improved availability of TB diagnostics, intensified case finding and innovations at district, health facility and communitylevels. However, there has been slow progress in treatment success rate for drug-susceptible TB (DS-TB) from 66% in 2015 to 74% in 2019, which remains below the national target of 85%. This is partially attributed to the gaps in the community linkage system thus leading to high loss to follow up. The MDR-TB treatment success has declined from 85% in 2015 to 64% in 2019 and this is due to challenges related to adverse drug reactions, late diagnosis and catastrophic expenditures. There is a need to increase investments in strengthening community linkage systems to improve patient follow up, adherence to medication, community-health facility referrals to improve early detection and diagnosis.

Malaria

Output indicators such as the proportion of suspected malaria cases tested, and the proportion of confirmed malaria cases treated, have continued to improve in 2019. There was a decrease in the proportion of people who tested negative for malaria that were treated using Artemisinin combined therapy (ACT). Increased availability of rapid diagnostic tests coupled with adherence to the Test and Treat policy at health centers facilitated the observed improvement in performance. In the third quarter of 2019, Uganda experienced more than twice the number of malaria cases compared to the same period in 2018 (an extra 1,801,248 cases). This affected approximately 65 districts with more cases reported in the Northern region. This resulted in a corresponding increase in the proportion of positive cases from 25.7% in Q4 2018 to 47.4 % in Q3 2019. The flexibility of the Global Fund business model was applauded for responding to the malaria epidemiological changes in 2018 and 2019.

Global Fund Business Model in Practice

Resilient and Sustainable Systems for Health (RSSH)

There has been improvement in the implementation of "direct" RSSH activities in 2019 compared to 2018. However, implementation across all modules is still suboptimal, with most modules absorbing less than half of what was budgeted in the first 18 months of the 2018-2020 grant, bringing cumulative expenditure of all RSSH modules to approximately 22% from Jan 2018- June 2019, with substantial improvement over time: S1 2018 (1.2%), S1-S2 (8.4%, TASO only), S2 2018 (14.7%, MoFPED only) and S1 2019 (64%). Implementation of "direct" RSSH activities under the 2018-2020 grant has been affected by insufficient discussion of operational details during the funding request and grant making phase, especially for research-related activities. This was exacerbated by the complexity of designing RSSH activities that require involvement, buy-in and sign-off from multiple stakeholders and the type of activities that necessitate thorough discussion to inform the design, since they are less straightforward compared to procurement.

District involvement and coordination in Global Fund grants

Increased alignment of Global Fund processes with country processes would promote country ownership and sustainability. While similarly consultative and participatory in nature, district involvement in the budgeting processes for the Government of Uganda and the Global Fund is perceived to be minimal. Districts participate at the prioritization and dissemination levels and are consulted during resource mobilization but not directly involved in resource allocation leading to an information gap that subsequently impacts activity implementation. Whereas existing structures at the district are used to implement activities, with PRs and sub recipients (SRs) coordinating and facilitating implementation, these Global Fund in-country implementing arrangements (PRs and SRs) are not represented during district budget planning conferences or subsequent meetings, which is a critical missed opportunity for informing districts of Global Fund plans and commitments. Furthermore, delays in sending implementation and expenditure guidelines from national to subnational level was highlighted as a key barrier to implementation of Global Fund grants at the sub-national level, although this was not a significant barrier in 2019 compared to 2018. Potential opportunities for stronger alignment between the Government of Uganda and Global Fund budgeting process could begin by districts getting indicative planning figures for Global Fund activities since these are three-year cycles and these can be incorporated in the annual district work plans for timely implementation.

Crosscutting Facilitators and Barriers to Grant Implementation

Global Fund business model and country contextual helping and hindering factors are presented, with a deeper review of the flexibilities of the Global business model in aspects of grant revisions, disbursements accelerated implementation by PRs and SRs; oversight and coordination at different levels as facilitating factors. Lengthy and bureaucratic in-country processes characterized by protracted buy-in and approval levels were highlighted as key barriers to grant implementation.

Recommendations

Continue doing:

- Continue to utilize Global Fund business model flexibilities to rapidly respond to epidemiological shifts where necessary.
- Continue to support grant implementation through adaptive management practices (e.g., Accelerated Implementation Plans and high-level MoH oversight).
- Continue to leverage on existing GeneXpert machines and optimize their use in order to sustain the gains in TB case notification.

Take action:

- Close the funding gap in GeneXpert machines and cartridges as well as speed up the operationalization of local initiatives like the AIDS Trust Fund (ATF) to mobilize resources to fill the ARV funding gap, to ensure sustained gains in TB case notification and retention in care for PLHIV respectively.
- Leverage the documented lessons learned to determine best practices that can improve TB treatment adherence and retention in care for TB patients.
- Strengthen the TB/HIV integration of community and facility-based prevention and treatment services along the outreach, prevention, diagnosis, treatment and retention cascade, not only for maximizing impact but also sustainability of programs.
- To track progress of RSSH activities, the Government of Uganda through MoH should define specific performance indicators across RSSH modules and how to operationalize them to measure RSSH activities.
- The Government of Uganda, partners and implementers of Global Fund grants (PRs and SRs) should leverage RSSH investments to integrate disease and system elements, especially strengthening integrated community approaches for sustainability of interventions.

- The Global Fund, PRs, and SRs should leverage the regional budget conferences to increase district participation in the planning and development of activities to improve implementation and accountability.
- In-country stakeholders implementing Global Fund grants should consider developing a centralized repository, for tracking grant revisions (especially budget revisions) to enable stakeholders to track changes made across the grant cycle.

Study further:

• Consider studying district and health facility-level innovations further to establish evidence to inform scale up to other districts.

Chapter 1. Introduction

1.1 Prospective Country Evaluation Overview

The Prospective Country Evaluation (PCE) is an independent evaluation of the Global Fund commissioned by the Global Fund's Technical Evaluation Reference Group (TERG) in eight countries: Cambodia, the Democratic Republic of the Congo, Guatemala, Mozambique, Myanmar, Senegal, Sudan and Uganda. The PCE aims to evaluate the Global Fund business model, investments and impact to generate timely evidence to inform global, regional and national stakeholders and to accelerate progress towards meeting the Global Fund Strategic Objectives.

The PCE was launched in Uganda in May 2017 with a five-month inception phase. During this phase, the Infectious Diseases Research Collaboration (IDRC) and global partners (Institute for Health Metrics and Evaluation (IHME) and PATH) worked together to build an effective mixed-methods platform for ongoing prospective data collection. In June 2018, our first report presented findings related to Uganda's funding request and grant making processes for the 2017-2019 allocation cycle. In April 2019, our second report presented findings related to early grant implementation of the 2018-2020 HIV, TB and malaria Global Fund grants. In 2019, based on guidance from the TERG, there was a shift in PCE methods to focus on select topic areas with a greater depth of data collection through "deep dives." A "deep dive" refers to a more specific, more focused and comprehensive method of addressing a topic of interest within a short time.

The PCE engaged stakeholders to identify priority topic areas based on several criteria:

- The topic is a critical component of the results chain being affected by Global Fund investments:
- The information will contribute substantially to understanding the Global Fund business model and to improve programming related to the Global Fund strategy;
- The issue is important for country stakeholders and the Global Fund Country Team (CT);
- Data on the issue are available and evaluable.

This process resulted in two "deep dive" topic areas with the following evaluation questions:

Tuberculosis:

- What are the trends in TB case notifications and TB treatment success rates at the national and subnational levels?
- What are the facilitators and barriers to increases in the number of TB case notifications and successful TB treatment outcomes at the national and district levels?

Alignment of Government and Global Fund budgeting processes including district engagement:

- To what extent are the Global Fund budgeting processes aligned to the Government of Uganda and district budgeting processes and how do these processes affect implementation?
- To what extent are districts involved in the oversight of donor activities, including the Global Fund?
- What are the facilitators and barriers to implementation of Global Fund investments at district level?
- How are districts involved in the development of national strategic plans?

The PCE continued to prospectively track grant implementation for the disease programs and examine how country contextual factors and the Global Fund business model help or hinder implementation.

1.2 Methods

1.2.2 Design

In June 2019, the PCE conducted six district case studies to collect data on the drivers of the observed trends in TB case notification, TB treatment success rates and on district involvement in the planning and implementation of Global Fund grants. The findings from the case studies

were used to inform disease programs of opportunities to leverage on in improving treatment outcomes and achieving targets and in improving ownership and transparency of Global Fund processes at district level. The case studies enabled the team to investigate in far more detail about the two focus areas above and thus the term "deep dives."

Districts were purposively selected using preliminary DHIS2 data analysis of treatment outcomes and they represented low, medium and high performing districts in treatment success rate. Districts within the same regions and with similar characteristics but with differing performance were selected to understand the disparities in performance and to highlight good practices for possible scale up (Annex 1). Information about district engagement and coordination of Global Fund grants was also collected.

In addition, the PCE team leveraged on the CCM oversight visits to three districts in West Nile Region in September 2019 to conduct Key Informant interviews on the malaria upsurge, flexibility of the Global Fund business model and on district engagement and coordination of Global Fund grants.

Data collection and overview of data sources

Primary data were collected using qualitative methods/techniques; meeting observations, key informant interviews (KIIs) and fact checking interviews (Table 1). A total of 36 meetings were attended by the PCE from January-November 2019. These were convened by the Country Coordinating Mechanism (CCM), the Global Fund CT, Ministry of Health (MoH), The AIDS Support Organization (TASO) and other partners. Information from Key informant and fact checking interviews (75 total) was used to triangulate, interpreted and validate results from preliminary analysis of DHIS2 data. In addition, the PCE reviewed 49 documents.

Table 1: Process evaluation data sources

Туре	No.	Description: January - November 2019			
Document review	49	Global Fund grant narratives, budgets, implementation plans and performance frameworks; PR quarterly progress reports to CCM; Monthly progress updates to MoH senior leadership; Communication letters from Global Fund to PRs; CCM meeting minutes; Progress update/disbursement requests (PU/DR); Global Fund guidance documents and reports; Global Fund Observatory articles; disease strategic plans; government guidance documents on budgeting, other Global Fund documentation			
Interviews (Total = 75)	15 20 39	National-level KIIs: MoH and TASO program managers and monitoring and evaluation (M&E) officers; Uganda AIDS Commission (UAC); CCM representatives National-level fact checking interviews: MoH and TASO program managers and M&E officers; CCM Secretariat; Ministry of Finance, Ministry of Education; UAC Subnational-level KIIs: District/Administrative: District Health Officers (DHO); Assistant DHOs; Biostatisticians; Chief Administrative Officers (CAO); Deputy CAOs; Principal Assistant Secretary, CAO's office; District Accountants; District planners; Health Manager Refugee Settlement Laboratory: Regional Lab focal persons; Regional TB and Leprosy Supervisors; District TB Lab Specialists; District Lab Focal Persons; Lab In-charge/Hub-supervisor; Lab technicians. Health facility: Health Facility In-Charge; TB focal persons. Global-level KIIs: Global Fund Secretariat			
Meeting observations (Total = 36)	, , , , , , , , , , , , , , , , , , , ,				

	Development (MoFPED); CCM evolution (linkage assessment); Multi-stakeholder		
	dialogue to validate human rights findings		
1	Other: Uganda Roll Back Malaria Partnership quarterly meeting		

The PCE also analyzed routine quantitative data from Uganda's national health management information system (HMIS), GeneXpert data maintained by the National TB Reference Laboratory (NTRL) and weekly malaria reports from the National Malaria Control Program (NMCP).

Table 2: Quantitative data sources

Quantitative	Date range	Description
DHIS2	July 2015- present	HIV, TB and malaria indicators from national programs
GeneXpert database	January 2016- March 2019	Uganda NTRL GeneXpert database, including facility level results of Xpert MTB/RIF testing
Malaria reports	2018 - 2019	Malaria weekly status reports from the NMCP(1)
Resource tracking	2011-2020	Global Fund detailed budgets, Global Fund Grant Operating System (GOS) and PU/DRs (2018-2019)

1.2.2 Data analysis tools, methods and analytical approaches.

Data analysis involved thematic analysis of documents and interview notes, preliminary analysis of DHIS2 data and triangulation of data sources. Triangulation across data sources and assessment of data quality inform the strength of evidence rating along a 4-point scale that allows comparison and identification of findings that need additional triangulation and validation. The findings were shared with disease programs for validation prior to compiling this report.

Table 3: Overview of the strength of evidence ranking criteria

Rank	Rationale
1	The finding is supported by multiple data sources (good triangulation) which are generally of strong quality.
2	The finding is supported by multiple data sources (good triangulation) of lesser quality, or the finding is supported by fewer data sources of higher quality.
3	The finding is supported by few data sources (limited triangulation) of lesser quality.
4	The finding is supported by very limited evidence (single source) or by incomplete or unreliable evidence. Findings with this ranking may be preliminary or emerging with ongoing data collection.

Chapter 2: Global Fund Grant Implementation

The Global Fund is investing over US\$500 million to support Uganda's national HIV, TB and malaria programs to achieve targets through five grants. These are implemented by a government PR, the Ministry of Finance, Planning and Economic Development (MoFPED) in partnership with the MoH and a civil society PR, TASO. A financial breakdown of investments by disease component, PR and budget source are shown in Table 4, which does not include emergency funding to support HIV and TB commodities for refugees that is being finalized in Quarter 4 (Q4) 2019. All investments are listed in United States Dollars (USD) unless otherwise stated.

Table 4: Global Fund investments, 2018-2020 grant cycle by PR and grant

Budget		MoFPED		TASO		TOTAL
source	HIV	TB	Malaria	HIV/TB	Malaria*	TOTAL
Approved Budget	\$245,570,664	\$18,445,026	\$175,310,366	\$14,347,607	\$14,969,534	\$468,643,197
Matching Funds	\$2,641,461			\$6,758,539		\$9,400,000
Portfolio Optimization	\$23,353,149	\$5,500,000				\$28,853,149
Total	\$271,565,274	\$23,945,026	\$175,310,366	\$21,106,146	\$14,969,534	\$506,896,346

^{*}includes majority of RSSH investments

Absorption of funds refers to funds spent and accounted for. However, programs have expenditures in the pipeline that are not accounted for yet and this may reflect low absorption. Cumulative absorption from Semester 1 (S1) 2018 through S1 2019 across all grants was 45.7% (US\$169,390,330/US\$370,304,953), with low absorption in the MoFPED malaria grant (27.0%), TASO HIV/TB grant (34.1%) and TASO malaria grant (39.3%)¹. The MoFPED HIV grant had moderate absorption (59.9%), and higher absorption for the MoFPED TB grant (80.3%) (Figure 1). By June2019, only the MoFPED TB grant had reached the Global Fund's 75% absorptive capacity target for 2022(2). Facilitators of absorption are discussed in further detail in each disease sub-section. Overall, by S3, the average achievement of targets set in the Performance Framework was 87% across the five grants (n=36 total indicators).

Figure 1: Cumulative expenditure and absorption by Global Fund grant (January 2018-June 2019)



¹ All absorption estimates come from Global Fund Progress Update and Disbursement Requests (PU/DRs) verified by the Local Fund Agents (LFA) and use the cumulative budget and expenditure by module and intervention for the specified time period.

2.1 HIV Grants

2.1.1 Grant Overview

The total allocation for 2018-2020 for MoFPED HIV and TASO HIV/TB is US\$292.7 million. This includes US\$9.4 million in catalytic funds approved in April 2018 and US\$23.4 million approved in February 2019 through portfolio optimization.

PR1 HIV grant. MoFPED

The biggest percentage of the MoFPED HIV grant supports treatment, care and support (76.7%) of which procurement and distribution of ARVs takes the biggest proportion. Other major investment areas include HIV testing (US\$35.6 million; 13.1%) and prevention programs for the general population (US\$23.2 million; 8.6%). The remaining investment modules each representing less than 2% of the total grant allocation includes US\$2.6 million for prevention programs for adolescents and youths; and US\$908,252 for reducing human rights-related barriers. Program management represents only 0.3% of the total grant (US\$708,162).

PR2 HIV grant: The AIDS Support Organization (TASO)

TASO is implementing a combined HIV/TB grant totaling to US\$21.1 million. This includes US\$ 6.8 million in approved matching funds to scale up prevention programs for adolescent girls and young women (AGYW) and programs to reduce human rights-related barriers. The additional matching funding represented a 47% increase over TASO's original approved budget. Over a third of the budget is devoted to programs to reduce human rights-related barriers (US\$7.7 million; 36.5%) and prevention programs for adolescents and youth (US\$7.4 million; 35.1%). The remaining 28.4% of the budget is comprised of interventions within seven modules: Multidrug resistant TB (US\$2.8 million;13.1%); program management (US\$1.9 million; 9.2%), TB/HIV (US\$33,011; 0.15%); Community responses and systems (US\$605,685; 2.9%); HIV treatment, care, and support (US\$299,840; 1.4%); PMTCT (US\$222,854; 1.1%); TB care and prevention (US\$132,445; 0.6%); and TB/HIV (US\$33,011; 0.2%).

Grant implementation status

In 2018, implementation of the HIV grants was delayed primarily as a result of late onboarding of SRs. However, by June 2019, all SRs for both PRs were onboard and acting on accelerated implementation plans. The cumulative absorption (semester 1-3) for the MoFPED was 60% and 49.2% for Jan-Jun 2019. The TASO grant cumulative absorption S1-3 was 34.1% and 46.6% for the Jan- Jun 2019 period. The observed absorption has been attributed to a number of reasons. These include pending accountabilities and reconciliation of invoices for implemented and ongoing activities and payment of implementation monies being made in installments to mitigate risk. An example of the latter is the vocational training for AGYW where payments for enrolled girls were staggered throughout the period of study.

Low or no absorption due to delayed implementation was also registered for the AGYW activities especially under Ministry of Education and Sports (MoE). Delays were also observed under community response systems and programs to reduce human rights related barriers to HIV services under TASO and prevention programs for the general population. The reasons for delayed implementation include:

Delays in onboarding of some SRs; UGANET for example, an SR responsible for implementing activities under community response systems and programs to reduce human rights- related barriers to HIV services came on board in June 2019. There were no successful applicants for the cluster under which these activities were grouped and the PR had to re advertise (advertised twice) which caused the delays. However, the SR is now working in an accelerated mode with two SSRs (The International Community of Women Living with HIV Eastern Africa (ICWEA) and Human Rights Awareness and Promotion Forum (HRAPF)) and there was improvement in implementation and absorption in the last quarter of 2019. There were also delays in the onboarding of PACE due to protracted negotiations over administrative costs, which were higher (21%) compared to their original budget (10%). This was later resolved and PACE started implementation in April 2019.

Harmonizing the policy position of new leadership with some SRs under PR1 whose work plans differed from the grant prioritized activities also caused delays. For example, the MoE had already set theme areas and it was too late to change to HIV/TB for the MDD and drama.

Additionally, procurement challenges created delays especially for activities under the prevention of HIV for the general population. There were delays in securing service providers for condom vending machines and printing of IEC/BCC materials. Lubricants and condoms could also not be procured due to program revisions and lack of storage facilities respectively. However, progress has been made with storage secured and orders for condoms placed. Furthermore, the issue of delayed procurements has been addressed through the recruitment of a grants specific procurement officer.

Translating HIV activities into outputs and outcomes

There was a significant improvement in performance of the coverage indicators with more than 50% (Annex 5&6) of the indicators in the HIV MoFPED and HIV/TB TASO grants meeting or exceeding targets. One indicator that has consistently performed well is the "percentage of people living with HIV currently receiving ART," which reached 92.1% compared to the performance target of 77.4% (as of June 2019) (Source: LFA verified PUDRs Jan-Jun 2019).

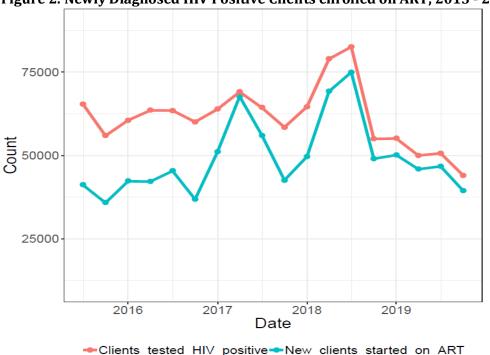


Figure 2: Newly Diagnosed HIV Positive Clients enrolled on ART, 2015 - 2019

In addition, the gap between clients tested HIV positive and new clients started on ART is narrowing (Figure 2), an indication that the test and treat policy is becoming effective. In Q1 2015, only 65% of patients newly diagnosed with HIV were initiated on care and treatment. This proportion increased to 73% in Q1 of 2018 and surpassed the UNAIDS target of 90% in 2019 (91% in Q1, 92% in Q2&Q3 and 90% by Q4 of 2019) (Source: HMIS). This performance is attributed to several factors: continued implementation of the test and treat policy, implementation of the HIV differentiated service delivery models, social mobilization and increased awareness to reduce stigma and improve uptake of HIV services, improved community and health facility linkages that allows follow up of patients, and the availability of ARVs.

The TB preventive therapy for people living with HIV indicators under MoFPED was 11.4% (July - December 2018) which was below the target of 89.1%. The main reason for the low performance was poor quantification of INH adult doses. The earlier stock estimates had only considered the new PLHIV and yet the TB preventive therapy was also prescribed to the old PLHIV leading to stock out of medications. This has since been resolved and the indicator

performance increased to 37.4% (January - June 2019) and by December 2019 it was approximately 51% (not LFA verified).

In the combined TASO HIV/TB grant, performance indicator targets were achieved with the exception of those relating to specific sub-populations where target achievement ratios were less than 0.6: the number of men who have sex with men (MSM) reached with HIV prevention programs (0.52), the number of sex workers (SW) reached with HIV prevention programs (0.59) and the number of AGYW who were tested for HIV and received their results during the reporting period (0.51) (Source LFA verified PUDRs). Despite the low performance, there has been an improvement compared with the previous reporting periods (Annex 6).

The low uptake of condoms from service centers brought the achievement ratio for the MSM and SW indicators down. These indicators are measured for HIV prevention services which include HIV testing, BCC and condom provision. However, due to lack of data on condom use by the two groups, only two services were measured thus the low achievement ratio observed. Key informants assumed that the two groups were getting condoms from condom dispensers and thus the low uptake at the service centers.

Finding: Implementation of the HIV grant is largely on track: Indicator performance improved, with 7 of 13 coverage indicators meeting or exceeding the target. However, there are increasing concerns from stakeholders regarding gaps in ARV funding (which was estimated at \$4.8 million USD in 2019, and as of September 2019, projected a gap of \$21 million in 2020).

Robustness: (Ranking=2). The finding is supported mostly by triangulation of document review (CCM meeting minutes and PU/DRs), observation of CCM and MoH monthly meetings, as well as a few KIIs at the national level.

Progress towards the 90-90-90 target

Uganda has made substantial progress towards the 90-90-90 goals. Estimates from the Uganda DHIS September 2019, show that 89% of PLHIV were aware of their HIV status, 88% of PLHIV who knew their status were on treatment and 70% of people on treatment were virally suppressed.

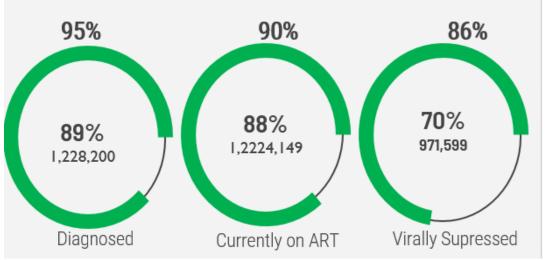


Figure 3. Uganda's progress toward 90-90-90, as of September 2019

Source: MOH analysis from DHIS2

With this progress comes concerns about how the country will sustain the gains and continue to achieve results beyond the global targets in the face of heavy reliance on donor funding for ARVs. In 2019, the funding gap for ARVs was US\$4,808,479 and in September 2019, MoH reported a projected 2020 funding gap of US\$21million for ARVs. These gaps were partly attributed to large

numbers of PLHIV receiving ART as a result of the Test and Treat Policy, improvements in case identification and antiretroviral therapy (ART) enrollment and increases in life expectancy for PLHIV.

Uganda relies heavily on donor funding for ARVs and other HIV commodities, with the largest percentage of funding contributed by the Global Fund and PEPFAR. Despite the increased investments in HIV commodities by the Government of Uganda, Global Fund and other partners, the funding gaps persist. There is a need for resource commitments from the government towards addressing the gaps for sustainability of ARVs and other commodities. Initiatives like the AIDS Trust Fund (ATF) were started to bridge these gaps, however, there is a need to speed up the operationalization of such initiatives. A total of US\$3.8 million was allocated to the ATF but the fund awaits MoH appointment of a task force and a board to manage it. (4). The PCE will continue to track sustainable approaches to funding HIV treatment during the final year of the 2018-2020 grant allocation period.

2.2 TB Grants

2.2.1 Grant overview

The total TB grant allocation for the 2018-2020 grant cycle was US\$21.3 million with US\$18.4 million (86.3%) allocated to MoFPED. The TASO's combined HIV/TB grant was allocated US\$2.9 million for Multidrug-Resistant TB (MDR-TB) and TB/HIV co-infection. The highest budget for the TB grant was to TB care and prevention with US\$13 million; 70.4%. Program management was the least budgeted at 5.1% (US\$946,327). An additional US\$5.5 million for case detection and diagnosis was awarded to MoFPED in 2019 through portfolio optimization bringing MoFPED's total TB allocation to US\$23.9 million.

2.2.2 Grant implementation status

By June 2019, the cumulative absorption for the first 18 months of the MoFPED TB grant was at 80.3%. The TB care and prevention module reported the highest expenditure of over \$10 million. Of this expenditure, procurement of commodities and GeneXpert machines consumed over 87% under case detection and diagnosis. Absorption for the MDR-TB module in TASO's grant was also high at 111.9%. However, absorption was moderate at 49.5% in MoFPED's grant due to delays in procurements and accountabilities. The TB/HIV module had the lowest expenditure at 0.2% in MoFPED's grant but is performing better in TASO's grant at 27.1%; see Figure 2 in the HIV section).

2.2.3 Translating TB activities into outputs and outcomes

The TB modules have performed relatively well over the first half of the 3-year cycle with improvements in most of the performance indicators as shown in Figure 4. All the indicators were close to or above the target except for numbers of rifampicin-resistant TB (RR-TB) and/or MDR-TB patients on second-line treatment (0.59 achievement ratio). The latter has consistently achieved less than 80% of the target. On the other hand, the number of notified cases, percent of HIV positive new and relapse TB patients on ART and percentage of new and relapse TB cases with HIV status have consistently achieved above their targets.

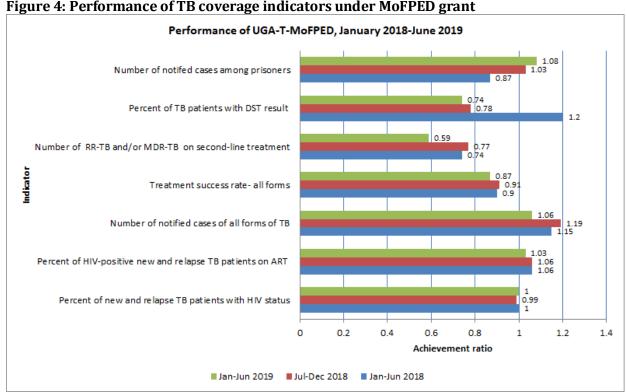


Figure 4: Performance of TB coverage indicators under MoFPED grant

The number of MDR-TB cases starting second-line treatment increased from 246 cases in semester one of 2018 to 257 cases in semester two of the same year and to 276 in semester one of 2019. Despite this increase, the indicator did not meet the set target of 468 cases resulting in an achievement ratio of 0.59 in Semester one of 2019. According to Key informants, this performance is attributed to challenges with treatment initiation of diagnosed patients, long turnaround times for receiving results and low coverage of GeneXpert machines. The percentage of TB patients with drug-susceptible TB results among the total number of notified (new and relapse) cases in the same year has drastically decreased from 84% in January-June 2018 to 74% in January-June 2019. This is an indication that there is a reduction in the number of new infections and an increase in adherence to medication and possible cure rates. However, this could also be confounded by suboptimal reporting and case finding.

2.2.4 Drivers of Case Notification

According to the National TB prevalence survey of 2014-2015, case notification was low, and this was attributed to use of less sensitive screening and diagnostic methods, low suspicion index of health workers and frequent stock outs of drugs and commodities (6). However, there is an improvement in case notification (new and relapse cases confirmed bacteriologically including clinically confirmed) due to intensified case finding at health facilities, increased use of GeneXpert machines for diagnosis and improved case reporting due to integration of parallel reporting systems. The case notification indicator exceeded its target (31,093) by 1,746 cases in the January-June 2019 reporting period.

Finding: There has been a 35.3% national increase in case notifications for all forms of TB (Q1 2018-Q3 2019) largely facilitated by improvements in TB case reporting, improved availability of TB diagnosis, as well as district, health facility and community innovations.

Robustness: (Ranking=1). The finding is supported by triangulation across multiple data sources including document review (TB NSP, national TB reports, CCM meeting minutes, NTLP presentations, facility registers), KII at national and district level, analysis of HMIS data, observation of CCM and MoH monthly meetings. Data sources are considered strong and the quality of insights from respondents is high.

Case notifications for all forms of TB increased nationally from 50,511 cases in 2016 to 57,514 cases in 2018 (Figure 5). Furthermore, a 35% increase in case notification was observed between Q1 of 2018 (13,757) and Q3 of 2019 (18,636) of the 2018-2020 grant. This increase in case notifications was attributed to a combination of increased case reporting and improved availability of GeneXpert machines (for better case identification) and additional funding that facilitated active case finding in some areas.

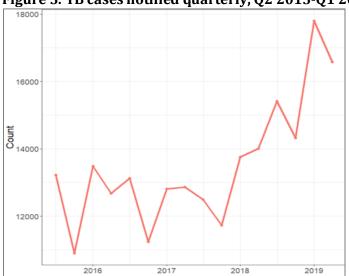


Figure 5: TB cases notified quarterly, Q2 2015-Q1 2019

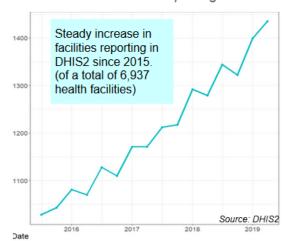
Source: HMIS

Improved TB Case Reporting

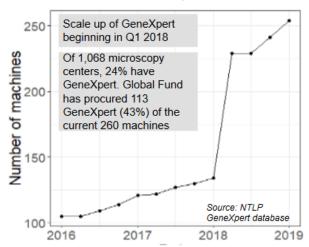
TB case reporting has increased as additional facilities provide TB screening and reporting to DHIS2. This data is integrated into a single national surveillance system. In addition, the TB NSP recommends that all detected TB cases, regardless of whether they are started on treatment or not, should be recorded. This has improved reporting, as shown in Figure 6. Furthermore, with the increasing number of GeneXpert machines, more facilities are reporting cases tested using GeneXpert diagnosis. In 2016, 158 facilities reported performing at least one GeneXpert test in that year. This has increased to 256 facilities in 2018. However, there is a challenge of long turnaround time of test results as they are delayed due to a limited number of hub riders covering a wide catchment area. The six districts visited also had an increase in samples tested by GeneXpert machines over time as shown in Table 5.

Figure 6: Number of facilities reporting to DHIS2 and number of GeneXpert machines in use over time, 2015-2019.

Number of facilities reporting to DHIS2



Number of GeneXpert machines



Availability of TB diagnostic technologies

TB case detection and diagnosis was allocated the highest amount (US\$12.5 million) of which US\$8.7 million was for procurement of GeneXpert machines. In January 2019, there were 260 GeneXpert machines in use in Uganda compared to 105 machines in 2016. The Global Fund contributed the largest number of GeneXpert machines (113) followed by PEPFAR (76), TB REACH (24), EAPHLN (11), LFTRC (10), Makerere University (4), IDRC (3) and AISPO (2). An additional 21 machines were procured by other supporting organizations (GRLA, CUAM, Rushooka project and FIND). The majority of Uganda's districts (n=72) have a single GeneXpert machine. All 14 regional referral hospitals and three of the four national referral hospitals have GeneXpert machines. The increased availability of GeneXpert machines coupled with improved DHIS2 reporting by facilities contributed to the steady increase in TB case notifications observed in Figure 5.

Table 5: GeneXpert machines and Sputum samples tested in visited districts

District	Number o	Number of machines Number of samples			
	2017	2018	2017	2018	
Amudat		1		62	
Nakapiripirit	1	1	305	1010	
Kole		1		896	
Apac	1	1	77	1287	
Mitooma		1		449	
Sheema	2	2	1058	2765	
Total	4	8	1440	6469	

Findings from the six district case studies (Table 5) indicate an average of one machine per district, except for Sheema with two machines. There are increasing numbers of samples tested from 2017 to 2018 implying increased access to testing services. However, in the Karamoja region, there is low case detection and diagnosis with one machine serving a wide catchment area whose population are pastoralists. In Apac district, there are sub counties with no Health center III and the district depends on

an implementing partner to collect samples to the nearest hub.

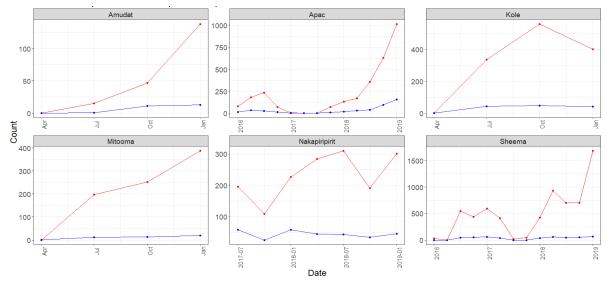
"Three sub counties do not have HC III [Health Center III] and therefore no diagnostic unit and we have to rely on a vehicle from RHITES [Regional Health Integrated Services] Lango which collects sputum samples on particular days to take to the hub..." (Subnational KII, Apac District)

Despite the increase in the number of GeneXpert machines, there is still a big gap to be filled to improve sample referral and reduce turnaround time for results. There are 260 potential hubs but only 100 facilities with GeneXpert machines currently serve as a hub for sample referrals, in part due to the limited number of hub riders covering large catchment areas. There was a general

increase in samples tested by GeneXpert machines over time in all the six districts that the PCE visited as shown in (Figure 7). This was also characterized by increasing reporting through the DHIS2.

Figure 7. Samples tested by GeneXpert machines in six districts

Red line is total samples; blue line is samples tested positive



Challenges in TB notification and case detection

GeneXpert cartridge stock outs threaten the progress in case notification. The 2018-2020 TB grant has a cartridge funding gap of over US\$14 million, with the 2020 gap at US\$7.9 million. Other challenges associated with GeneXpert machines include unreliable electricity, unreliable transport systems to deliver samples on time and unsuitable sputum containers that cause spillage. A low suspicion index among health care workers was also mentioned in three of the districts visited. Some districts still rely on clinical diagnosis despite the installation of GeneXpert machines. A key informant noted that this is usually done to prevent further disease spread for suspected cases as patients must travel long distances to health facilities and may not make frequent visits (including picking up test results). In order to further increase detection and case notification, there is a need to mobilize funding to narrow the gaps in cartridges and to leverage existing GeneXpert machines as the country lobbies for more funding to increase coverage.

"TB detection has been very low in our district, the worst in the region. The health workers lack the competencies to diagnose TB." (Sub-national KII, Kole district)

"Trial therapy should be done by a doctor, and not everybody, and yet our district health facilities have nursing assistants who do not have proper training to handle TB patients. This is of great concern to many people." (Sub-national KII, Sheema district)

"The policy on clinical diagnosis needs to be changed to emphasize laboratory diagnosis using GeneXpert machines to detect TB... otherwise current policy allows health workers to clinically diagnose and treat suspected cases, which is causing misdiagnosis, wastage of drugs and drug resistance." (Sub-national KII, Amudat district)

Innovations to increase TB case notification

Despite the challenges faced by local governments in improving TB treatment outcomes, district and health facility innovations have helped increase case notification. These innovations varied from data reviews, coordination of partners, and engagement of lower health facilities, engaging Village Health Teams (VHT) and increasing the number of TB focal persons at facilities as shown in table 6 below.

Table 6: Summary of district innovations compiled for six case study districts.

Innovations	Effects of the Innovations	Challenges
Bi-weekly data meetings by DTLS, TB focal persons, & biostatisticians (Apac)	Entering cleaned data in the DHIS2 thus improved reporting	Delays in collecting data from the different diagnosis and treatment centers
Coordination: DHO requests HIV partners to incorporate TB services during outreach visits (Nakapiripirit)	Improved TB/HIV collaboration, better follow up, improved case notification	Procedures for TB outreach activities take longer than HIV activities "sometimes HWs miss transport back from the community"
Intensified case finding: Assigned two Tb focal persons per facility (lab and clinician) for active facility-based case finding across departments (Sheema)	Increased case notification resulting from identification of TB cases from all health facility departments, improved reporting	Stock outs on cartridges affect turnaround time of results
Sample collection: HCIIs (n=7) collecting sputum samples and coordinating pick up (2x/week) through RHITES to send to district TB hub (Kole)	Increased case notification, referral and initiation on treatment, treatment of TB is further decentralized, and more cases can be found.	Inadequate sputum containers, loss of samples due to spillage from poor improvised containers, delayed pick up of samples, lack of storage facilities for excess samples or those delivered late.
Public –Private health facility coordination and cross learning mentorship	Improved TB prevention and TB referrals leading to increased case notifications	Fewer number of private health facilities managing TB thus limited translation of acquired knowledge.
Engaging VHTs for sample collection and referring patients to health facilities.	Increased case notification, follow up and contact tracing	Delayed pick up of samples and returning results due to limited transport facilitation

Bi-weekly data review meetings have been initiated where data is cleaned, and discrepancies analyzed before submitting for HMIS entry. This has improved TB treatment outcome indicator reporting. There is also a deliberate effort to coordinate HIV and TB activities; including follow up of HIV patients performed together with contact tracing and follow-up of TB patients. The result has been improved adherence to TB medication, increased case finding and referrals to health facilities for testing and treatment. At the facility level, more TB focal persons have been assigned to different wards or departments in a bid to intensify case finding. HC IIs also collect sputum samples and send them to the district TB hub for testing. In some districts, VHTs are involved in active case finding to identify and refer suspected cases to the nearest health facility for further management. The VHTs also follow up with facilities for test results and follow up cases for treatment. With improved collection of samples and rapid return of results, the innovation of collecting samples from HC IIs and the community level can be scaled up to further increase case notification. This calls for advocating for more funding for the community response system, and funding to support sample transport networks, including motorcycles and hub riders in the next grant.

2.2.5 Drivers of Treatment Success Rate

The TB NSP refers to treatment success rate as a stagnant outcome mainly because of the persistently high loss to follow-up (6). Treatment success rate is measured after twelve months of treatment for DS TB.

Finding: There has been an improvement in treatment success rate of TB (all forms) nationally (66.1% in 2014 to 74% in 2019); however, the indicator is still below the national target of 85%. This is partly attributed to challenges with the community linkage systems thus affecting patient follow-up and contributing to poor adherence to treatment.

Robustness: (Ranking=1) The finding is supported by triangulation across multiple data sources including document review(NSP, Funding request, national TB reports, CCM meeting minutes, health facility registers), KIIs at national and sub national levels, observation of MoH monthly and CCM meetings, analysis of HMIS data. Sources are considered strong and the quality of insights from respondents high.

Nationally, treatment success rate has improved although it remains below the target of 85%. According to the HMIS aggregated data, the treatment success rate in 2015 was at 66.1% (for the 2014 patient cohort) and has improved to 74% in 2019 (for the 2018 patient cohort). The NTLP attributes the latter performance to the over 18% of TB patients lost to follow-up. This was also a challenge in the district case studies, notably for the districts with pastoral and fishing communities and security personnel who are frequently transferred to different duty stations during treatment.

"Case holding is very difficult as herdsmen and fishing communities keep moving from place to place making tracing them close to impossible, so we end up losing them. The askaris are also transferred from time to time and it interrupts follow-up and treatment." (Subnational KII, health department)

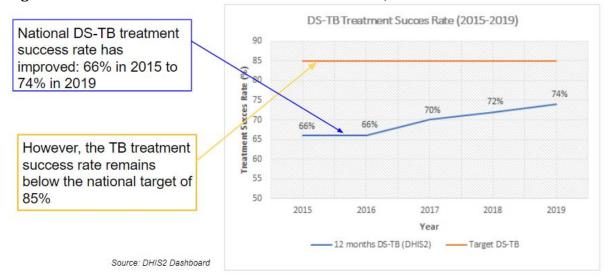


Figure 8. National trend in DS TB treatment success rate, 2015-2019

Treatment success rate in the six districts varied with districts having functional community linkage systems having better performance. For example, Sheema and Mitooma districts, despite their declining trends, had treatment success rates of over 60% and over 80% respectively. Other barriers to treatment success rate are limited feedback from facilities for the transfer outpatients and interruptions in treatment, especially for prisoners due to lack of food/proper nutrition

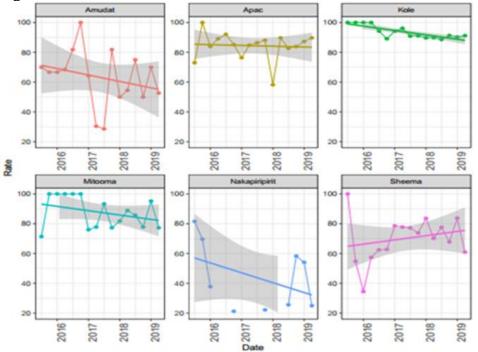


Figure 9: Trends in TB Treatment Success Rate in the district case studies (2016 - 2019)

Source: HMIS

Five of the six districts visited had a declining trend in treatment success rates with Sheema showing a slight improvement. The reasons for the observed trend varied by district with factors like good governance, less mobile communities, availability of other implementing partners at play.

Community linkage system

The community linkage system includes: patient follow-up to ensure adherence to medication, linkage to care for suspected cases, recording and reporting of patients transferred out. This system is not operational due to the limited resources budgeted for it. The NTLP reported that due to the breakdown of the community linkage system, 18% of patients were lost to follow-up in the 2018 cohort and this poses a danger of developing drug resistant TB. Challenges with follow up of TB patients stem from inadequate funding for the community response system. Subnational data highlights several key challenges to follow up (Box 1), many of which are corroborated by findings in the NTLP report.

Box 1: District level challenges to follow up of TB patients

- 1. Lack of facilitation for transport and "safari" allowances for health workers and VHTs to follow up patients. This has led to poor adherence to treatment.
- 2. Minimal supervision and mentorship of VHTs and sub-county health assistants
- 3. Mobility of communities e.g. semi-nomadic or mobile pastoralist and fishing communities, frequent transfer of security personnel, refugee movements in and out of settlement camps.
- 4. Long distances from remote areas to treatment facilities.
- 5. Patient follow-up which was previously done through short-course DOTS at community level is not functional and patients are now followed by family members through family DOTs.
- 6. Health facility TB focal persons are not facilitated with airtime to follow up the transfer outs to ensure proper recording and reporting.
- 7. There is a challenge of inadequate recording and reporting of treatment success rate, especially for the transfer-out patients.
- 8. There are no mechanisms to ensure patients who complete treatment come back for end evaluation.

The Global Fund invested in community systems in the resilient and sustainable systems for health (RSSH) module. However, this is limited and not specific to the TB community response. Approximately 1% of the US\$21.3 million budget is invested in community response to: Train community health workers on TB contact tracing (US\$26,090), facilitate transport for contact tracing for TB (US\$106,354) and facilitate transport and safari day allowance for contact tracing for MDR-TB (US\$106,354). The TB priority above allocation request (PAAR) includes US\$492,737 to support capacity building for providers of TB/HIV activities and enhance TB/HIV collaborative activities at the community level. Furthermore, there was US\$493,000 placed in the PAAR for TB/HIV Community Care and Delivery.

Evidence from subnational data collection suggests that more investments in community systems to support TB are necessary. The community linkage system needs to be strengthened to ensure effective follow up of all patients including the transfer outs. Sub national KIIs indicated that when a patient shows up for treatment at a new facility, that facility does not contact the old facility to let them know. Thus these patients are reported as lost to follow up and affecting treatment success rates.

"There is a need to facilitate facility TB focal persons to understand the TB indicators and how to report them. At the moment, it is the DTLS [District TB and Leprosy Supervisor] who moves around facilities to compile the data from the TB unit register." (Sub-national KII, health department)

With the review of tools and use of revised HMIS tools, there is a need for training of health workers in TB treatment outcomes, recording and reporting. Appointment books are being used to follow up with clients; and there is renewed effort towards intensified case finding to detect TB cases early and ensure completion of treatment.

2.3 Malaria Grant

2.3.1 Grant overview

The approved malaria grant for the 2018-2020 implementation period was US\$190.3 million, with the majority of the funds (92%) budgeted for MoFPED. An additional US\$64.1 million in prioritized investments for malaria and RSSH were included in the PAAR. Case management was the largest budget component in 2018 US\$46.5 million (84%), while vector control accounted for over US\$71 million (65%) of the 2019 budget. Procurement of Long lasting insecticidal nets (LLIN) and supply chain management (PSM) costs for LLINs constituted the biggest component of the vector control budget.

2.3.2 Grant implementation status

By June 2019, cumulative absorption (semester 1-3) for the malaria grant under MoFPED was at 27.9%, with 7.2% absorption in the January to June 2019 reporting period. TASO's malaria grant had a cumulative absorption of 39.3%, of which semester three was at 65.5%. Due to the heavily budgeted procurement of LLINs in year 2 which had not been implemented by June 2019, the MoFPED malaria grant had the lowest cumulative absorption (27.9%). In addition, the low incidence of malaria during 2018 led to reduced expenditures. However, in 2019, expenditure on procurement of commodities increased due to the upsurge of malaria cases.

By June 2019, most modules had suboptimal absorption as shown in Figure 7. The case management module had the highest absorption for both MoFPED (45.2%) and TASO (25.5%). As reported in the 2018 PCE report, RSSH-related modules such as community systems and information systems/M&E continue to be under-spent for both PRs (13.4%). Key informants partly attributed the low performance of most "direct" RSSH activities to the insufficient discussions on operational details of some activities during grant application, which led to changes in the implementation approach and thereby delays in implementation of these activities. More information is available in chapter 3.1 below.

UGA-M-MoFPED UGA-M-TASO \$6,160,906 (8%) \$1,078,607 (56%) Vector control \$29,510 (10%) \$0 (0%) Specific prev. interventions Service delivery \$22,179 (9%) \$166,853 (76%) PSM-\$492,041 (150%) \$1,494,418 (84%) Program mgmt -\$1,637 (0%) \$55,422 (87%) Nat. health strategies Budget Expenditure \$139,688 (28%) \$26,233 (6%) Info systems & M&E HR & health workers -\$95,048 (23%) Financial systems -\$6,969 (15%) \$8,301 (43%) Community systems \$5,369 (5%) \$34,292,372 (45%) \$1,552,124 (25%) Case management ^{260'000'000} \$40,000,000 \$50,000,000 \$40,000,000 \$60,000,000

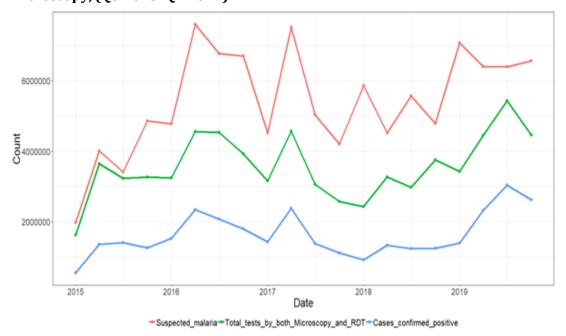
Figure 10: Cumulative expenditure and absorption for MoFPED and TASO malaria grants (January 2018 – June 2019)

*Absorption capped at 150%

2.3.3 Translating malaria activities into outputs and outcomes

The 2018 PCE annual report highlighted the significant improvement in key output indicators such as the proportion of suspected cases tested and the proportion of confirmed cases treated. These indicators have continued to show a positive trend over the eighteen-month grant implementation period (Figure 11).

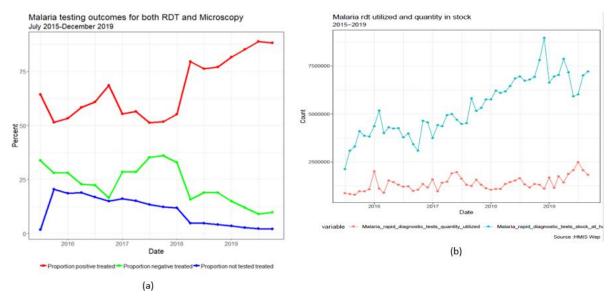
Figure 11: Number of suspected malaria cases tested and confirmed positive with RDT and microscopy, (Q3 2015–Q4 2019)



Nationally, there was an increase in the number of suspected malaria cases tested in public sector health facilities. Global Fund investments have enabled commodities to be stocked at health facilities and all districts that the PCE visited attested there has been no report of drug stock outs. The average quarterly number of suspected cases tested increased from 2,430,226 in Q1 2018 to 4,454,970 in Q4 2019 due to increased availability of RDTs. This is coupled with the increasing number of facilities reporting to DHIS2. Although there are challenges with incomplete reporting of integrated community case management (iCCM) data into HMIS, overall the testing rates suggest that the health system has been effective in responding to the increasing numbers of suspected cases.

Trends in malaria testing outcomes have changed over the last four years (Figure 9a). The number of positive malaria cases (confirmed positive with RDT and microscopy) that were treated with Artemisinin-based combination therapy (ACT) increased from Q1 2015 (551,689) to December 2019 (2,615,202). The proportion of positive cases tested and treated has increased from 52.6% in Q1 2015 to 55.2% in Q2 2018 to 88.1% in Q3 2019. The proportion of patients treated without testing reduced significantly from 20.5% in Q3 2015 to 11.8% in Q4 2018to 2.1% by Q4 2019. In addition, the proportion of patients treated with negative test results has decreased from 33.9% in Q3 2015 to 9.7% in Q3 2019. This is an indication that Uganda's health system is increasingly becoming compliant with the test and treat policy coupled with improved availability of RDTs and malaria drugs at the facilities (Figure 9b).

Figure 12: Malaria testing and treatment outcomes (a) and RDT stocks (b) July 2015-December 2019



2.3.4 The Upsurge of Malaria Cases

In 2019, Uganda experienced an upsurge of malaria cases with a spontaneous rise in the suspected cases in all regions. Cases increased from 4,791,920 in Q4 2018 to 6,395,154 in Q3 2019 (8). Ultimately, the number of positive cases diagnosed more than doubled from Q4 2018 (1,232,346) to Q3 2019 (3,033,594). The number of cases reported weekly in 2019 (green) were higher compared to the same weeks in 2018 (red) (Figure 10). This resulted in a corresponding increase in the proportion of positive cases from 25.7% to 47.4% in the respective quarters (Figure 13).

Malaria cases with superimposed reporting rates
Week1_33_2018 - Week1_52_2019

750000

250000

250000

250000

250000

Figure 13: Upsurge of Malaria cases in 2019 (reported weekly)

The upsurge affected approximately 65 districts in different sub regions with more cases reported in the Northern region. Figure 11 shows an increase in the number of people treated for malaria in the reporting period of 2019 compared to 2018. A majority of the districts in the Northern and Western regions of Uganda appear to have more people either suspected or confirmed to have malaria treatment.

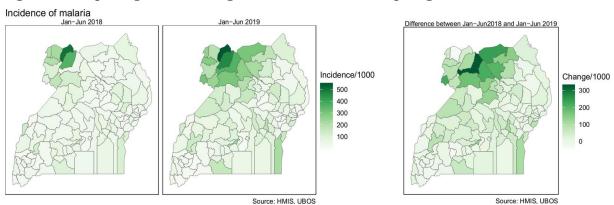


Figure 14: Map of Uganda showing districts with malaria upsurge, 2018-2019

The upsurge has been attributed to several factors including but not limited to seasonality, prolonged intermittent rains in various parts of the country, reduced mosquito net ownership and use due to the aging of nets distributed during the 2017/18 mass LLIN campaign and movement of populations from high burden areas are, among other factors (8).

Due to the flexibility of The Global Fund, the country revised the procurement and supply plan accordingly to suit the changing 'epidemiological trends.' For example, there was deferred shipment for malaria commodities meant for 2018/2019 into 2020 and flexibility to reallocate the commodity savings worth US\$10 million to fill the RDTs and Artesunate commodity gaps.

Finding: The flexibility of the Global Fund business model in responding to the spontaneous rise in malaria cases in 2019 was highlighted as a facilitator in the observed decline of malaria cases in the country.

Robustness: (Ranking=2) The finding is supported by triangulation across a few data sources, including KIIs and documents (budget analysis, national media), observation of meetings convened by MoH, National Malaria Control Division program review meetings.

Source: HMIS

Following the 2019 malaria upsurge, the response plan required a revision of several aspects of the malaria grant. Through stakeholder interviews and meeting observations, flexibilities in several aspects of the Global Fund business model were highlighted as key facilitators in responding to the upsurge. These included: (1) Global Fund's approval of the US\$3.5m for procurement of malaria commodities (ACTs and RDTs), considered timely given the increase in ACT and RDT consumption that was tending towards stock out; and (2) front loading of some commodity consignments which called for a revision of 2019 and 2020 procurement plans.

"I have to say that the Global Fund has been very kind to us in terms of addressing the malaria upsurge. When we started realizing that the cases were going up, we immediately had a discussion with them and they allowed us to apply for an emergency fund and also allowed us to re-organize our procurement plans to see how best we can address the upsurge." (KII, MoH)

Using a multi-sectoral approach, there were concerted efforts from the MoH and several partners through coordination by the government-led National Task Force towards responding to the malaria upsurge. For example, some of the funds for the epidemiological evaluation in Northern Uganda were reallocated to several activities that aimed at responding to the upsurge especially in the districts with the highest malaria cases as well as the enhanced inter-health facility and inter-district redistribution of health commodities to reduce risks of stock outs.

"The upsurge came at a time when we could shift monies around the grant and when we wrote to the Global Fund about the upsurge, they immediately advised us to identify budget lines that were not spent or savings from some activities and prioritize the upsurge. I have to say that the Global Fund has really been flexible this time, which has helped us because as of September, we had started seeing the number of cases going down." (National level KII, MoH)

2.4 Implications of delayed SR Selection on Grant implementation

According to the original implementation plans, a total of 17 SRs were responsible for implementing the 2018-2020 Global Fund grants through MoFPED (ten SRs) and TASO (seven SRs). As mentioned in last year's PCE report, there was a substantial delay in SR selection and onboarding, leading to delays in early grant implementation. This section will highlight key repercussions of delayed SR selection and onboarding on 2019 grant implementations.

Implementation of activities has improved in 2019 across the three grants that implement through SRs. Absorption for TASO SRs has improved from 11.4% to 34.5% during July-Dec 2018 and Jan-Jun 2019, respectively. Although expenditures for some activities are still low, there are some SRs that have reached targets for the current reporting period and this has been attributed to the high demand of some activities, especially at the community level. Additionally, informants had concerns related to quality of implementation of some activities resulting from the accelerated mode of implementation, as well as the time allocated to each sub-activity and whether this would allow for reaching the intended objective.

"In 2019, we have seen several SRs coming up with acceleration plans to catch up with the time lost last year...one thing that I think we have discussed with colleagues is whether these SRs are actually doing all these activities as they had planned, for example if the activity is under AGYW, we are interested in knowing whether each girl is given enough time during profiling/enrollment and this affects uptake." (National level KII, Uganda CCM)

While the acceleration strategy has enabled fast tracking implementation by SRs, it may result in unintended consequences which could impact the objectives of associated activities. For example, SRs have mentioned challenges related to increased workload in a bid to accelerate activity implementation to meet the targets. This was corroborated by informants at the national level who reported that the strategies of fast-tracking activities are essential but interfere with earlier plans since most of the MoH officers will need to travel regularly to the field.

"The work is sometimes too much for us. Some of the activities require back and forth movements to communities yet we don't have enough human resources..." (Sub-national KII, SR)

"...I see now people are moving to the field a lot. You go to someone's office and you are told they are in the field; you go back after a few days and you are told she/he went back to the field. So, the question is when do they ever sit to conceptualize and analyze what they have collected from the field?" (National level KII, MoH)

Chapter 3. Global Fund Business Model in Practice

3.1 Resilient and Sustainable Systems for Health (RSSH)

Building resilient and sustainable systems for health is key in ensuring effective and sustainable national health services as well as maximizing the impact of Global Fund investments. In the 2018-2020 grants, US\$5,517,656 (1% of total portfolio) in direct RSSH investments was allocated across three of Uganda's five grants (MoFPED-M, TASO-M, and TASO-C), with the majority of funds (78.6%) embedded within MoFPED's malaria grant; in addition, US\$13,148,085 for RSSH interventions was placed within the PAAR. Beyond direct RSSH investments, the Global Fund considers an additional US\$87.4 million (17% of Uganda's total portfolio) as "contributory" RSSH investments covering all five grants (9).

Cumulative expenditure on RSSH modules was 12.6% through the first 18 months of the grant (US\$550,132 of US\$4,355,243 budgeted). As described in last year's PCE report, underabsorption during 2018 was largely attributed to the delay in SR selection and onboarding, as SRs were responsible for implementing 67% of the direct RSSH investments. Even after onboarding SRs, implementation of most activities has remained suboptimal, with cumulative absorption ranging from 3% (national health strategies) to 23% (human resources for health) across modules during the first 18 months (Figure 15).

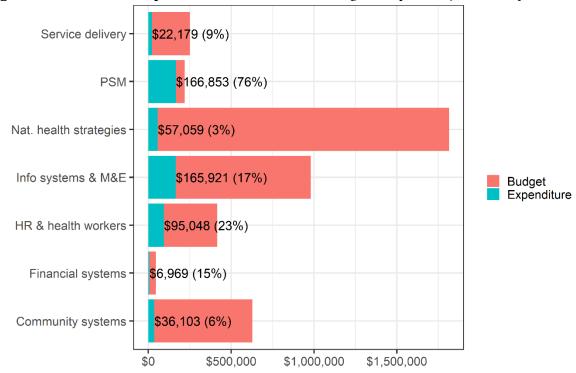


Figure 15: Cumulative expenditure for RSSH modules (January 2018-June 2019)

Finding: Implementation of "direct" RSSH activities have significantly improved in 2019. However, absorption across all models is suboptimal in part due to the complexity of designing RSSH activities, protracted approval processes and limited performance indicators for RSSH.

Robustness (Ranking=1): The finding is supported by triangulation across multiple data sources, including key informant and documented evidence (budget analysis, TRP desk reviews of RSSH investments, CCM meeting minutes) and observation of CCM-convened meetings and MoH monthly meetings

Stakeholders have varied understanding of RSSH modules categorized under the "direct" RSSH versus "contributory" RSSH investments, which affects the interpretation of performance and absorption of some of the RSSH activities as highlighted by one key informant.

"We have to admit that some of the people who implement or even oversee the performance of Global Fund grants don't differentiate between the activities that we call 'RSSH' and those that also support the implementation of activities but we may not directly refer to them 'RSSH'. So sometimes when programs are presenting, you hear people saying, 'under which RSSH modules are those RSSH activities?'... This is proving to be challenging in some ways..." (National level KII, MoFPED)

During grant application, emphasis was put on the situation analysis and assumptions. However, stakeholders perceived the process to have less focus on activity specifics including the implementation framework, details on scope and scale of some activities as well as feasible budgets. This has resulted in implementation setbacks characterized by several reviews and approvals. For example, the national health strategies module accounts for the largest component (33%) of the total direct RSSH budget. However, less than 10% has been spent as planned and the rest has been reallocated for reasons related to the above. Reallocation has largely targeted interventions that address similar RSSH objectives, such as filling gaps in the malaria indicator survey and as well as improve data reporting at regional level.

"...RSSH activities are key to successful implementation of grants, however, I must say that during grant application, we tend to concentrate a lot on what the situation analysis reveals, and we ignore some of the things that actually lead to successful implementation. For example, detailed understanding of the how, what, when and which frameworks will be used is crucial but often less and at implementation, then we realized what was accidentally omitted, which takes us along time to try and clarify." (National level KII, MoH)

Furthermore, unlike commodity procurements, the design and implementation of some RSSH activities requires involvement of many stakeholders and the type of activities necessitate thorough discussion to inform the design as well as implementation, since they are less straightforward compared to implementing procurement activities. For example, the printing of revised HMIS tools was delayed because the process necessitated each of the three disease programs to review their indicators and ensure they are comprehensively captured and approved. Whereas these processes are aimed at mitigating risk and ensuring quality control, some informants perceive the process to be lengthy and bureaucratic at the expense of efficiency, thus delaying cash requisitions which in turn stalls activity implementation. According to some stakeholders, these delays were amplified by the annual closure of Uganda's Integrated Financial Management System (IFMS) at the end of a financial year (June) due to uncertain timelines for reopening of the system. Such challenges are observed to affect the speed of implementation of "soft" activities, many of which are RSSH ('soft' activities generally refer to non-commodity activities, such as capacity strengthening at sub-national and health facility level, supportive supervision and mentorship, etc.).

"We are still facing a challenge of bureaucratic processes with PR1 [MoFPED]. When program officers put in cash requests for activity implementation, sometimes requests take forever to be approved. They move desk to desk for approval signatures and if it's the time

of IFMS closing, those requests may never be approved until IFMS opens ...it seems some government "offices" are more interested in appending the signatures on the cash request documents than understanding the importance of having those activities implemented." (National level KII, MoH)

Despite the implementation kickoff for some RSSH activities, it is still not clear how stakeholders are conceptualizing implementation of these activities in a vertical versus crosscutting manner. Most of the "direct" RSSH activities for the 2018-2020 grants are being administered through a single disease program, and it remains unclear whether and how the implementation approaches will strengthen the health system. Additionally, informants expressed challenges of measuring RSSH performance progress since some modules do not have indicators to assess progress towards the set targets. This was evident among most stakeholders who did not know crosscutting RSSH activities placed under the malaria grant were aimed at national systems strengthening as illustrated below:

"...not everyone understands activities related to RSSH, especially after putting it in the malaria grant. I think people understood it best when it was a standalone but now, you don't expect us to start following up activities that are not in our grants... it's hard to keep track of such activities especially if they are not placed one's disease program." (National level KII, MoH)

If RSSH investments are to make a desired impact in strengthening the health system, careful design and monitoring is paramount to ensure that its administration is reflective of the needs of the national health system, in addition to defining specific performance indicators for measuring progress across all RSSH modules. In order to track progress of RSSH activities, the government of Uganda through MoH should define specific performance indicators across RSSH modules. Leveraging RSSH investments to integrate disease and system elements especially strengthening integrated community approaches will be crucial towards building resilient and sustainable systems.

3.1.1 Community Responses and Systems

Increasing Global Fund investment in community responses and systems has been identified by the TRP as critical to RSSH, but underutilized by most countries (10, 11). Country stakeholders also recognize the importance of the community system in supporting the three disease programs. In 2018-2020 grants, the community responses and systems RSSH module was allocated 15% of the total direct RSSH investments, mostly within TASO's grants. However, cumulative absorption for community systems interventions through the first 18 months of grant implementation was very low partly due to the delay in the onboarding of SRs. Absorption was low for: social mobilization (1.7%), community-led advocacy (3.9%), community-based monitoring (4.5%), and institutional capacity building (18.5%) (Annex 3). However, beyond the semester three reporting period, the accelerated implementation had increased absorption to over 25% for the above modules. Without resolving implementation bottlenecks for community systems investments and RSSH investments more broadly, national programs may not be motivated to allocate further resources to this critical area.

While most stakeholders appreciated implementing community related activities through the private sector, there were concerns of the feasibility in promoting local ownership which would eventually lead to long term strengthening and sustainability of community programs. Informants further perceived the current community responses and systems to be vertical as opposed to crosscutting system strengthening. Specifically, the Malaria and HIV programs were perceived to benefit more (due to more funds allocated to community response and systems) as opposed to the TB program that was allocated less funds and has also had several challenges in the follow up of TB patients thus leading to poorer TB treatment outcomes.

"TB is more infectious than HIV and malaria. However, if you look at the current grant, you will see that even the little money for community systems is mostly benefiting malaria and

HIV. In fact, the TB grant hardly got any money for community activities." (National level KII, MoH)

This was corroborated by key informants at the subnational level who reported that, while village health teams are intended to link communities to health facilities, they tend to focus on HIV and Malaria programs due to the availability of funds for implementation. As such, TB is often neglected due to limited funding to run community-based activities. The PCE intends to further understand and track the sustainability concerns of implementing community responses and systems activities via the private sector.

3.2 District engagement and coordination of Global Fund grants

Context

Global Fund activities are implemented through existing local government structures and every district is mandated to oversee all health-related activities on behalf of the MoH. The Global Fund support to districts is both direct through funds disbursements and indirect through commodities and implementation via SRs or SSRs. Global Fund money is disbursed to districts that have been prioritized for implementation based on funds available, disease burden, presence of implementing partners, previous engagements, and changes in disease epidemiology (such as disease upsurges, high disease incidence or prevalence). The funds sent to district accounts are mainly for: training, allowances for health workers conducting follow ups in the community, planning and coordination meetings. For example, in the 2018-2020 cycle, the MoH malaria program disbursed Global Fund money directly to 63 district accounts (as of October 2019). These funds were mainly for the Integrated Management of Malaria (IMM), Facility Clinical Audits, supervision and planning meetings. Unlike the national malaria program, the TB and HIV programs did not disburse Global Fund grant money to districts during the 2018-2020 grant cycle, mainly because activities are either implemented directly by the program or through SRs. The HIV grant is highly commoditized, and most activities are implemented through SRs and a few are implemented by TASO. Other Global Fund interventions are implemented through PRs and SRs.

3.2.1 Budget alignment

Increased alignment of Global Fund budgeting processes to country's processes can help to promote country ownership and sustainability. This is in line with the Global Fund's aim of promoting the sustainability, transition and co-financing (STC) policy.

Finding: Districts are not adequately informed of allocation amounts for Global Fund activities. There are unclear information channels for sharing information to districts and minimal PR and SR representation during regional and district budget conferences.

Robustness (Ranking=2): The finding is supported by triangulation across multiple data sources including documents review, KII at national and subnational levels and observation at the budget week expo at Kololo independence grounds prior to reading the national budget in June. Data sources are considered strong and the quality of insights from respondents is high.

While the Global Fund budget cycle happens every three years and follows the calendar year, the Uganda government budget cycle is annual from 1 July to 30 June. The other differences between the two cycles are highlighted in the table 7.

Table 7: Key differences in Government of Uganda and Global Fund budget processes

Comparative Factor	Government of Uganda	Global Fund
Duration of budget	1 year	3 years
Timing of fiscal year	July-June	January-December
Timing of budgeting process	Annual	During funding request development, every 3 years
District involvement in budgeting process	Highly consultative at all levels; District involvement in regional and district budget conferences	Highly consultative at national level through the MoH and districts implement according to the national strategies. The process involves regional consultative meetings.
District management of funds	Government health sector funds transferred directly to district health accounts and accountabilities sent to MOFPED before 30th June.	Accountability done as per timing of disbursements that is in respective quarters for the prioritized and selected districts that receive funds
District oversight	Government mandate for district to provide oversight of all health-related activities.	Limited knowledge of Global Fund investments implemented by PRs/SRs in districts. Indicative Planning Figures not communicated in advance.

As a result of the two budget processes not being aligned, funds are sometimes disbursed to districts at the end of the Government of Uganda's financial year, and as such, funds are not utilized in time and sometimes lost to the treasury. Additionally, disbursements to districts are often unpredictable and lack accompanying guidelines thus affecting implementation of Global Fund activities. Many times, Global Fund money remains in district accounts and activities are not implemented. As a result, money is lost to the treasury, through bank charges, or being used for other district activities. The oversight of the funds is still lacking at the district level with the stigma associated with using the funds due to past experiences of misuse and its consequences.

PCE findings from Uganda's 2018-2020 funding request development process highlighted high inclusivity in terms of stakeholder representation and participation compared to previous cycles. However, there are concerns about the lack of involvement of district officials (like District Health Officers) in the funding request development process. Key informants perceived the representation of districts during the country dialogue as inadequate with no mechanism of transferring the information from the dialogue to other districts. Through decentralization, there has been a notable expansion in the total number of districts in Uganda, from 116 at the time of grant writing in 2016 to 133 in 2019. This poses a challenge of how to engage all districts in the planning process leaving sub-regional representation as a viable option.

Despite having a platform at the regional and district budget conferences, the Global Fund, PRs and selected SRs are not represented at these meetings. This is a critical missed opportunity for informing districts about Global Fund plans and commitments. During the district budgeting conference, external donors present indicative figures, which are included in the district budget and work plans. The PRs and the SRs have district entry meetings and quarterly engagements with district authorities, but they do not present their indicative figures to be included in the district budgets and work plans. This creates a knowledge gap in understanding Global Fund operations and its visibility through the country's structures. Key informants at the administrative offices emphasized the need to participate actively in planning meetings to address district-level priorities.

"Unlike Global Fund, other partners like UNICEF and other local NGOs communicate their Indicative Planning Figures in advance and as such, are included in the district budgets as external funding. They also participate in the district budget conference and discuss their next plans and previous performance, but we never see the Global Fund!" (Subnational KII, District planner's office)

In a bid to engage districts further and to ensure ownership, the MoH has given autonomy to districts to determine the implementation specifics for Global Fund activities. The district officials communicate the type of activity to be implemented and the dates that inform planning for supervision by the MoH. The actual implementation of activities and accountabilities are done by the district. However, one potential bottleneck identified by the PCE team is the inadequate district level financial management, which results in delayed accountabilities, funds lost to the treasury, and through bank charges due to late implementation of activities.

Table 8: Summary of facilitators and barriers to implementation of Global Fund investments in districts.

Facilitators

- Using existing district structures to implement Global Fund grants promotes ownership and strengthens the health system to sustain treatment outcomes
- Autonomy given to districts to implement activities promotes buy in and ownership of programs. The electronic system of disbursement of funds (IFMS) ensures checks and controls.

Barriers

- Lack of Global Fund indicative planning figures to facilitate planning and budgeting. Districts create estimates from previous budgets when planning and budgeting, which causes audit queries when estimates are not sent or are less or more than stated in plans and budgets.
- The timing of Global Fund disbursements at the subnational level is unpredictable and affects implementation of activities. The disbursements are done at any time of the year and this sometimes coincides with the end of the government financial year when IFMS is closed/closing thus leading to delayed start, short implementation time and loss of funds to the treasury.
- Districts often receive Global Fund implementation and expenditure guidelines from the MoH beyond the stipulated implementation time, leading to delayed implementation or not implementing at all.
- Bureaucratic processes of disbursements from the national level to the districts led to delays.
- The 'Fear' of using Global Fund money due to past experiences with the Fund's mismanagement.

Opportunities for improved implementation of Global Fund grants at district level

Key Informants from the district planning units suggested that when Global Fund money is disbursed to the district at whatever time, it should be treated as sector conditional grants or other government transfers to avoid delays caused by going through IFMS. They also suggested that MoFPED should communicate the Indicative Planning Figures early enough since these are three-year grants whose budgets are known. These can then be discussed at the regional and district budget conferences and included in district budgets, which will ensure continuity from the national, regional and district levels. Informants also suggested that the Global Fund money should be sent during the Government's first financial quarter, July-September for timely implementation and accountabilities.

3.3 Crosscutting facilitators and barriers to grant implementation

The table below summarizes how the Global Fund business model is operating in Uganda, including assessment of how Global Fund policies, processes and structures intersect with

contextual factors to facilitate or hinder progress towards achieving impact. Facilitators and barriers are synthesized from across PCE evidence collected to-date, and several factors are described in further detail subsequently.

Table 9: Global Fund and country contextual facilitators and barriers to grant implementation

Global Fund Business Model factors helping grant implementation

Flexibility of Global Fund policies and processes to:

- Respond to unpredictable epidemiologic changes;
- Revise grants through less bureaucratic process;
- Disburse funds in advance to avoid disruption of grant implementation
 - o (For example, funds for Quarter 4-6 were disbursed in Nov. 2018)

Country contextual factors helping or hindering grant implementation

Continued support to grant implementation through adaptive management and oversight

Helping Factors (Facilitators)

practices through:

- Accelerated implementation plans
- Continued country support from CT
- Continued oversight by CCM
- Stakeholder alignment and coordination efforts

Hindering Factors (Barriers)

- Bureaucratic in-country processes (protracted and with several sign off levels)
- Continued delay in the implementation of some activities until the first half of 2019, due to:
 - Protracted administrative negotiations between PRs and SRs
 - Protracted time for top management buyin within some SRs (Line ministries)
- Delay in orientation of new SRs to Global Fund processes (financial processes, procurements, and reporting). For both PRs, orientation by CCM was conducted in May 2019 for all SRs.

3.3.1 Management, Oversight and Coordination

There are different players in the management, oversight and coordination of Global Fund grants i.e., CCM, Global Fund CT, MoFPED, MoH, TASO, SRs, other government ministries, and development partners. In this section, we discuss how these different players are coordinated and how grants are managed and the impact on grant implementation.

Management and coordination at MoH

As reported in 2018 PCE findings, one of the facilitators of early grant implementation was strong leadership and engagement from the top management within MoH. This has continued to be a strong facilitator and a demonstration of country ownership. The leadership has increasingly shown emphasis on accountability and partnership collaboration between and among implementers of Global Fund grants with a key goal of ensuring that grants demonstrate value for money. In the monthly progress meetings chaired by the Permanent Secretary MoH, the three disease programs provide updates and set targets for the upcoming reporting period. These meetings have fostered greater accountability among responsible officers as well as accelerated implementation of activities.

Oversight by the CCM

Oversight of Global Fund grants is a core function of the CCM. Global Fund guidance stated that "The CCM is responsible for understanding grant implementation at the macro level, but does not need to immerse itself in the micro details, which is the responsibility of the PR"(16). More recent guidance approved in 2018 highlights oversight as one of seven principles for CCMs, stating that "CCMs should oversee the performance of the PRs to ensure that agreed targets are met. Effective oversight efforts should drive improvements in grant performance in support of national programs"

(17). The Uganda CCM has continued to provide oversight across all the five grants. However, evidence from observation and KIIs highlight that the CCM still faces challenges that impact their ability to provide effective oversight of grant implementation, including unclear boundaries on the extent to which they should perform their oversight role during implementation.

"Most times in trying to understand how the grant is being implemented, we are told of how we are doing micromanaging but what is micromanaging? You need to define your expectations in terms of oversight of the CCM... the guidance we have is that we should not get involved in the micro issues of the grant, but you can't tell what is macro and micro. There is a need for more guidance on this. We feel this is a statement that's often misused by different stakeholders engaged in implementation of Global Fund grants." (KII, CCM)

Additionally, evidence from observations and KIIs suggests that having MoH senior management attend CCMs meetings regularly would facilitate quick decision making, other than appoint ad hoc committees to meet with management at MoH to follow up on issues that would otherwise be resolved during CCM meetings. Stakeholders perceive this to be time consuming and heavily bureaucratic.

Stakeholder Alignment and Coordination

To avoid duplication and promote synergies among available resources, the CCM organized a national harmonization and alignment meetings of all implementing and funding organizations for HIV, TB and malaria. In addition, national disease programs have also organized alignment activities to determine the geographic reach and scope of activities by organizations. Despite these recent successes, stakeholders noted that some organizations/donors are not transparent with budgetary and activity information, hindering joint planning and leading to duplication. For example, during CCM meetings, the PCE has observed numerous instances of partners stating they are already covering certain interventions, yet the same activities are planned within the Global Fund grants. Furthermore, stakeholders indicated that having a clearer follow-up mechanism regarding recommendations discussed during the national alignment and harmonization meetings will be crucial for promoting partner collaboration and coordination toward a common public health goal.

3.3.2 Implementation of Grant Revisions

During implementation, grant revisions are used for reallocating resources within or across grants in order to address bottlenecks, weak absorption or shifting program priorities—all with the purpose and aim of maximizing impact. In February 2017, the Global Fund issued a new Grant Revisions Operational Policy Note (OPN) describing five types of grant revisions (Extensions, Additional Funding Revisions, Program Revisions, Budget Revisions, and Administrative Revisions); the OPN was subsequently updated in February 2018(14, 15). Uganda's 2018-2020 grants have undergone several types of grant revisions, as summarized in Table 11. Here we mostly focus on budget revisions (previously "reallocation"), but the table also summarizes additional funding revisions and program revisions (previously "reprogramming") (15).

Budget revisions are defined as "adjustments that are purely budgetary in nature, do not represent a change in the total approved funding for the relevant implementation period, and do not affect the Performance Framework," which can be material or non-material (15). The general process in Uganda is that disease programs identify sources of funds within the grants and they discuss gaps to be filled based on current needs. Program managers can approve reallocations of 5% or less and for those between 5-10%, they are discussed with the LFA. For reallocations above 10%, approval has to be sought from the Global Fund. Sources of excess funds include efficiency gains usually from forex exchanges, decreases in commodity prices, delayed or non-implementation of activities among others.

"So, there are some of those movements of very small monies that is happening as we move. Sometimes it is like expanding the scope of the same activity or sometimes the scope shrinks a bit and we divert that money to something closely related to that, enhancing the same objective." (National level KII, MoH)

"Reallocations can be direct communication between CT and PR. Not changing programmatic targets, just changing the budget line." (Global Fund CT Uganda KII)

Finding: There was increased flexibility to grant revisions in NFM2 compared to NFM1. Additionally, stakeholders perceived budget revisions to be consultative, participatory and timely, thus facilitating activity implementation across the three diseases. However, there are still concerns about documentation of budget revisions given that they are not centralized.

Robustness (Ranking=2): The finding is supported by triangulation mainly across two data sources including KIIs and observation of meetings. These data sources are considered strong and the quality of insights from respondents is high.

Grant revisions are designed to be responsive in a flexible and timely manner to emerging country needs in order to maximize impact against the three diseases. Compared to NFM1, the Global Fund has shown flexibility in its grant revisions policies in NFM2 and this has supported the effectiveness of implementing activities, by routinely analyzing gaps and filling them in a more time manner. Such responsiveness was demonstrated in the case of the malaria upsurge where funds were reallocated to respond to the increasing numbers of malaria positive cases (through commodity procurement and facilitating district specific interventions).

Additionally, grant revision processes have been considered participatory and consultative with a cascade of discussions starting with disease program to CCM committees and then CCM board, MoH oversight meeting and finally to CT "reallocation mission visit" in November 2019. During these discussions, priority areas for reallocations were agreed upon from the PAAR list as well as from emerging gaps identified during grant implementation. As a result, many of the stakeholders noted that the deliberations from these processes were a true reflection of the country's viewpoint with the aim of maximizing the impact of Global Fund investments. Stakeholders commended the timeliness of grant revisions as they allowed programs to effectively address emerging gaps and further improve on delivering results.

"...grant revisions this time around were easier with several compromises from Global Fund compared to the previous grants. We must acknowledge this positive shift." (National KII, CCM member)

"We really tried to have everyone involved in knowing where to propose shifts of savings that we have made so that we all come to a consensus. At least you (referring to the PCE team) attended most of the reallocation meetings that we held at different levels. Stakeholders discussed priority areas for reallocations extensively..." (National level KII, MoFPED)

Tracking grant revisions has been challenging for the PCE, in part because documentation of the type of revision and materiality of the budget or program revision is not clearly documented. While Implementation Letters issued by the Global Fund formally document changes resulting from additional funding revision and program revision, there is no comprehensive tracking of budget revisions that is shared across stakeholders so that all are aware of how budgets have shifted within the grants, and why. Further, this information is not captured clearly in the PU/DRs and is only reflected in the budget variances, which often do not include adequate explanation of the variance. The reasons for revisions, gaps filled, sources of funds within the grant and how the revisions will facilitate grant implementation are not well documented, which makes it difficult for stakeholders to track the changes made. There is a need to develop a centralized repository, for tracking grant revisions especially budget revisions to enable stakeholders to track changes made across the grant cycle.

Furthermore, looking across Uganda's grant portfolio to assess whether revisions are "maximizing impact" (beyond increasing grant absorption) is difficult. Table 10 pulls together key information from a variety of sources as of November 2019 (emails, slide presentations, implementation letters, budgets, and KIIs) to summarize a few proposed budget revisions. For

material budget revisions, this type of macro-level summary of the revision trigger, timing of revision, rationale for revision, amount of funding, and interventions increasing and reducing budget could help increase transparency.

Table 10: Summary of Uganda grant revisions, 2018-2020 grants

Grant	Amount US \$	Funds removed from	Funds added to	Rationale for Revision
Additional f	unding revisio	n		
MoFPED-H Feb 2019	\$23,353,149	Not applicable	-Condom dispensers -HIV testing services quality improvement -Cervical cancer screening for HIV-infected women	Portfolio Optimization via UQD/PAAR
MoFPED-T May 2019	\$5,500,000	Not applicable	-TB active case finding -Sputum transport system -GeneXpert cartridges -MDR-TB interventions	Portfolio Optimization via UQD/PAAR
MoFPED-T	In progress	Not applicable	-TB and HIV commodities	Emergency funds for refugee response
Program Re	visions			
MoFPED-H, TASO-C	In progress	Not applicable	Not applicable	Transfer funds from MoFPED-H to TASO-C: lubricant procurement
Budget revi	sions (Illustrat	ive, not comprehensive)	'	
MoFPED-H Sep 2019	\$1,275,930 (MoH) \$139,531 (UAC)	-Procurement condom dispensers: \$772,828 -PSM costs condom dispensers: \$227,173 -Stigma and discrimination reduction by religious and cultural leaders	Procurement of ARVs	-Efficiency savings (exchange rates under budgeted items, commodity prices,) -Failure to procure condom dispensers -Fill ARV gaps
MoFPED-T Sep 2019	\$938,125	PSM lab commodities mass screening in 50 prisons	-GeneXpert cartridges and machines -Vehicle for program management operations and DHO orientations	-Expenditure savings from conducting fewer prison mass screening -Fill GeneXpert gaps
MoFPED-M Sep 2019	\$4,775,367	Commodities: ACTs, Artesunate, RDTs, LLINS	-Scaling response to malaria upsurge -Integrated hospital management systems	-Responding to increased cases of malaria
All grants Nov 2019	In progress	TBD	TBD	End of Year 2 reallocation exercise

Following the "reallocation exercise" that took place in November 2019, new Implementation Letters will be issued for all five grants following this process, suggesting the budget revisions will all be classified as "material" changes. As of the time of writing this report, most of the proposed program and budget revisions hadn't been approved. The PCE intends to further track and understand how grant revisions have/are playing out at country level the final year of this grant cycle.

3.4 Limitations

As described in previous PCE reports, a limitation of this evaluation platform is our reliance on existing secondary data sources, including HMIS and online dashboards, which are subject to availability and quality of the underlying data sources. Data quality issues include data entry errors and incomplete reporting by health facilities, which the PCE addressed by conducting data verification with the MoH, removing outliers and checking for completeness of reporting. Through the PCE methodological shift to conduct "deep dives" in 2019, we triangulated data collected through sub-national KIIs with analyses from routine HMIS and document review data sources. Given our more intensive focus on two deep dive areas—TB and government/Global Fund process alignment—process tracking and HMIS analyses were less intensive for HIV and malaria grants during 2019. A further limitation is that PU/DR data, the primary source for Global Fund expenditure data, does not reflect commitments for ongoing activities and is considered out-of-date by the time of verified reporting, thus failing to present a real-time reflection of grant absorptive and program performance.

Chapter 4: Summary analysis and implications of findings for course correction

Table 11: Summary of findings and recommendations

Disease Specific findings	Recommendations/Strategic considerations
HIV	
Implementation of the HIV grant is largely on track: Indicator performance improved, with 7 of 13 coverage indicators meeting or exceeding the target. However, there are increasing concerns from stakeholders regarding gaps in ARV funding (which was estimated at \$4.8 million USD in 2019, and as of September 2019, projected a gap of \$21 million in 2020).	
Tuberculosis	
There has been a 35.3% national increase in case notifications for all forms of TB (Q1 2018-Q3 2019) largely facilitated by improvements in TB case reporting, improved availability of TB diagnosis, as well as district, health facility and community innovations.	
The TB treatment success rate has improved overtime but remained below the national target of 85%. This is partly attributed to challenges with the community linkage systems thus affecting patient follow-up and contributing to poor adherence to treatment.	
District and health facility level innovations have contributed to increased case notification and treatment success rates within the six case study districts.	Consider studying district and health facility level innovations further to establish evidence to inform scale up to other districts.
Malaria	
Flexibilities in the Global Fund business model enabled timely responses to the epidemiological changes in malaria in Uganda.	Continue to utilize Global Fund business model flexibilities to rapidly respond to epidemiological shifts where necessary.

Cross Cutting Findings	Recommendations/Strategic considerations
RSSH	
2019. However, absorption across all models is suboptimal in part due to the	To track progress of RSSH activities, the Government of Uganda through MoH should define specific performance indicators across RSSH modules and how to operationalize them to measure RSSH activities (to supplement newly added RSSH indicators in the Modular framework).
	The Government of Uganda, partners and implementers of Global Fund grants (PRs and SRs) should leverage RSSH investments to integrate disease and system elements, especially strengthening integrated community approaches for sustainability of interventions.
District Involvement in the Implementation of Global Fund grants	
	The Global Fund, PRs, and SRs should leverage the regional budget conferences to increase district participation in the planning and development of activities to improve implementation and accountability.
Grant revisions	
Also, the grant revision processes were perceived by stakeholders to be	In-country stakeholders implementing Global Fund grants should consider developing a centralized repository, for tracking grant revisions (especially budget revisions) to enable stakeholders to track changes made across the grant cycle.
Other considerations	
Continue to support grant implementation through adaptive management pra	ctices (e.g., Accelerated Implementation Plans and high-level MoH oversight).

Chapter 5: Dissemination and use of findings

A key strength of prospective evaluations is the ability to provide timely feedback on emerging findings to contribute to program improvement. In 2019, the PCE disseminated findings through numerous avenues including meetings with program managers on preliminary findings and data quality issues; update presentations at CCM and other national program meetings; annual dissemination workshop to share findings and agree on recommendations; periodic check-ins with the CT; and informal communication channels, such as phone calls. A summary of dissemination presentations follows:

- **January 2019**: Presentation of Uganda's 2018 PCE findings and 8-country PCE synthesis findings at the Global Fund TERG meeting in Geneva, which included attendance by the CT.
- **February 2019**: Presentation of Uganda's 2018 PCE findings at the dissemination workshop in Kampala, attended by approximately 80 stakeholders representing various stakeholders groups (CCM, MoH, civil society, LFA, CT, partners, TERG, TERG Secretariat). The Minister of Health attended and opened the workshop, asking for stakeholders to "offer unlimited support to the evaluation team" and emphasizing the PCE should build capacity of MoH staff to ensure strong evaluation practices continue. The 2018 findings and recommendations were validated by stakeholders at the workshop, and the PCE team subsequently finalized the annual report for electronic dissemination.
- **March 2019**: Presentation of synthesis findings from across the 8 PCE countries at the Global Fund Strategy Committee meeting in Geneva. Presented by the Chair of the TERG.
- May 2019: Presentation to PRs and SRs about insights on early grant implementation, highlighting key areas that need focus and improvement by PRs and SRs.
- May 2019: Presentation of synthesis findings from across the 8 PCE countries at the Global Fund Board Meeting in Geneva. Presented by the Chair of the TERG.
- **June 2019**: Consultation with national TB program to share preliminary quantitative analyses to-date and discuss how findings can inform program improvement and to solicit MoH input on plans for sub-national data collection for the TB deep dive.
- **July 2019**: Presentation on preliminary findings from sub-national data collection with TB national program, including operational level challenges at the district and health facility level
- **September 2019**: Presentation of Uganda's 2019 preliminary findings at the Global Fund TERG meeting in Guatemala.
- **November 2019**: Presentation to CCM Board to refresh on the 2017 funding request and grant making findings and share emerging findings from 2019.
- **December 2019**: Presentation of Uganda's 2019 preliminary findings to Uganda's High-Level Advisory Panel for the Global Fund PCE and Gavi Full Country Evaluations.

In addition to dissemination, in the third year of the PCE the value-add of the evaluation platform was indicated through additional instances of findings being used to inform programs and/or for process improvement. The following examples illustrate how PCE evidence is either being used by stakeholders or how the PCE platform is being leveraged to provide inputs:

- After the 2019 dissemination meeting, the CCM used the PCE report on several occasions, particularly regarding findings on SR selection and associated delays. The IDRC team made an additional presentation on the SR findings and the CCM used this evidence to plan for stronger improvements in the SR selection process. In addition, the CCM conducted an indepth evaluation of SR selection following on from the PCE findings, which will support process improvement during the 2021-2023 grant cycle.
- In mid-2019, the PCE team was contacted by the National TB program to conduct analyses on the discrepancy between TB cases tested and treated using available data from the program. The analyses showed discrepancies in the available data, which was attributed to different data collection tools, and these findings were subsequently used by the program to further justify the need for new TB tools to reduce any further discrepancies. The PCE team has also provided analyses on GeneXpert data, which has proven useful to the National TB program. These findings contributed to: (1) advocating for revising and merging TB data

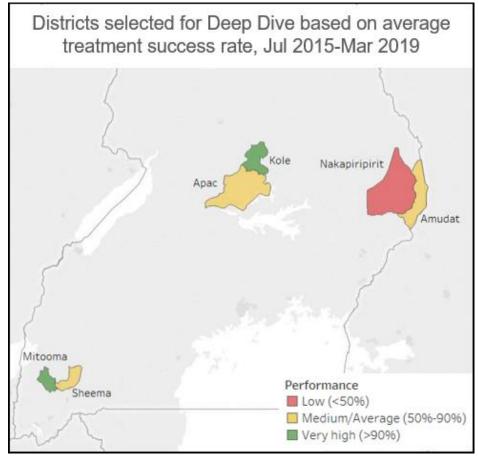
- collection tool decisions into one and (2) identification of regions and district therein that are prioritized for scale of GeneXpert machines.
- The Global Fund's CCM evolution team expressed interest in using the PCE findings on co-financing to bolster the CCM's role in tracking of co-financing. The PCE report was shared with the CCM evolution team.
- The Global Fund's Office of the Inspector General (OIG) team requested the PCE report for program evidence on grant progress. One area of the 2019 OIG assessment was whether the Ministry and National Programs had a mechanism for tracking program improvement, and the Ministry referred them to the PCE as the external mechanism.
- In preparation for CCM oversight visit in September 2019, the Uganda CCM consulted the PCE team to review the data collection tools and requested the PCE to provide guidance on key areas of follow up during the site visit. The PCE team accompanied the CCM during oversight visits and leveraged this trip to collect additional subnational data on government and Global Fund process alignment.
- PCE findings from the funding request and grant making phase in 2017 are being refreshed
 for national stakeholders (see above, November 2019 presentation to CCM Board) to
 ensure that lessons from the last cycle are incorporated into the next funding request
 development phase.

References

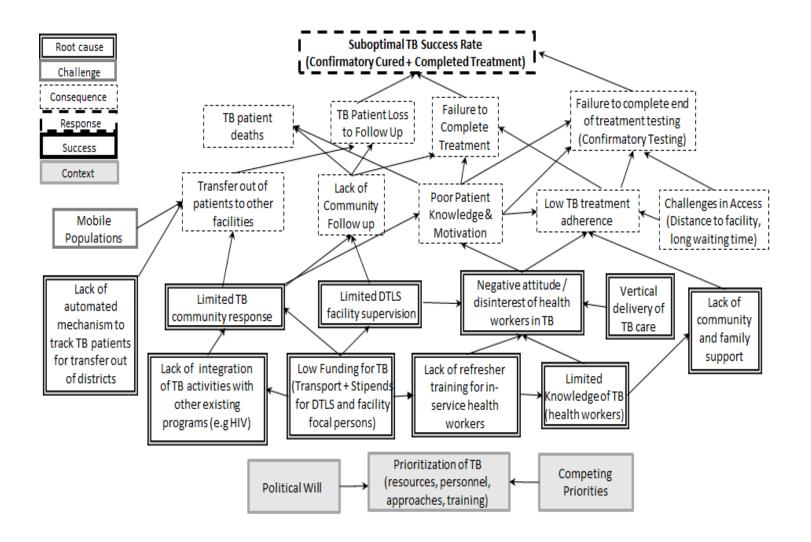
- 1. National Malaria Control Program. Malaria status reports [Internet]. Available from: http://library.health.go.ug/publications/
- 2. The Global Fund. 2017-2022 Strategic KPI Framework: Proposed Performance Targets [Internet]. 2017. Available from: https://www.theglobalfund.org/media/8050/bm36_edp09_report_en.pdf
- 3. PEPFAR. PEPFAR Uganda Country Operational Plan (COP) 2019 Strategic Direction Summary [Internet]. 2019. Available from: https://www.state.gov/wp-content/uploads/2019/09/Uganda COP19-Strategic-Directional-Summary public.pdf
- 4. Avert. HIV and AIDS in Uganda [Internet]. Avert. 2015 [cited 2019 Dec 4]. Available from: https://www.avert.org/professionals/hiv-around-world/sub-saharan-africa/uganda
- 5. US Dollar (USD) to Ugandan Shilling (UGX) exchange rate history [Internet]. [cited 2019 Dec 4]. Available from: https://www.exchangerates.org.uk/USD-UGX-exchange-rate-history.html
- 6. National Tuberculosis and Leprosy Program. Revised National Strategic Plan, 2015/16-2019/20.
- 7. Global Fund Technical Review Panel. TRP Funding Request Review and Recommendation Form: TB/HIV. 2017.
- 8. National Malaria Control Program. Malaria Upsurge Response. 2019 Aug 30.
- 9. The Global Fund. Database of contributory and direct RSSH investments. Internal document;
- Technical Review Panel. Report on RSSH Investments in the 2017-2019 Funding Cycle [Internet]. The Global Fund; 2018. Available from: https://www.theglobalfund.org/media/8093/trp_rssh2017-2019fundingcycle_report_en.pdf
- 11. Technical Review Panel. The Technical Review Panel's Observations on the 2017-2019 Allocation Cycle [Internet]. 2019. Available from: https://www.theglobalfund.org/media/8965/trp_2017-2019observations report en.pdf?u=637075054850000000
- 12. Ministry of Finance, Planning, and Economic Development. National Budget Framework Paper, FY 2019/19 FY 2022/23 [Internet]. 2017. Available from: https://csbag.org/wp-content/uploads/2018/01/National-Budget-Framework-Paper-FY-2018-19-FY-2022-23-13.pdf
- 13. Ministry of Finance, Planning, and Economic Development. A Guide to the Budget Process [Internet]. 2009. Available from: https://budget.go.ug/sites/default/files/National%20Budget%20docs/A%20Guide%20t o%20the%20Budget%20Process%202009.pdf
- 14. The Global Fund. Operational Policy Manual, Issue 2.13. 2017.
- 15. The Global Fund. Operational Policy Manual, Issue 2.23 [Internet]. 2019. Available from: https://www.theglobalfund.org/media/3266/core_operationalpolicy_manual_en.pdf
- 16. The Global Fund. The Country Coordinating Mechanism Grant Oversight Tool: Set-up and Maintenance Guide [Internet]. 2010. Available from: https://www.theglobalfund.org/media/5405/ccm_setupmaintenance_guide_en.pdf?u=63 6727911420000000
- 17. Country Coordinating Mechanism Policy Including Principles and Requirements [Internet]. Global Fund Board; 2018. Available from: https://www.theglobalfund.org/media/7421/ccm_countrycoordinatingmechanism_polic y_en.pdf?u=637066568320000000

Annexes

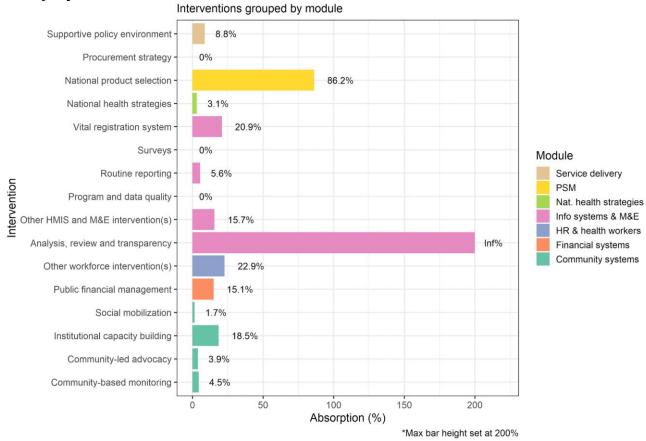
Annex 1. Districts selected for subnational data collection for TB Deep Dive.



Annex 2. Root cause analysis explaining the sub-optimal TB treatment success rate in Uganda



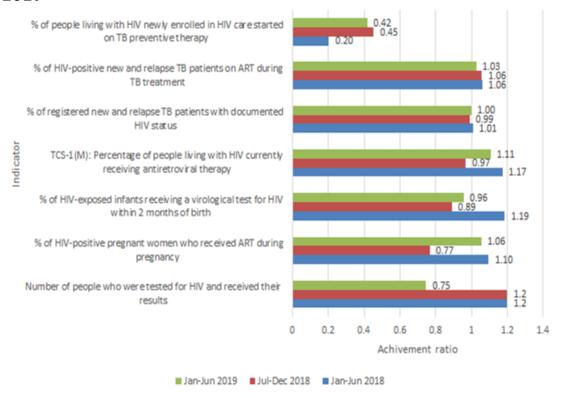
Annex 3. Cumulative absorption of RSSH interventions (January 2018 - June 2019), by module



Annex 4: Detailed Global Fund grant budgets used in the report

Grant	Grant Period	File	Budget Total
UGA-C-TASO	2018- 2020	UGA-C-TASO_IL1_Catalytic Funding DetailedBudget IMPP2 26April18.xlsx	US\$21,106,146
UGA-H-MoFPED	2018- 2020	UGA-H-MoFPED_IL2_SB2_Optimization_7March19	US\$271,565,274
UGA-T-MoFPED	2018- 2020	Budget_UGA-T-MoFPED_DB_ IMPP4_IL1_May2019.xlsx	US\$23,945,026
UGA-M-MoFPED	2018- 2020	UGA-M-MoFPED_DB_IMPP2_17 Dec_GF Final.xlsx	US\$175,310,366
UGA-M-TASO 201 202		UGA-M-TASO_DB_IMPP2_17 Dec_GF Final.xlsx	US\$14,969,534

Annex 5: Performance of Achievement indicators for MoFPED, January 2018-June 2019



Annex 6: Indicator Achievement ratio (UGA-C-TASO July 2018-June 2019)

