

AUDIT REPORT

Global Fund Grants in the Republic of Mozambique

GF-OIG-22-006
11 March 2022
Geneva, Switzerland

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➤ Email:

hotline@theglobalfund.org

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+1 704 541 6918

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+41 22 341 5258



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1. Executive Summary

1.1 Opinion

Mozambique has made significant progress in fighting the three diseases. Malaria deaths fell by 70% between 2015 and 2019, TB coverage increased by 46% between 2015 and 2020, and antiretroviral enrolment increased from 42% in 2015 to 68% in 2020. Despite two devastating cyclones in 2019, the COVID-19 pandemic, limited availability of health workers, and challenges accessing facilities, grants have performed well. Further progress is however dependent on tackling major challenges, particularly around supply chain and program management.

There has been slow progress on implementing the Procurement and Supply Chain Management strategic plan. The supply chain is fragmented and managed by several stakeholders, with diluted accountability and ownership. Current supply chain arrangements, and lack of basic controls related to inventory management, warehousing, and logistics data accuracy, stock-outs and expiries are impacting services to patients. Procurement and supply chain interventions **need significant improvement**.

With Mozambique having the second highest population of people living with HIV in Africa, programmatic improvements are needed in a number of areas, including low antiretroviral retention, weak monitoring of lost to follow-up patients, low viral load coverage and suppression, and key and vulnerable population program design, quality and testing coverage. To tackle the high death rate for drug-resistant TB patients (17%)¹ there is a need to improve notification and treatment success rates for multi drug resistant (MDR)/Tuberculosis (TB) through the optimized utilization of GeneXpert platforms and scale up use of short oral treatment regimen, which the country has recently adopted in the context of operational research. Programmatic interventions **need significant improvements** to ensure efficient and sustainable achievement of grant impact.

Mozambique had utilized less than 35% of its available COVID-19 2020 funding² by the end of the grant – June 2021. While disease programs have so far been relatively unaffected by the pandemic, as the actual need for commodities proved lower than estimated given the lower-than-expected number of COVID-19 cases, the environment remains volatile. Mozambique was one of the first countries with suspected cases of the Omicron variant. Low absorption and use of COVID-19 Response Mechanism funding could hamper future preparedness and program progress. The utilization of COVID-19 funds **is rated as partially effective**.

1.2 Key Achievements and Good Practices

Procurement and supply chain process have been strengthened, particularly for ordering and distribution

Supply chain arrangements have improved, notably through using third-party logistics providers for last-mile delivery, including distributing HIV commodities from provincial warehouses to health facilities. Order processing times at the central medical store (CMAM) have been reduced from three months to within the 30-day target. A new logistics management tool has been developed to aggregate data from central and province/district level; this should improve the availability of information, including for order requests and distribution.

Notable programmatic achievements across all three diseases

Mozambique has made significant progress on HIV over the past three years. At end-2020, 81% of people living with HIV knew their status and 68% of those were enrolled on antiretroviral treatment (ART). HIV-related deaths fell from 62,000 in 2016 to 37,000 in 2020. Between 2017 and 2019, TB notifications increased by 12%.³ In 2019, Mozambique introduced TB molecular testing as a primary diagnostic tool and transitioned to an all-oral treatment regimen for MDR-TB, which has contributed to improved treatment success rates. For Malaria, in 2017 the country completed the first universal coverage LLIN campaign with Global Fund funding, and has repeated it in the following campaign between 2019-2020. In addition, the country scaled up indoor residual spraying and access to malaria services, expanding the

¹ Global Fund Progress Update and Disbursement Report July-Dec 2020.

² C19RM awards must be used by 31 December 2023 - [COVID-19 Response Mechanism Guidelines](#), published April 7th, 2021

³ [WHO Global Tuberculosis Report 2021](#)

number of Community Health Workers. Malaria deaths more than halved between 2016 and 2019, from 6 to 2.5/100,000 population.⁴

Concerted efforts by the disease programs have alleviated the negative impact of COVID-19

COVID-19 has not deeply impacted programs, notably regarding treatment at government facilities. The Ministry of Health (MoH) developed memos and guidelines to ensure the continuity of HIV, Tuberculosis and Malaria services, specifying the type of services to be maintained and how they would continue. Civil Society Principal Recipients adapted their implementation measures to continue providing HIV and TB services, for example by deploying community health workers to health facilities and adapting malaria net distribution campaign activities to follow COVID-19 protocols.

1.3 Key Issues and Risks

Limited progress in tackling structural procurement and supply chain barriers

There has been limited progress in implementing the 2013 Strategic Plan for Pharmaceutical Logistics, due to limited political support and a weak accountability framework. The country remains acutely short of high-quality warehouse space. Persistent structural and administrative barriers remain, and the supply chain system is fragmented. Despite this issue being well-known to the Global Fund, the mitigation measures to address it have had limited effectiveness.

Stock-outs, low levels of stock and significant expiries are occurring across all levels due to data quality challenges and procurement challenges and transition planning to implement successive fast-paced regimen changes recommended by WHO. There is a lack of traceability of commodities due to limited batch number tracking, arising from a reliance on manual inventory management and ineffective warehouse controls. A lack of oversight and monitoring, and delays in-country non-health procurement processes, were noted at two Principal Recipients.

Challenges in TB diagnosis, and ART retention and monitoring further hinder impact

In 2019, 72% of MDR-TB patients were missing⁵ due to poor quality and coverage of diagnosis (e.g. inadequate management of GeneXpert network). For HIV, Mozambique has consistently struggled to retain patients on treatment, an issue raised in the OIG's 2017 audit.⁶ The MoH developed a six-pillar approach that focuses on health services-related interventions; however, the recently conducted national sample-based lost to follow-up study recommends a more comprehensive multi-sectoral response under Conselho Nacional de Combate ao HIV/SIDA (CNCS)⁷ to address this issue⁸. Patient tracking and monitoring is limited in its effectiveness as the country still uses a paper-based system. In 2020, only 56% of HIV patients on ART received viral load tests due to challenges around sample and result transportation, inadequate capacities to generate demand and perform viral load testing as there are no points of care for viral load testing. Viral load scale-up plans are outdated. Delays in implementing activities to strengthen health systems, such as expanding the electronic laboratory information system, are affecting programs.

Limited assurance and oversight prevent long-outstanding issues being addressed

Oversight over grant implementation is limited, both at the Country Coordinating Mechanism and the Ministry of Health. Grants are not effectively coordinated by the MoH Project Management Unit. Global Fund risk management and oversight requires improvements in terms of tackling well-known and long-outstanding challenges.

Capacity to use COVID-19 funding is low

By June 2021, only 35% of COVID-19 Response Mechanism funding had been absorbed, due to global demand on diagnostics, slow MoH procurement processes and limited commodity availability. While COVID has not negatively affected programmatic performance, movement restrictions have impacted community-based interventions.

⁴ Report of the mid-term review of the malaria strategic plan (2017-2022), 2020

⁵ [WHO Global Tuberculosis Report 2020](#)

⁶ [Audit of Global Fund Grants to the Republic of Mozambique, 10 March 2017 \(GF-OIG-17-006\)](#)

⁷ CNCS is the National AIDS Council, a sub-recipient under the MoH Global Fund grant

⁸ Study Report on the patient-related reasons for abandoning or remaining in antiretroviral therapy, August 2021

1.4 Objectives, Ratings, and Scope

The Audit's overall objective was to provide reasonable assurance on the adequacy, effectiveness, and efficiency of Global Fund Grants to the Republic of Mozambique. The specific Audit objectives are in the table below:

| Objective | Rating | Scope |
|--|--------------------------------------|---|
| Adequacy, efficiency and effectiveness of Global Fund support, including grant flexibilities and C19RM funds utilization, to address COVID-19 challenges in maintaining or scaling up the disease programs achievements. | Partially effective | Audit period: January 2019 to June 2021. Grants and implementers: NFM2 grants implemented by the Ministry of Health, Word Vision, FDC and CCS. |
| Adequacy, efficiency and effectiveness of grant design and implementation arrangements to ensure efficient and sustainable achievement of grants impact. | Needs significant improvement | |
| Adequacy, efficiency and effectiveness of the procurement and supply chain processes and systems to ensure timely availability of quality medicines, health and non-health products. | Needs significant improvement | |

The auditors visited 21 health facilities in five provinces, as well as the two central, five provincial and seven district warehouses. Details about the general audit rating classification can be found in [Annex A](#).

2. Background and Context

2.1 Overall Context

Mozambique is a low-income country, with health expenditure of US\$40/capita.⁹ The country faces significant challenges in ensuring availability of and access to health services. In 2019, two cyclones wreaked major devastation, putting much of the population in need of humanitarian assistance.

Mozambique has 1,886 health facilities in 11 provinces, 53 municipalities and 161 districts. 88% of facilities are public and 12% are private. There is a significant gap of human resources for health (6 health workers per 10,000 population in 2018 below the recommended benchmark of 23 health workers per 10,000 populations).¹⁰

| | |
|--|-------------------|
| ▶ Population | 31 million |
| ▶ GDP per capita | US\$449 (2020) |
| ▶ Transparency International Corruption Perception Index | 149 of 180 (2020) |
| ▶ UNDP Human Development Index | 181 of 189 (2020) |
| ▶ Government spending allocated to health | 9% (2019) |

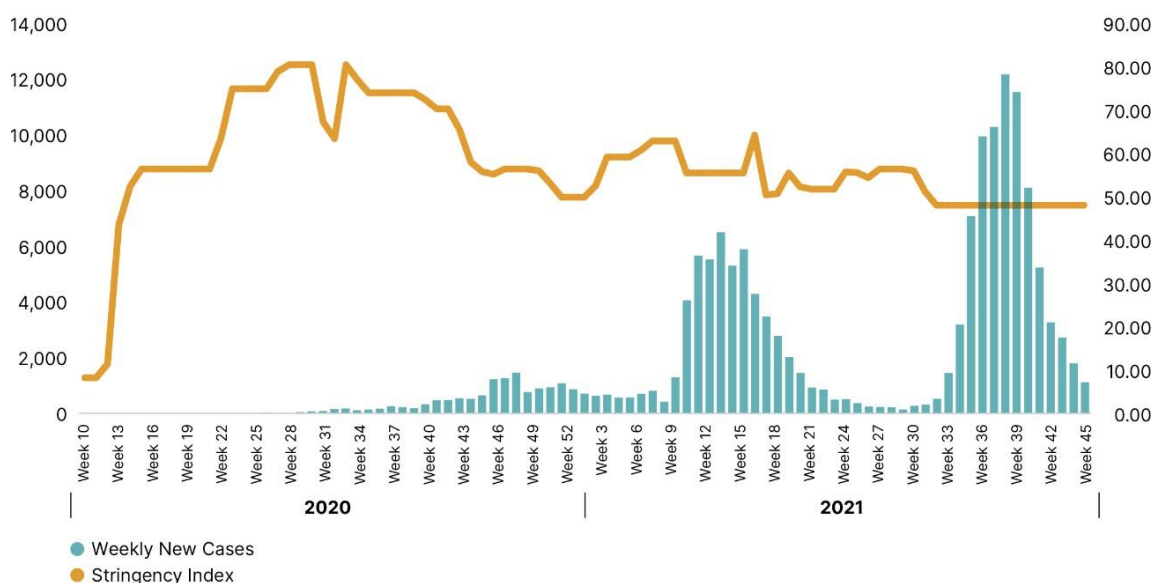
2.2 COVID-19 situation

Since April 1st, 2020, Mozambique has put in place stringent containment measures to slow the spread of the virus, such as movement restrictions and restrictions on social gatherings, commercial activities and government working schedules.¹¹ The Ministry of Health issued specific guidelines to allow the continuation of activities at health care facilities.

COVID-19 statistics (16.12.21)

- Cases – 155,494
- Active cases – 3,534
- Recovered – 150,015
- Deaths – 1,946

COVID-19 Cases and Stringency Index in Mozambique



⁹ WHO Global Health Expenditures Database, accessed on November 30th, 2021

¹⁰ Service Availability and Readiness Assessment 2018, accessed on October 15th, 2021

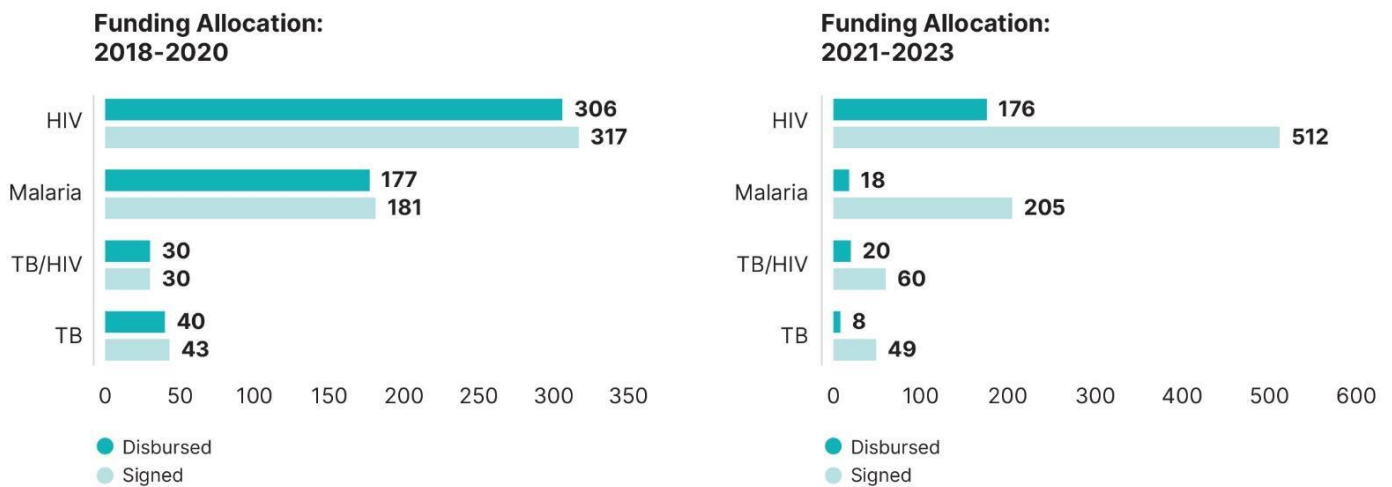
¹¹ Mozambique: Coronavirus Pandemic Country Profile, accessed on December 16th, 2021

2.3 Global Fund Grants in Mozambique

Since 2002, the Global Fund has signed over US\$ 2.2 billion and disbursed over US\$ 1.6 billion to Mozambique. Active grants total US\$927 million for the January 2021 to December 2023 implementation period. Full details on the grants can be found at [the Global Fund's Data Explorer](#).

The Ministry of Health of Mozambique (MoH), *Fundação para o Desenvolvimento da Comunidade* (FDC), *Centro de Colaboração em Saúde* (CCS) and World Vision International in Mozambique are the Principal Recipients for Global Fund grants. The Ministry of Health implements the grants through national programs for the three diseases. Each disease program is implemented by a government implementer and a non-governmental organization.

Figure 1: Funding allocations, prior and current funding cycles (as of November 2021)¹²



Approximately 79% of grant funding goes towards procuring medicines and health products. The Ministry of Health has contracted *Central de Medicamentos e Artigos Médicos* (CMAM)¹³ as its sub-recipient for the receipt and distribution of HIV, TB and Malaria commodities, and most recently for COVID-19 commodities (PPE and Rapid Diagnostics).

COVID-19 Funding

In 2020, Mozambique was awarded US\$60.5 million of C19RM funding as well as US\$2.5 million in grant flexibilities. These funds were split across the four Principal Recipients. 74% of funding was geared towards reinforcing the national COVID-19 response. In 2021, additional funding of US\$100.5 million was awarded.

¹² [Global Fund Data Explorer](#) accessed on December 16th, 2021

¹³ CMAM is a legal entity established by the Government which is responsible for procuring, storing, and distributing medicines and health products.

2.4 The Three Diseases



HIV/AIDS

2.1M people are living with HIV, of whom 81% know their status. Among identified PLHIV, 68% were on treatment and 55% had viral load suppressed in 2020.¹⁶

Annual new infections decreased by 35% from 150,000 in 2010 to 98,000 in 2020.¹⁷

AIDS-related deaths decreased by 42% from 65,000 in 2010 to 38,000 in 2020.¹⁸



Malaria

Malaria cases increased by 69% from 6.4M in 2015 to 10.8M in 2019.¹⁹

Malaria deaths per 100,000 population dropped significantly from 6/100,000 population in 2016 to 2.5/100,000 population in 2019.²⁰

11.9M LLINs were distributed in 2020 against a target of **11.2M**.²¹

Proportion of population using an insecticide-treated net among those with access increased from 54% in 2015 to 82% in 2018.



Tuberculosis

Mozambique is among the **30 WHO high burden list for TB, TB/HIV co-infection and multi-drug resistant-TB**.²²

TB incidence of **368 cases per 100K**.²³

Increase in TB case notification by 12% from 86,515 in 2017 to 97,093 in 2020.²⁴

TB treatment coverage 84% (2020) and **success rate** was 93% for new cases in 2019.²⁵

¹⁴ [UNAIDS Global Update 2021 Mozambique](#), accessed on November 30th, 2021

¹⁵ Idem

¹⁶ Idem

¹⁷ [Malaria Elimination 8 – Mozambique Country Profile](#) accessed on November 30th, 2021

¹⁸ Global Fund Progress Update and Disbursement Report July-Dec 2020.

¹⁹ Idem

²⁰ [WHO list of high burden countries for TB, HIV/TB and MDR TB](#) – Published: June 17th, 2021, accessed on November 30th, 2021

²¹ [WHO Mozambique Profile Data](#), accessed on November 30th, 2021

²² [WHO Global Tuberculosis Report 2021](#)

²³ TB/HIV Funding Request Allocation Period 2020-2022

3. Portfolio risk and performance snapshot

3.1 Portfolio Performance

| Global Fund grants in Mozambique Implementation Period (2018-2020) | | | | | Grant ratings | | | | | |
|---|---------------------|---|-------------------------|------------|---------------|----------|----------|----------|----------|----|
| Grant number | Principal Recipient | Total Budget Amount (USD) | Absorption Dec 2020 (%) | Jun 2018 | Dec 2018 | Jun 2019 | Dec 2019 | Jun 2020 | Dec 2020 | |
| HIV | MOZ-H-MOH | Ministry of Health | USD 288,527,246 | 94% | A2 | A2 | B1 | A1 | A1 | A2 |
| HIV | MOZ-H-FDC | Fundacao p/ o Desenvolvimento da Comunidade | USD 28,748,896 | 101% | C | B1 | B1 | B1 | B1 | B2 |
| HIV/TB | MOZ-C-CCS | Centro de Colaboracao em Saude | USD 30,372,845 | 97% | B1 | B2 | B1 | A2 | B1 | B1 |
| Malaria | MOZ-M-MOH | Ministry of Health | USD 134,521,718 | 98% | A2 | A2 | A2 | A1 | A2 | A1 |
| Malaria | MOZ-M-WV | World Vision | USD 46,051,309 | 87% | A1 | A1 | A1 | A1 | A1 | A1 |
| TB | MOZ-T-MOH | Ministry of Health | USD 42,727,425 | 97% | A2 | B1 | B1 | B1 | B1 | B1 |
| TOTAL | | | USD 570,949,440 | 95% | | | | | | |

3.2 Risk Appetite

The OIG compared the Secretariat's aggregated assessed risk levels of the key risk categories covered in the audit objectives for the Mozambique portfolio with the residual risk that exists based on OIG's assessment, mapping risks to specific audit findings. The full risk appetite methodology and explanation of differences are detailed in [Annex B](#).

Risk Appetite

| AUDIT AREAS | RISK CATEGORY | SECRETARIAT AGGREGATED ASSESSED RISK LEVEL (July 2021) | ASSESSED RESIDUAL RISK, BASED ON AUDIT RESULTS | RELEVANT AUDIT ISSUES |
|--|---------------------------|--|--|-----------------------|
| COVID's impact on program implementation | Program quality – HIV | Very High | Very High | Finding 4.2 |
| | Program quality – TB | High | High | Finding 4.2 |
| | Program quality – Malaria | High | High | Finding 4.2 |
| Grant design and implementation arrangements | In-Country Governance | Moderate | High | Finding 4.4 |
| Procurement and supply chain management | Procurement | Low | Low | Finding 4.1 |
| | In-country supply chain | Very High | Very High | Finding 4.1 |

4. Findings



4.1 Delayed structural reform of the supply chain and ineffective controls are affecting commodity availability

The 2013 national strategic plan for pharmaceutical logistics is yet to be fully implemented, leading to structural and operational gaps. Inadequate inventory management and limited infrastructure and storage capacity are affecting commodity traceability, contributing to expiries and stock-outs at all levels.

81% (US\$460 million) of grant funding to Mozambique goes towards procuring and distributing health products. Most Global Fund-financed commodities are procured using the organization's Pooled Procured Mechanism. The central medical store (CMAM) is responsible for storage and warehousing at the central level and for distribution to provincial levels and central hospitals. Provinces and districts manage warehouses at their respective levels, and the distribution between these levels and to health facilities.

Strategic and structural supply chain gaps

Acknowledging the need to clarify the accountability and ownership of various supply chain actors, and to strengthen the visibility and availability of commodities until the last mile, a Strategic Plan for Pharmaceutical Logistics (PELF) was developed in 2013. After eight years, progress has been limited to the expansion and renovation of central warehouses, the creation of five intermediary warehouses, outsourcing distribution for last-mile delivery and the development of various studies on distribution network optimization. The pace of progress has been limited by a lack of political endorsement from central and provincial authorities in support of the plan. Key structural gaps remain in terms of roles and responsibilities, logistic systems and warehousing capacity.

One major component of PELF was to evolve CMAM's role in managing the supply chain system until the last mile, including distribution and data management. The plan remains to be fully implemented alongside decentralization policies that emphasize provincial autonomy of managing resources. As a result, CMAM continues to monitor the supply chain only until the provincial level, with no control or monitoring over district and health facilities level.

Mozambique's Logistic Management Information System (LMIS) remains fragmented across various systems, hindering interoperability and the use of real-time data for decision making.²⁴ The LMIS does not interface with case management systems to triangulate logistics and patient data. LMIS software upgrades have been supported by other donors, however these were not accompanied by matching investments in hardware, maintenance, training and supervision. The health unit warehouse information system was not working in three of 16 Health Facilities visited, due to hardware breaking down.

One focus area for PELF is to develop intermediary warehouses, eliminating province and district warehouses to shorten the distribution chain. Thus far, only five of the planned thirty warehouses have been constructed, and only two are operational²⁵ and distributing directly to health facilities.

Operational gaps are causing stock outs and expiries

Delays in PELF's implementation have contributed to inadequate warehouse management and controls over inventory and logistics data. This has contributed to insufficient traceability of health products at all levels and to pervasive expiries and stock-outs.

²⁴ MACs (Central warehouses), SIMAM (Provincial and District warehouses) and SIGLUS (Health Unit Warehouse). Other systems used by CMAM includes SIP (Sistema de Informacoes de Procura) and "Pipeline" to support the planning and pipeline monitoring of health products

²⁵ Vilankulo (2018) and Mokuba (2021)

Poor warehouse management: The Zimpeto central warehouse holds up to three times its authorized capacity. Up to 50% of products sampled were stored in warehouse corridors, entry or exit areas, in a manner that did not allow for stock verification.²⁶ Warehouses at all levels, included new/renovated ones, do not have insurance policies, resulting in the risk of uninsured loss. Due to two cyclones in 2019, commodity losses of US\$2.6 million were waived by the Global Fund, while another loss (US\$1.2 million) due to fire was paid by the Government.

Inadequate inventory controls: The CMAM lacks a barcode system, and receipt of commodities is still inputted manually, resulting in inaccuracies. As a result, less than 30% of health commodities delivered through the Global Fund's Pooled Procurement Mechanism could be reconciled (based on batch number) with CMAM records. Similarly, no COVID-19 diagnostics managed by *Instituto Nacional de Saude* (INS)²⁷ could be traced at the lowest level, as INS does not have a system that records diagnostics data distributed to laboratories.

No controls over logistics data: Procurement and supply specialists at national disease programs have no direct access to relevant stock data (stock on hand, orders received and filled). This hinders operational-level monitoring and redistributing stock to address impending stock-outs and expiries at facility and provincial levels. A technical working group that includes CMAM and National Programs exists to monitor medicine distribution and consumption, but has met irregularly (e.g. for TB, twice in 2021).

There are discrepancies between consumption and patient data across the three diseases. For example, the number of patients served only accounted for 60-70% of Artemisinin-based combination therapy (ACT) used,²⁸ and 47% in the case of the TB treatment, INH prophylaxis.²⁹ This has been confirmed by OIG visits to health facilities, where discrepancies between consumption and patient data for ACTs and Malaria Rapid Diagnostic Tests averaged 34% and 65% respectively, and were as high as 142%.

Inadequate inventory management, lack of controls over stock levels and poor regimen transition planning have led to expiries and stock-outs of health commodities:

- *Expiries:* Expired health commodities were noted throughout the supply chain, and are caused by multiple factors:
 - At Central and province level, there were US\$7.7 million worth of expiries for HIV, TB and Malaria commodities between 2019 – 2021,³⁰ 42% of which relates to expired Nevirapine 50 mg, which is no longer utilized due to Paediatric ARV regimen transition to Lopinavir/Ritonavir. Further expiries of US\$7.6million are expected in 2022 due to the HIV regimen changing,³¹ while US\$259k of expiries were noted at 14 of the 28 sites visited. We found 24 months of stock for Bedaquiline, and 18 months for Isoniazid 300 mg drugs which will transition out of treatment. The fast pace of regimen transitions (as recommended by WHO) has resulted in a significant volume of disposed commodities. To prevent this situation reoccurring, the Secretariat has established a committee to manage regimen transitions, oversee the transition process and develop improved operational guidance. HIV and Malaria commodities are funded by multiple donors and the expiries represent approximately 2% of Global Fund-procured drugs.
 - “First Expiry, First Out” principles for distribution are not being effectively implemented due to insufficient storage space and incorrect capture of product batch details and expiry dates. In some cases, expiry dates entered into the CMAM inventory system are incorrect by up to six months. Maximum stock levels are not being respected, leading to overstocking and potential risks of expiries. There is limited coordination between grant implementers and CMAM around stock monitoring of commodities to be transitioned out.

²⁶ Warehouse over-capacity is also due to COVID 19 related commodities (not anticipated when the warehouse extension was completed in 2020) and taking more commodities to cover other central warehouses, e.g.. Beira which is undergoing renovation due to cyclone in 2019

²⁷ Instituto Nacional de Saude, sub recipient of MoH to distribute the COVID-19 diagnostics to the laboratories

²⁸ Based on quarterly and annual reports on CMAM KPIs for 2019 - June 2021

²⁹ Based on the Global fund Quantification Review over TB medicines in 2020

³⁰ Transition from Nevirapine 50mg to Lopinavir/Ritonavir 40/10mg granules in 2019

³¹ US\$ 1.6 million of HIV medicines tenofovir/lamivudine/efavirenz (TLE) and US\$ 6.0 million of Pediatric Lopinavir/ritonavir (LPV/r) 40/10mg granules

- *Stock-outs*: At Central level there are low levels of stock, and stock-outs of HIV and TB drugs lasting more than two months. Similarly, we noted stock-outs at most health facilities visited (at 15/16 facilities for Malaria commodities, 15/16 for HIV and 14/16 for TB).³² Stock-outs are impacting services: for example, for Malaria we noted instances where alternative doses of ACTs were stocked out at the same time. See Annex C for stock-out details.

Inadequate procurement planning and long turnaround timelines

In addition to the issues highlighted above, the audit noted long procurement processes for in-country procurements. Neither the Ministry of Health (MoH) nor FDC produce a plan detailing the timeline for procurements, procurement method and planned delivery dates. MoH procurement processes are complex and involve many stakeholders. As a result, procurements are frequently delayed – 84% of sampled procurements were delayed against target, on average by seven months.

Non-adherence to Global Fund procurement regulations and guidelines are causing lack of transparency, competition, and value for money

At FDC, 40% of “over-threshold” procurements sampled, totaling US\$1.9 million, did not obtain Global Fund pre-approval as required. Payments totaling US\$521k were made without any delivery notes as evidence that the items were received. The Global Fund issued a management letter in May 2021 to strengthen FDC’s procurement process (including lowering the procurement threshold that requiring Global Fund approval), however no measures have been taken by FDC to address these issues.

| |
|---|
| Agreed Management Action 1: |
| The Secretariat will work with the MOH, CMAM and relevant partners to deliver an updated institutional and operational/implementation plan to strengthen CMAM inventory management and distribution down to healthcare facility level - in line with the supply chain situation. The plan should include a roadmap to improve the traceability, warehousing and distribution of health commodities. |
| OWNER: Head of Grant Management Division |
| DUE DATE: 31 December 2023 |

| |
|--|
| Agreed Management Action 2: |
| The Secretariat will work with: <ol style="list-style-type: none"> MOH and relevant Partners to identify the most common issues leading to delay of non-health procurement processes in the MoH and develop an implementation plan with appropriate actions to reduce the delay in such processes. FDC to prepare a procurement plan for the grant, covering both health product and non-health product procurements, on which the assurance mechanisms are to be pre-agreed with the Secretariat before commencing any procurement. |
| OWNER: Head of Grant Management Division |
| DUE DATE: 31 December 2022 |

³² Stock outs at most province/district warehouses visited (7/12 facilities for Malaria commodities, 9/12 HIV commodities, and 8/12 for TB commodities).

4.2 Progress achieved on all three diseases, but improvements needed in ART retention and monitoring, MDR-TB diagnosis and treatment

While the number of HIV patients on ART has grown, Mozambique struggles to retain and monitor patients on treatment. A high proportion of TB cases are identified but there has been limited progress on GeneXpert testing and sputum test management. Malaria incidence has increased due to improvements in surveillance and reporting, but gaps remain in case management.

Despite multiple challenges including the COVID-19 pandemic, devastating cyclones, limited infrastructure and ongoing political conflict, Mozambique has achieved strong programmatic results.

At the end of 2020, 81% of people living with HIV knew their status, and initiation of treatment for people living with HIV had increased by 21% in 2020 compared to 2017. There has been a rapid expansion in the number of health facilities providing HIV care.³³ Mozambique had 98,000 new infections in 2020 compared to 120,000 in 2016, and HIV deaths have gradually decreased, from 44,930 in 2016 to 38,000 in 2020. Key population interventions have been expanded to groups including people who inject drugs, prisoners, and mobile populations, with substantial increases in targets and geographical coverage.

Mozambique has achieved high TB treatment coverage (84%) and treatment success rate (94%) among new and relapse cases. In 2019, the country introduced GeneXpert as a primary diagnostic tool. The transition to oral treatment regimen for MDR-TB treatment has also contributed to improved treatment success rates among MDR-TB patients, from 47% in 2015 to 66% in 2021.³⁴

For Malaria, incidence increased from 313/1000 population in 2016 to 372/1000 in 2019, explained by an improved surveillance and reporting system, as well as access to care and testing.

Some key issues could however hinder programmatic sustainability and achievements if not addressed:

Design and implementation of HIV retention interventions and prevention activities for key populations

(I) Poor retention and monitoring of HIV patients, low viral load coverage

The retention rate is 68% against a target of 90%³⁵ and around 75,000 PLHIV default on treatment each month.³⁶ Viral load coverage stands at 56%, far below national and grant targets.³⁷ This is due to:

- *Weaknesses in patient recording, tracking, and reporting:* Various manual systems are used at health facilities and at community level, and the lack of Unique Identifier Codes hinders tracking and monitoring of HIV cascade services and lost-to-follow-up cases. Implementation of the grant-funded electronic patient system has been delayed.
- *Outdated viral load implementation plans and operational guidelines:* 2015 guidelines are still in use and do not incorporate either the national vision on scaling up viral load testing, nor the latest WHO guidance, which includes expanding point of care viral load testing to health facilities, and the use of GeneXpert machines to achieve faster results to guide treatment.³⁸
- *No point of care viral load testing:* currently, all viral load samples are sent from health facilities to reference laboratories. Only three laboratories can perform viral load testing. As of 2021, only 75% of viral results are received back at facility level due to challenges on sampling quality and transportation. There is no plan to use GeneXpert machines for viral load testing.

A study into loss to follow-up on Antiretroviral Therapy (ART) noted that a Ministry of Health response in isolation is insufficient, as it requires a comprehensive effort from CNCS and other ministries and stakeholders to address the root causes (socio-economic, stigma, discrimination, etc).³⁹ The Ministry of Health developed and is implementing a 6-pillar

³³ from 65% of health facilities in 2015, to 81% in 2017, to 96% (1,633 facilities) in 2020 (State of HIV in Mozambique 2020).

³⁴ WHO Global Tuberculosis Report 2021

³⁵ UNAIDS Global Update 2021 Mozambique, accessed on November 30th, 2021

³⁶ National HIV Program data extract – October 30th, 2021

³⁷ 84% in 2021, 87% in 2022 and 90% in 2023 - TB/HIV Funding Request Allocation Period 2020-2022

³⁸ The Secretariat declined a new corrective action on the basis that a comprehensive Grant Condition is being implemented, whose implementation due date was 31 March 2021.

³⁹ Study Report on the patient-related reasons for abandoning or remaining in antiretroviral therapy, August 2021

ART retention approach with related guidance, but this mainly focuses on health-related responses,⁴⁰ and does not address economic barriers to treatment, stigma or discrimination. The grant Principal Recipient and Global Fund Secretariat informed us that they are working with in-country stakeholders to develop a comprehensive plan to address this issue (a requirement of the 2017 OIG audit), however there had been no progress at the time of the audit.⁴¹

(ii) Low coverage and testing strategy of HIV prevention programs for Key Populations

Prior Global Fund grants supported HIV prevention programs for female sex workers (FSWs), men who have sex with men (MSM) and adolescent girls and young women (AGYW). The current grant has expanded to include people who inject drugs, prisoners, and mobile populations, with a substantial increase in targets and geographical coverage. However, the national coverage of HIV prevention programs for KPs remains very low, e.g. 32% for MSM, below recommended global guidance (80%) to achieve impact.⁴² Various challenges hinder community HIV interventions:

- *Outdated data:* Key Population target setting, and design of community interventions, is based on 2013 IBBS data,⁴³ which impacts the appropriateness of approaches/interventions in certain places. Without an updated IBBS it will be impossible to determine the actual number of key populations in the country, to set the right targets.
- *Low HIV testing among key populations:* For the NFM-II period, only 57% of Female Sex Workers and 48% of MSM have been tested, against a target of 90%, partly because FDC is not performing community-based testing, and eligible clients are not being referred for testing.
- *Limited availability of national standards, guidelines, and operating procedures for Key Populations:* There are no standardized prevention service delivery packages for Key Populations, due to limited progress on the development of standardized normative guidance by the National AIDS Council (CNCS).

Improvements needed in multi drug-resistant TB notification

(i) Low case detection for TB and MDR TB

A significant proportion of TB (16%)⁴⁴ and MDR-TB cases (72%) are missing.⁴⁵ This is due to:

- *Inadequate GeneXpert testing coverage and network:* only 35% of new and relapse cases are bacteriologically confirmed, and only 46% are tested with GeneXpert. There are no plans specifying which health facilities should use which GeneXpert sites, and discussions are on-going about the optimal placement of GX instruments in health facilities. GeneXpert machines are poorly maintained: of the 680 modules in Mozambique, only 481 (71%) were functioning in 2020.⁴⁶
- *No comprehensive sputum transportation system:* only 45% of facilities send samples for testing within 1-2 days of obtaining them, and only 48% had a working refrigerator in 2020.⁴⁷ Cold chain challenges during transportation and storage are resulting in poor quality samples. Only 50% of grant investments to improve the sputum transport system are being utilized. The Ministry of Health Laboratory division (*Repartição Central dos Laboratórios Clínicos-RCLC*), *Instituto Nacional de Saude (INS)*⁴⁸, and the National TB Program are reviewing the sputum transportation system to expand access to molecular assay/diagnostic testing not only for TB but also other diseases.
- *Lack of private sector engagement:* 30% of TB patients first seek care from private providers (mostly traditional practitioner and pharmacist) who are minimally engaged in TB prevention and care.⁴⁹ There is no strategy/plan for private sector provider engagement.

⁴⁰ Test and Counselling support to patients, differentiated model for reach and testing services for HIV

⁴¹ [Audit of Global Fund Grants to the Republic of Mozambique, 10 March 2017 \(GF-OIG-17-006\)](#)

⁴² [2025 AIDS TARGETS – UNAIDS](#)

⁴³ The new IBBS planned under NFM-II could not be completed due to COVID and other procedural delays and expected to be completed by beginning of 2022.

⁴⁴ [WHO Global Tuberculosis Report 2021](#)

⁴⁵ [WHO Global Tuberculosis Report 2020](#)

⁴⁶ Mozambique Expansion Plan for GeneXpert 2021-2023/ Plano de Expansão de plataformas de diagnóstico Molecular da TB -GeneXpert - 2021-2023

⁴⁷ Global Fund Commissioned Report - Findings on Availability of Sputum Sample Transportation Systems and GeneXpert Test Systems, 2020

⁴⁸ Instituto Nacional de Saude, sub recipient of MoH

⁴⁹ TB/HIV Funding Request Allocation Period 2020-2022

(ii) **Inadequate case management for improving MDR-TB treatment outcomes/adherence**

Only 28% of Rifampicin-Resistant (RR)-/MDR-TB patients (1,336 out of 4,900) begin second-line treatment.⁵⁰ There is a high death rate for MDR TB patients (17%) and a significant number of patients are lost to follow-up (12%)⁵¹. Only two of the country's three reference laboratories can test for resistance to second line anti-TB drugs, resulting in long turn-around times for results and clinical treatment decisions.⁵² Insufficient programmatic management and monitoring of side effects is contributing to the suboptimal quality of MDR-TB treatment.⁵³ Mozambique plans to utilize a new diagnostic test (GeneXpert XDR), however no detailed operationalization plan yet exists. The National TB Program has not conducted any in-depth study to understand the reason for low treatment outcomes (e.g. mortality audit, loss to follow-up study).

While the malaria program is progressing well, case management could be improved

There has been a lack of progress in reducing transmission, with prevalence averaging 40% since 2011. Contributing factors include:

- *Disrupted availability of Malaria commodities:* Stock-outs of microscopy reagents lasting over a year have been observed, and there have been delays in the provision of Community Health Worker malaria kits due to the central medical store's low capacity to assemble and distribute them.
- *Limited monitoring of quality of services:* Only 20-30% of supervision visits were conducted in 2018-2021 to ensure quality of service, which may result in longstanding issues remaining unresolved (e.g. treatment of patients with ACTs without confirmed malaria diagnosis).

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| Agreed Management Action 3: |
| The Secretariat will work with Ministry of Health and relevant Partners to: a. Develop action plan to improve and strengthen the HMIS and data quality b. revise the FSW and MSM baseline data and grant coverage targets for FSW and MSM based on the latest IBBS results, and to support the update and development of standardized HIV prevention service delivery packages for the Key Population groups included in the relevant grant for the implementation period 1 January 2021 to 31 December 2023; and integrate the standardized HIV prevention service delivery packages into grant implementation. |
| OWNER: Head of Grant Management Division |
| DUE DATE: 31 December 2022 |

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| Agreed Management Action 4: |
| The Secretariat will work with the Principal Recipient, MoH and relevant Partners to: a. Develop a National Strategic Plan for private sector engagement in TB. b. Conduct an in-depth study to understand the reasons for low treatment outcomes of among MDR-TB patients in care. |
| OWNER: Head of Grant Management Division |
| DUE DATE: 30 June 2023 |

⁵⁰ WHO Global Tuberculosis Report 2020 - No significant progress compares to the result of previous audit in 2017 with 26% case detection rate

⁵¹ Global Fund Progress Update and Disbursement Report July-Dec 2020.

⁵² Detection of any second-line resistance by the SL-LPA means that MDR-TB patients should not be enrolled on the shorter regimen as this could jeopardise their treatment outcome and lead to the development of XDR-TB. Source: [Tuberculosis Diagnostics: Molecular line-probe assay for the detection of resistance to second-line anti-tb drugs \(SL-LPA\)](#)

⁵³ Interviews with the PR (NTP) and WHO, analysis of the aDSM data submitted by the PR



4.3 COVID-19 has not materially impacted programs, but low utilization of pandemic funding could hamper future progress and preparedness

Programs have not been deeply affected by the pandemic due to government measures and guidelines to ensure service continuity. Community health services have however been impacted, and adaptation measures need to be reinforced. Mozambique's capacity to absorb its COVID-19 funding allocation is low.

In response to the pandemic, Mozambique's government declared a state of emergency in April 2020 and introduced stringent measures to limit population movement. The Ministry of Health instituted flexible measures that allowed health facilities to continue providing key health services. These included quarterly dispensation of ARV for eligible patients, and psychosocial support via telephone, both of which reduced the need for clients to visit health facilities.

World Vision and the Ministry of Health, the Principal Recipients for the Malaria grants, were able to successfully implement a Long-Lasting Insecticidal Net campaign in 2020 by adjusting registration and distributing nets door to door. They used COVID-19 funding to provide Personal Protective Equipment (PPE) to community health workers who distributed the nets, in line with the Global Fund's objective of mitigating the pandemic's impact on grant programs.

The Global Fund promptly provided COVID-19 funds to Mozambique

Between July and December 2020, Mozambique was awarded three COVID-19 Response Mechanism (C19RM) awards totalling US\$60.5 million. This was in addition to US\$2.5 million in grant flexibilities approved in May 2020. 77% of funds were allocated for reinforcing the national COVID-19 response, and the remaining 23% for mitigating the pandemic's impact on HIV, TB and Malaria programs.

Mozambique was granted an additional US\$100.5 million of C19RM funding in September 2021. This includes additional human resources support, including programmatic, finance, Monitoring & Evaluation, and Procurement & Supply Management officers to increase the country's ability to manage additional funding.

Impact of pandemic on disease programs limited to date, with community activities worst affected

COVID-19 has had limited impact on programs. PPE was provided to health workers in all 16 health facilities visited across five provinces, allowing them to continue providing services. Lockdown measures slowed or halted community health activities and impacted the HIV key population program implemented by FDC. Although key population groups were unable to access community centers, and people living with HIV could not access treatment centers, community health services restarted in Q3 2020, and the programs began to recover from then on. The TB program was also impacted, as Government measures to control the pandemic's spread created access barriers between the Principal Recipient and target clients. Overall, the numbers of TB cases notified, and those notified through community-based activities, declined by 12% during Q2 2020 and by 24% at the beginning of 2021.

Low absorption of pandemic funding could impact future progress


As of June 2021, only 35%⁵⁴ of COVID-19 funds had been absorbed, partly due to global demand for commodities and limited availability of COVID-19 diagnostics, and partly due to low human resource capacity.

The Ministry of Health, which manages 84% of COVID-19 funds, faced challenges in managing additional COVID funding. As an example, one PSM specialist is in charge of managing both COVID-19 commodities for Global Fund grants as well as procurement and supply chain for the HIV grant; similarly, the MOH was not able to hire technical staff to support the implementation of COVID-19 funds. The actual need for commodities proved lower than estimated given the lower-than-expected number of COVID-19 cases,⁵⁵ with US\$30 million of the initial C19RM allocation remaining unspent at the time of the audit. Protracted processes for hiring and training health facility staff, and for procuring COVID-19 commodities, could impact grants should a new COVID-19 wave or new variants hit the country.

The Agreed Management Action to address these challenges will be covered in OIG's Audit of the COVID-19 Response Mechanism 2021.

⁵⁴ Absorption of Objective 1 to reinforcing the national COVID-19 response is 26% and absorption for Objective 2 to mitigate the pandemic's impact across the three diseases is 9%

⁵⁵ The funding request for C19RM 2020 estimated 300,000 patients who will need hospital case, while the actual number of cases in the country was 151,000 as of November 2021 (Source: [Reuters COVID-19 Tracker](#), accessed 09 December 2021).



4.4 Limited grant oversight, coordination and risk management are affecting grant implementation

There is limited oversight, coordination, and management of Global Fund programs by the Country Coordinating Mechanism and Ministry of Health. Portfolio risk management could be improved in view of emerging risks.

Limited Country Coordinating Mechanism (CCM) oversight

CCMs are national committees that submit funding applications and oversee grants on behalf of their countries. The Global Fund has sought to strengthen the Mozambique CCM through its CCM reform process, as well as through an ongoing CCM Evolution project. Despite this, CCM oversight over grants in Mozambique remains limited.

Since December 2019, the CCM has been functioning under the leadership of its vice chair as the Chair position has been vacant. There is room for improvement in terms of meeting attendance (54% attendance rate between 2019 and 2021). Only one meeting was held between the CCM's oversight and governance committee and grant Principal Recipients, which covered purely operational issues rather than strategic issues affecting grant implementation. As a result, key supply chain bottlenecks and programmatic challenges around ART retention have not been identified or discussed. Two of the three CCM committees have no workplans to guide them in performing their tasks.

Gaps in Ministry of Health oversight, coordination, and management

Oversight and effective follow-up at the Ministry of Health is limited. A Technical Council⁵⁶ is responsible for overseeing grant implementation. While some issues affecting implementation, such as sputum transportation or lengthy procurement processes, have been frequently presented to this council, no actions have been taken on addressing their root causes, or been followed up for resolution.

A Project Management Unit (PMU) under the Planning and Cooperation Directorate is supposed to coordinate and facilitate grant implementation, as well as ensuring compliance with programmatic objectives, goals, and procedures. It does not however effectively perform this role. For example, oversight over procurement and supply chain is limited to the quantification process and does not cover the supply chain challenges faced at lower levels (as detailed in Finding 4.1). In-country procurement processes are long, and no workplan tracking tools exist to monitor procurement status.

Global Fund risk management and oversight processes are limited in light of procurement, supply chain and programmatic risks

Mozambique is the second-largest Global Fund portfolio for the 2020-2022 allocation cycle, with a total active grant of US\$927 million. The Global Fund has mature processes for risk management at portfolio level; this is a continuous process performed by the Country Team with support from various second lines of defense and the Risk department. A Portfolio Performance Committee (PPC) is the primary forum for decision-making on country level risk trade-offs. The PPC conducts country portfolio reviews (CPR) that combine programmatic, financial and risk considerations to strengthen progress toward achieving impact. While risk management processes are well defined, their effectiveness is limited.

High-Impact Countries like Mozambique are expected to have a CPR annually, unless the PPC agrees to a less frequent review. Mozambique was scheduled for a CPR in 2020 but due to COVID-19 it was deprioritized. Countries that didn't have a PPC in 2020 were required to "invest their efforts towards detailing a comprehensive Risk Tracker per grant for NFM3 grants".⁵⁷ This assessment was not effectively done, as key portfolio risks were not identified. Despite 79% of Global Fund investments being allocated to the procurement and supply of health commodities, and knowing that the national procurement and supply chain management strategic plan (PELF) was affected by a lack of political endorsement, this was not identified as a key risk requiring close follow-up and prompt mitigation.

⁵⁶ The technical council members include the permanent secretary and directors of different units of the MOH such as the Director of Planning (overseeing the Program Management Unit) and Director of Public Health (oversees national disease programs)

⁵⁷ Executive Grant Management Committee Memo issued on September 2020

The Global Fund’s Integrated Risk Management module does not accurately reflect key risks, such as low ART retention and high HIV loss to follow-up (see finding 4.2), as reflected in the last CPR in October 2019. Root causes for key risks are not defined; 12% of MoH risks identified are missing root causes and mitigation actions. While Principal Recipient governance risk is rated as “moderate” for the MOH HIV grant, no root causes or mitigation actions are defined.

Where assurance activities have been defined, there is limited follow-up on risks identified by assurance providers. The lack of traceability of Global Fund commodities due to inaccurate batch monitoring at the central medical store has been flagged in several Secretariat-commissioned reviews, but has never been followed up or addressed. All five key Ministry of Health mitigation actions due in 2021 were delayed.

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| Agreed Management Action 5: |
| The Secretariat will work with the Ministry of Health to develop a plan to enhance oversight and management of the relevant Global Fund grants by defining the clear roles and responsibilities of senior management, PMU and the implementing entities, and with clearly defined reporting lines and accountabilities and timelines |
| OWNER: Head of Grant Management Division |
| DUE DATE: 31 December 2022 |

Annex A: Audit rating classification and methodology

| | |
|--------------------------------------|---|
| Effective | No issues or few minor issues noted. Internal controls, governance and risk management processes are adequately designed, consistently well implemented, and effective to provide reasonable assurance that the objectives will be met. |
| Partially Effective | Moderate issues noted. Internal controls, governance and risk management practices are adequately designed, generally well implemented, but one or a limited number of issues were identified that may present a moderate risk to the achievement of the objectives. |
| Needs significant improvement | One or few significant issues noted. Internal controls, governance and risk management practices have some weaknesses in design or operating effectiveness such that, until they are addressed, there is not yet reasonable assurance that the objectives are likely to be met. |
| Ineffective | Multiple significant and/or (a) material issue(s) noted. Internal controls, governance and risk management processes are not adequately designed and/or are not generally effective. The nature of these issues is such that the achievement of objectives is seriously compromised. |

The OIG audits in accordance with the Global Institute of Internal Auditors' definition of internal auditing, international standards for the professional practice of internal auditing and code of ethics. These standards help ensure the quality and professionalism of the OIG's work. The principles and details of the OIG's audit approach are described in its Charter, Audit Manual, Code of Conduct and specific terms of reference for each engagement. These documents help safeguard the independence of the OIG's auditors and the integrity of its work.

The scope of OIG audits may be specific or broad, depending on the context, and covers risk management, governance and internal controls. Audits test and evaluate supervisory and control systems to determine whether risk is managed appropriately. Detailed testing is used to provide specific assessments of these different areas. Other sources of evidence, such as the work of other auditors/assurance providers, are also used to support the conclusions.

OIG audits typically involve an examination of programs, operations, management systems and procedures of bodies and institutions that manage Global Fund funds, to assess whether they are achieving economy, efficiency and effectiveness in the use of those resources. They may include a review of inputs (financial, human, material, organizational or regulatory means needed for the implementation of the program), outputs (deliverables of the program), results (immediate effects of the program on beneficiaries) and impacts (long-term changes in society that are attributable to Global Fund support).

Audits cover a wide range of topics with a particular focus on issues related to the Impact of Global Fund investments, procurement and supply chain management, change management, and key financial and fiduciary controls.

Annex B: Risk appetite and risk ratings

In 2018, the Global Fund operationalized a Risk Appetite Framework, setting recommended risk appetite levels for eight key risks affecting Global Fund grants, formed by aggregating 20 sub-risks.⁵⁸ Each sub-risk is rated for each grant in a country, using a standardized set of root causes and combining likelihood and severity scores to rate the risk as Very High, High, Moderate, or Low. Individual grant risk ratings are weighted by the grant signed amounts to yield an aggregate Current Risk Level for a country portfolio. A cut-off methodology on high risks is applied (the riskiest 50% of grants are selected) to arrive at a country risk rating.

OIG incorporates risk appetite considerations into its assurance model. Key audit objectives are generally calibrated at broad grant or program levels, but OIG ratings also consider the extent to which individual risks are being effectively assessed and mitigated.

OIG's assessed residual risks are compared against the Secretariat's assessed risk levels at an aggregated level for those of the eight key risks which fall within the Audit's scope. In addition, a narrative explanation is provided every Time the OIG and the Secretariat's sub-risk ratings differ. For risk categories where the organization has not set formal risk appetite or levels, OIG opines on the design and effectiveness of the Secretariat's overall processes for assessing and managing those risks.

Global Fund grants in Mozambique: comparison of OIG and Secretariat risk levels

The updated Secretariat risk levels assessment issued in September 2021 is aligned with the OIG assessment, except as it relates to "In-country Governance" and "Procurement".

In-country Governance is composed of five sub-risks:

- i. Health sector governance
- ii. National program governance
- iii. PR Governance
- iv. Implementation effectiveness
- v. CCM Governance.

The OIG and the Secretariat have similar levels of assessed risk for (i), (iii) and (iv), but different levels of assessed risk related to (ii) and (v). The OIG is of the view that these should be rated high, considering that findings on inadequate monitoring and oversight by the CCM and PR (Ministry of Health) which have resulted in long outstanding challenges (highlighted in the report) remain unresolved.

⁵⁸ Due to COVID-19 changes in the risk landscape, the Risk Appetite framework has been revised in 2021 as approved by the Board in November 2021

Annex C: Stock-outs of commodities noted during the audit

A. Stock-outs of Health Commodities at Central Level

| | |
|----------------|---|
| HIV | <p>TLD - 30 pack: Stock levels below the minimum recommended level from Q1 2020 to Q2 2021 (except for brief periods). Majority of clients received the TLD-90 pack following adoption of multi-month dispensing and have highlighted expressed need to rationalise the supply of the product.</p> <p>UniGold: Stock levels <1 months between Mar - May 2021 attributed to late delivery of an order by CMAM (approx. 2.5 months) at a time of transition from NFM2 to NFM3.</p> |
| TB | <p>4FDC: Stock outs were reported in Q3 and Q4 2019, and thereafter long periods of low stocks below the recommended minimum from Q2 2020 to Q2 2021, except a brief period in Mar 2021. Explanation provided suggests inadequate quantification of the needs for paediatric clients >25kg was not well addressed.</p> <p>Bedaquiline 100mg: Low stock levels between Q1 2020 to Q4 2020, except for April and May 2020. The Central warehouse was effectively unable to fulfil requests from the DPMs (order fulfilment <40% in 2020). This resulting in stock outs at facilities sampled by the OIG team.</p> |
| Malaria | <p>Malaria RDT: Low stock levels in Q4 2019 (approx. 1.2 MOS) and again in Jun 2020</p> |

B. Stock-outs of Health Commodities at Province and District Warehouses

| Malaria Drugs and Commodities | No. of facilities with stock outs (%) | Overall average days of stock outs | Highest # of days for an individual stock out |
|--|---------------------------------------|------------------------------------|---|
| ACT – Artemether + Lumefantrine (AL) 20+120 mg (6) | 5 (42%) | 19 | 68 |
| ACT – Artemether + Lumefantrine (AL) 20+120 mg (12) | 5 (42%) | 21 | 67 |
| ACT – Artemether + Lumefantrine (AL) 20+120 mg (18) | 6 (50%) | 18 | 45 |
| ACT – Artemether + Lumefantrine (AL) 20+120 mg (24) | 5 (42%) | 22 | 75 |
| MRDT (Malaria Rapid Test Kits 25 Tests) | 3 (25%) | 6 | 20 |
| HIV Drugs and Commodities | | | |
| Tenofovir/Lamivudine/Dolutegravir(TLD) 300mg/300mg/50mg 30s | 3 (25%) | 11 | 29 |
| Tenofovir/Lamivudine/Dolutegravir(TLD) 300mg/300mg/50mg 90s | 3 (25%) | 22 | 54 |
| Tenofovir/Lamivudine/Efavirenz(TLE) 300mg/300mg/400mg - 30s | 1 (8%) | 10 | 20 |
| HIV Test Kits (Determine) | 5 (42%) | 9 | 28 |
| HIV Test Kits (Uni-gold) | 6 (50%) | 8 | 39 |
| TB Drugs | | | |
| RHZE 150 mg/75mg/400mg/275 mg | 6 (50%) | 22 | 71 |
| Bedaquiline 100 mg tablets | 8 (67%) | 38 | 171 |
| Isoniazid 300mg | 6 (50%) | 19 | 74 |
| GX Cartridges | 0 (0%) | - | 0 |
| C19 Commodities | | | |
| Panbio COVID-19 Ag RDT 25 tests | 1 (8%) | 15 | 23 |

C. Stock-outs of Health Commodities at Health Facilities

| Malaria Drugs and Commodities | No. of facilities with stock outs (%) | Overall average days of stock outs | Highest # of days for an individual stock out |
|--|---------------------------------------|------------------------------------|---|
| ACT – Artemether + Lumefantrine (AL) 20+120 mg (6) | 12 (75%) | 28 | 88 |
| ACT – Artemether + Lumefantrine (AL) 20+120 mg (12) | 13 (81%) | 29 | 119 |
| ACT – Artemether + Lumefantrine (AL) 20+120 mg (18) | 13 (81%) | 35 | 133 |
| ACT – Artemether + Lumefantrine (AL) 20+120 mg (24) | 14 (88%) | 21 | 90 |
| MRDT (Malaria Rapid Test Kits 25 Tests) | 8 (50%) | 8 | 23 |
| HIV Drugs and Commodities | | | |
| Tenofovir/Lamivudine/Dolutegravir(TLD) 300mg/300mg/50mg 30s | 6 (38%) | 20 | 98 |
| Tenofovir/Lamivudine/Dolutegravir(TLD) 300mg/300mg/50mg 90s | 7 (44%) | 33 | 147 |
| Tenofovir/Lamivudine/Efavirenz(TLE) 300mg/300mg/400mg - 30s | 3 (19%) | 120 | 467 |
| HIV Test Kits (Determine) | 11 (69%) | 11 | 52 |
| HIV Test Kits (Uni-gold) | 12 (75%) | 15 | 89 |
| TB Drugs | | | |
| RHZE 150 mg/75mg/400mg/275 mg | 13 (81%) | 25 | 332 |
| Bedaquiline 100 mg tablets | 7 (44%) | 34 | 91 |
| Isoniazid 300mg | 10 (63%) | 24 | 101 |
| GX Cartridges | 1 (6%) | 17 | 32 |
| C19 Commodities | | | |
| Panbio COVID-19 Ag RDT 25 tests | 1 (6%) | 20 | 36 |