Global Fund Grants in the
Republic of Madagascar

GF-OIG-22-018
25 November 2022
Geneva, Switzerland
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Table of Content

1. Executive Summary 3
2. Background and Context 6
3. Portfolio Risk and Performance Snapshot 9
4. Findings 12
1. Executive Summary

1.1 Opinion

Madagascar has a challenging environment due to its exposure to recurring natural disasters, successive waves of epidemics, hard to access environment and low human capital. The country continues to struggle to achieve expected impact to reduce mortality and incidence for HIV and malaria, although at least 70% of grant performance targets are met on average. For the past 10 years, tuberculosis (TB) incidence and related mortality remains stable. Despite a significant increase of patients on antiretroviral treatment (ART) in the past three years, coverage remains the lowest in Africa (15%). This is due to weaknesses in the design and implementation of HIV testing, recurring stock-out of HIV test kits and misalignment of grant indicators. As a result, HIV related mortality and new infections have continued to rise over the years in contrast with expected grant impact. Underperformance on HIV testing in the country was raised during the OIG audit in 2018.

Regarding malaria, both incidence and mortality have risen in 2021. The OIG noted limited planning and oversight of LLIN mass campaign distribution as a contributing factor to increased incidence. Significant improvement is needed in HIV and malaria grant design and implementation to ensure grant objectives are achieved.

Key health commodities for the three diseases were continuously available during the implementation period with few exceptions. The OIG noted, however, limited assurance over the quality of health products due to sub-optimal storage conditions at peripheral levels and lack of in-country quality controls. There is also a risk of expiries of antiretroviral medicine and products, amounting to US$2 million procured through C19RM funds, due to low demand from health facilities. Significant improvement is needed in the adequacy and effectiveness of processes to ensure continuous availability of quality-assured commodities across the supply chain.

The Global Fund has instituted safeguard measures for government implementers, including the use of fiscal agent services and a zero cash policy to reduce exposure to fiduciary and financial risk. Although no material non-compliant expenditures were identified, the inadequate design of existing procurement procedures and recurring non-compliance indicates the need to strengthen oversight and internal control systems. Significant improvement is needed to ensure the adequacy and effectiveness of internal controls to mitigate financial and fiduciary risks.

1.2 Key Achievements and Good Practices

Continuous availability of key health products

Except for HIV test kits and first line antimalaria drugs that experienced stock-outs, key antiretroviral medicines for HIV treatment, first-line anti-TB drugs as well as malaria rapid tests were continuously available at both central and peripheral levels in the current implementation period (from 2021 to April 2022). In the case of malaria, more than 98% of patients with suspected malaria who came to health facilities in 2020 and 2021 were diagnosed thanks to the availability of rapid test kits.

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1 Latest devastating cyclone in Madagascar February 2022
3 Development plan for health sector in Madagascar 2020 - 2024
4 Development plan for health sector in Madagascar 2020 - 2024
5 UNAIDS fact sheets – treatment cascade (accessed on 20 July 2022)
6 UNAIDS Madagascar data (accessed on 1 September 2022)
7 LLIN: Long Lasting Insecticidal Nets
8 Under this objective, procurement refers to the procurement of non-health products and services. Risks around this type of procurement are classified in the Global Fund Integrated Risk Management (IRM) module under the financial and fiduciary risk category.
An example of effective partnership

The Global Fund and two other development partners share the services of a Program Management Unit (PMU) known as the Unité de Coordination des Projets (UCP) in the Ministry of Health. Due to the high financial and fiduciary risks in Madagascar, a fiscal agent, co-financed by the Global Fund and one of the partners, is tasked with overseeing the management of respective grants. The current arrangement allows the PMU to oversee RSSH activities financed by the three partners, reducing the risk of duplicated efforts. For greater efficiencies, some PMU staff are also assigned across grants from the three partners.

1.3 Key Issues and Risks

Limited impact for HIV investment despite progress made in the past three years

Since 2005 the Global Fund has disbursed nearly US$72 million\(^1\) to support the fight against HIV in Madagascar, making it the main financial contributor to the country’s HIV response. Yet significant progress against impact targets has not been achieved to date. The rate of HIV mortality and new HIV infections has continued to rise over the past 10 years: 480% and 313% respectively from 2010 to 2021.\(^1\)

While the country has managed to increase the number of people living with HIV who know their status by 73% from 5,506 in 2018 to 9,300 in 2021, the impact is insufficient. Poor progress can be attributed to inadequate geographical coverage of testing interventions, recurring stock-out of HIV test kits, misalignment of testing indicators with the differentiated testing approach and lack of reliable and recent data for decision-making.

There is a lack of consensus on the current approach to the HIV response in Madagascar between the Global Fund’s Technical Review Panel and in-country stakeholders, including the Ministry of Health and technical partners. This makes it difficult to determine whether the current prevention and testing strategy, which focuses mainly on key populations, is the right one.

Limited oversight over LLIN mass campaign distribution

The Global Fund Secretariat has provided limited assurance over LLIN mass campaign distribution, although this activity accounts for 50% of the malaria grant budget. The review of the 2021 mass campaign has shown non-compliance to the World Health Organization (WHO) recommendation of one bed net for two people.\(^2\) This could affect their use rate and the limited reliability of the registration process, which registered 26% more people compared to the estimated population.

The previous 2018 mass campaign still has a pending unsupported payment (US$0.59 million) due to lack of evidence of cash collection by beneficiaries. The Ministry of Health has been liaising with the contracted local bank for relevant supporting documentation, but this has taken too long.

Risk of expiries of HIV and COVID-19 related products

The lack of timely distribution of health products procured through C19RM funds and ARVs put these products at risk of expiry. Antiretroviral medicines worth US$0.11 million (20% of total antiretroviral medicines procured in 2021) could expire in the next 12 months due to low demand from health facilities. During the audit, laboratory items amounting to US$0.3 million received in November 2021 had expired. COVID-19 related products amounting to US$1.6 million are kept in sub-optimal storage conditions and are also at risk of expiry. Health commodities subject to expiry represents 15% of the cost of health products in the C19RM grant.

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\(^9\) Resilient and Sustainable Systems for health (RSSH)
\(^10\) The Global Fund data explorer
\(^11\) UNAIDS Madagascar data [accessed on 1 September 2022]
\(^12\) WHO recommendations for achieving and maintaining universal coverage with LLIN – page 2

25 November 2022
Geneva, Switzerland
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 Madagascar. Specifically, the objectives in the table below were assessed.

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Rating</th>
<th>Scope</th>
</tr>
</thead>
</table>
| HIV and malaria grant design and implementation to ensure grant objectives are achieved. | Need significant improvement | Audit period: January 2019 to December 2021  
Grants and implementers: The audit covered the Principal Recipients and sub-recipients of Global Fund supported programs.  
Scope exclusion: TB diagnosis and treatment |
| Controls and processes in place to ensure continuous availability of quality-assured health commodities and accountability across the supply chain. | Need significant improvement |                                                                                  |
| Implementers’ internal controls as well as assurance mechanism to mitigate financial and fiduciary risks. | Need significant improvement |                                                                                  |

Our auditors visited seven health facilities in the country, as well as warehouses of the central medical store (SALAMA). The health facilities visited account for 87% of patients using antiretroviral therapy in the largest Madagascar region, Analamanga, and 15% at the national level.

Details about the general audit rating classification can be found in Annex A of this report.
2. Background and Context

2.1 Country context

As an island in the Indian Ocean, Madagascar has in recent years been affected by natural disasters as well as by various epidemics besides COVID-19. The country is one of the major victims of climate change resulting in severe drought that has put 1.64 million people in acute food insecurity (World Food Programme Madagascar).

Although Madagascar has experienced continuous GDP growth since 2015, the rate declined in 2020 due to COVID-19. While GDP contribution to health is relatively low (3.7% in 2019), the share of government expenditure towards health meets the Abuja recommendations with health expenditure representing 15% of total government expenditure in 2017. The country has a shortage of health workers, with 0.2 physician per 1,000 people against a standard of one per 1,000.13

<table>
<thead>
<tr>
<th>Country data14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
</tr>
<tr>
<td>GDP per capita</td>
</tr>
<tr>
<td>Corruption Perception Index</td>
</tr>
<tr>
<td>UNDP Human Development Index</td>
</tr>
<tr>
<td>Gov’t spending allocated to health</td>
</tr>
</tbody>
</table>

2.2 COVID-19 situation

Since April 2020, Madagascar has taken stringent containment measures to slow the spread of the virus, including lockdowns and curfews. From the start of the pandemic until 16 July 2022, the case fatality rate has been 2.12%.15

Figure 1: COVID-19 new cases and stringency index16

COVID-19 statistics (07.16.22)
- Confirmed cases – 66,098
- Daily new cases 7d. average – 44
- Deaths – 1,403
- Recovered – 20,186

13 World Bank database, 2014
14 Sources: population, GDP, Health expenditure from World Bank Database; Corruption Perception Index by Transparency International; Human Development Index by UNDP; all accessed on 20 July 2022
15 University of Oxford Our world in data Accessed on 20 July 2022
2.3 Global Fund Grants in the Republic of Madagascar

Since 2004 the Global Fund has signed over US$551.55 million and disbursed over US$493.29 million to Madagascar. Active grants total US$113.30 million of which 47% has been disbursed for the 2021 to 2023 Funding Allocation period (January/July 2021 to December 2023/2024 implementation period). See the Global Fund’s Data Explorer for details.

Population Service International (PSI) and Catholic Relief Services (CRS) are the Principal Recipients for malaria and TB respectively, with national disease programs also implementing the grants as Sub-Recipients (PNLP for malaria and PNLT for TB). Population Service International is also a Principal Recipient for HIV (community component), together with the National HIV Secretariat SE-CNLS. Finally, the Ministry of Health is the Principal Recipient for the RSSH grant (including C19RM).

In NFM 3 grant funding, 66.7% goes towards procuring medicines, health products and equipment. The central medical store, SALAMA, is responsible for storing and distributing medicines and health products related to Global Fund grants, except for commodities procured by PSI.

*Figure 2: Funding allocations, prior and current funding cycles (as of December 2021)*

![Graph showing funding allocations](image)

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17 Global Fund Data Explorer
## 2.4 The Three Diseases

<table>
<thead>
<tr>
<th>HIV / AIDS (2021)</th>
<th>TUBERCULOSIS (2020)</th>
<th>MALARIA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>60k people are living with HIV (2020)</strong> of whom 15% know their status. Among identified people living with HIV (PLHIV) who know their status, 97% were on treatment.</td>
<td><strong>66,000 estimated TB cases, of which 55% are notified.</strong>&lt;br&gt;<strong>TB incidence is high and stable over the years, with only a slight 1.2% reduction since 2010, from 241 to 238 per 100,000 people in 2020.</strong>&lt;br&gt;1.6% of TB patients who know their status are HIV positive, of which 41% are on ARV.</td>
<td>With a <strong>significantly growing incidence</strong> (133.5 per 100,000 people, +216% since 2010), malaria is <strong>endemic</strong> across the country. There were <strong>3.6m estimated malaria cases</strong> in 2020 (over 4 times the 2010 figure), with 1.7m cases treated with ACT (vs. 893k in 2018). Estimated <strong>malaria-related deaths</strong> grew by 328%, from 2,208 in 2010 to 9,459 in 2020. <strong>Climate change</strong> related floods and resistance to LLIN insecticide are contributing to increased incidence and deaths.</td>
</tr>
<tr>
<td><strong>Annual new infections increased by 313%</strong> from 2,300 in 2010 to 9,500 in 2021.</td>
<td><strong>TB treatment success rate</strong> has remained close to the WHO target of 90% since 2010 (81% vs 82% of new TB cased in 2019). <strong>In 2020, there were 73 MDR/RR-TB reported cases.</strong></td>
<td><strong>Source:</strong> WHO data (accessed on 20 July 2022)</td>
</tr>
<tr>
<td><strong>AIDS-related deaths increased by 480%</strong> from 500 in 2010 to 2,900 in 2021.</td>
<td></td>
<td><strong>Source:</strong> Malaria World Report 2021</td>
</tr>
<tr>
<td><strong>Low PMTCT coverage</strong>, with only 15% of pregnant women, tested HIV positive, receiving ARVs in 2021.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>While Madagascar has a <strong>prevalence of 0.4%</strong> in the adult population, <strong>higher prevalence levels are seen among key populations:</strong> 14.9% among men who have sex with men, 8.5% among people who inject drugs and 5.5% among sex workers.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| **Source:** UNAIDS – Madagascar fact sheet (accessed on 20 July 2022) | **Source:** WHO data (accessed on 20 July 2022) | }
### 3. Portfolio Risk and Performance Snapshot

Historically, Global Fund grants in the country have performed well against targets, as shown below.

#### NFM 2 Allocation (2019-2020)

<table>
<thead>
<tr>
<th>Comp</th>
<th>Grant</th>
<th>Principal Recipient</th>
<th>Grant Signed Amount (US$)</th>
<th>Grant Disbursed Amount (US$)</th>
<th>Absorption %</th>
<th>Jun - 18</th>
<th>Dec - 18</th>
<th>Jan - 19</th>
<th>Dec - 19</th>
<th>Jun - 20</th>
<th>Dec - 20</th>
<th>Jun - 21</th>
</tr>
</thead>
<tbody>
<tr>
<td>🌈</td>
<td>MDG-M-MOH*</td>
<td>Ministry of Public Health of Madagascar</td>
<td>12,454,692</td>
<td>9,753,671</td>
<td>78%</td>
<td>B1</td>
<td>B2</td>
<td>B1</td>
<td>B1</td>
<td>B1</td>
<td>B1</td>
<td>B1</td>
</tr>
<tr>
<td>🌈</td>
<td>MDG-M-PSI</td>
<td>Population Services International (PSI)</td>
<td>65,988,446</td>
<td>64,405,249</td>
<td>98%</td>
<td>B1</td>
<td>B1</td>
<td>B1</td>
<td>A2</td>
<td>A2</td>
<td>A2</td>
<td>B1</td>
</tr>
<tr>
<td>🌈</td>
<td>MDG-H-SECNLS</td>
<td>Sécrétariat Exécutif du Comité National de Lutte Contre le VIH/SIDA (SECNLS)</td>
<td>10,910,964</td>
<td>7,822,885</td>
<td>72%</td>
<td>B1</td>
<td>B1</td>
<td>B1</td>
<td>A1</td>
<td>B1</td>
<td>A2</td>
<td>N/A</td>
</tr>
<tr>
<td>🌈</td>
<td>MDG-H-PSI</td>
<td>Population Services International (PSI)</td>
<td>6,321,686</td>
<td>5,938,521</td>
<td>94%</td>
<td>B1</td>
<td>A1</td>
<td>B1</td>
<td>A2</td>
<td>B2</td>
<td>B1</td>
<td>N/A</td>
</tr>
<tr>
<td>🌈</td>
<td>MDG-T-ONN</td>
<td>Office National de Nutrition</td>
<td>9,746,072</td>
<td>9,488,082</td>
<td>97%</td>
<td>B1</td>
<td>B1</td>
<td>B1</td>
<td>B1</td>
<td>B1</td>
<td>B1</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**TOTAL** | 105,421,860 | 97,408,408 | 92% |
**NFM 3 Allocation (2021-2023)**

<table>
<thead>
<tr>
<th>NFM3</th>
<th>Grant</th>
<th>Principal Recipient</th>
<th>Grant Signed Amount (US$)</th>
<th>Grant Disbursed Amount (US$)</th>
<th>% Disbursed from Signed</th>
<th>Jun -21</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MDG-S-MOH**</td>
<td>Ministry of Public Health of Madagascar</td>
<td>35,326,291</td>
<td>13,463,325</td>
<td>38%</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>MDG-M-PSI</td>
<td>Population Services International (PSI)</td>
<td>44,370,650</td>
<td>5,659,421</td>
<td>13%</td>
<td>B1</td>
</tr>
<tr>
<td></td>
<td>MDG-H-SECNLS</td>
<td>Sécrétariat Exécutif du Comité National de Lutte Contre le VIH/SIDA (SECNLS)</td>
<td>12,717,804</td>
<td>3,704,814</td>
<td>29%</td>
<td>B1</td>
</tr>
<tr>
<td></td>
<td>MDG-H-PSI</td>
<td>Population Services International (PSI)</td>
<td>5,800,000</td>
<td>2,508,814</td>
<td>43%</td>
<td>B1</td>
</tr>
<tr>
<td></td>
<td>MDG-T-CRS</td>
<td>Catholic Relief Services (CRS)</td>
<td>15,094,285</td>
<td>6,717,350</td>
<td>45%</td>
<td>B1</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>113,309,031</strong></td>
<td><strong>32,053,724</strong></td>
<td><strong>28%</strong></td>
<td></td>
</tr>
</tbody>
</table>

* NFM 2 Malaria MOH grant includes the RSSH component.
**RSSH grant for NFM3 includes C19RM grant (US$ 23.098 million)
3.1 Risk Appetite

The OIG compared the Secretariat’s aggregated assessed risk levels in key categories covered in the audit objectives with the residual risk 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.

<table>
<thead>
<tr>
<th>Audit area</th>
<th>Risk category</th>
<th>Secretariat aggregated assessed risk level (March 2022)</th>
<th>Assessed residual risk based on audit results</th>
<th>Relevant audit issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programmatic and Monitoring &amp; evaluation</td>
<td>HIV: program quality</td>
<td>Moderate</td>
<td>High</td>
<td>4.1</td>
</tr>
<tr>
<td></td>
<td>Malaria: program quality</td>
<td>Moderate</td>
<td>Moderate</td>
<td>4.2</td>
</tr>
<tr>
<td>Procurement and supply chain management</td>
<td>In-country supply chain</td>
<td>Very high</td>
<td>High</td>
<td>4.3</td>
</tr>
<tr>
<td>Financial assurance framework/mechanism</td>
<td>Grant-related fraud and fiduciary risks</td>
<td>High</td>
<td>High</td>
<td>4.4</td>
</tr>
</tbody>
</table>
4. Findings

4.1 Limited impact for HIV investment despite progress made in the past three years

AIDS-related deaths and new HIV infections remain high despite progress in recent years. Finding new HIV cases remains a challenge, and access to HIV care and restrictions on HIV care guidelines affects treatment retention for people living with HIV.

Madagascar implements an HIV differentiated approach, which has resulted in significant improvement in the HIV treatment cascade since the last OIG audit in 2018. The number of people living with HIV who know their status has increased by 16% from 5,506 in 2018 to 9,300 in 2021. The percentage of people living with HIV on antiretroviral treatment has more than doubled from 3,510 to 8,995 in the same period. Despite this progress, the “first 90” of the HIV treatment cascade18 (15% in 2021) in Madagascar remain the lowest in Africa and far below the average of the three UNAIDS African regions, which range from 67% to 90%.19

HIV testing and prevention activities need significant improvement to curb increasing new HIV infections

Given the low HIV prevalence (0.4% in 2021), the HIV prevention and testing strategy mainly focuses on key populations whose prevalence rate is much higher. The HIV test positivity rate20 for key populations is however five to 10 times lower than their respective prevalence rate. Persistent stock-out of Determine HIV test kits (up to six months) at both central medical store (SALAMA) and peripheral levels is one of the contributing factors of the low HIV screening results in the country.

All four antiretroviral treatment clinics visited as part of the audit did not have HIV test kits on the day of visit. The Principal Recipient in charge of HIV community-based intervention could not screen the expected number of key populations in 2021 due to the shortage of Determine HIV tests. This is mainly due to lack of buffer stock as well as use of HIV test kits for the general population, although quantified mainly for HIV key and other vulnerable populations (e.g., TB patients).

The screening of bridge populations21 was not considered in previous funding cycles, despite the high HIV transmission rate (10.2%)22 for this sub-population. Screening started, however, in 2021 in five cities in a pilot phase. Performance indicators for this activity are yet to be defined.

Another contributing factor relates to inaccurate, outdated and insufficient data to improve decision-making. Absence of regular data quality verification by the national HIV program has contributed to various inconsistencies in routine data reported. Program data is also based on UNAIDS spectrum estimates as well as surveys and studies completed long ago between 2009 and 2016. Consequently, potential changes in HIV infection rates in previously non-high burden regions are not considered in prevention activities supported by the Global Fund.

The geographical coverage of Global Fund grant supported cities for testing and prevention may not be adequate. Nine of the 46 towns currently supported by the Global Fund recorded a maximum of three HIV cases in 2021, while HIV positive cases ranging from 9 to 114 were identified in 10 districts not classified23 as high HIV burden with no

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18 The first 90 refers to the percentage of people living with HIV (PLWH) who know their status
19 UNAIDS fact sheet 2020 (accessed on 20 July 2022)
20 The HIV test positivity rate refers to the percentage of HIV positive cases out of the volume of HIV tests conducted. In the case of Madagascar, the positivity rate may be underestimated because of duplicated testing.
21 Bridge populations refer to clients, sexual partners and children of key populations
22 HIV National Strategic Plan 2018 – 2022, page 22
23 Presentation by National Aids Control programme (PNLIST) – Prevalence of HIV (April 2022)
prevention activities. The biological and behavioral survey (IBBS) scheduled in 2021 was halted for almost a year (March 2021 - May 2022) due to delayed procurement of the reagents and consumables required for the second phase of the survey. In-country stakeholders including the Ministry of Health and partners have called for a seroprevalence survey to better guide the current prevention and testing approach. However, in its review of funding requests for the current funding cycle, the Technical Review Panel24 did not find this survey appropriate due to the low HIV prevalence in the country and low HIV positivity rate among pregnant women.

Lastly, grant indicators are not aligned with the differentiated testing approach. The HIV testing indicator for key populations is defined considering the volume of tests performed. But it should focus on testing efficiency, consistent with the current screening strategy. Under these circumstances, HIV testing performance for the Principal Recipient, even if achieved, is unlikely to improve impact because the same people may have been tested multiple times.

Due to the challenges of finding new HIV cases, the rate of mortality and infection has surged in the past 10 years. The country is not likely to achieve the current grant objectives of reducing these two rates by 75%. UNAIDS had recently re-adjusted the estimated number of people living with HIV from 42,000 in 2020 to 60,000 in 2021 (50% increase) and the HIV prevalence rate from 0.3% to 0.4%.25

**Inadequate service coverage affects optimal care for PLHIV on antiretroviral treatment**

The number of HIV patients on treatment has more than doubled from 3,510 in 2018 to 8,995 in 2021.26 The target is to have 12,400 patients on treatment by end of NFM 3.27 The link from HIV testing to antiretroviral treatment is sufficient, exceeding 95%. Access to services, however, remains challenging with less than 1% of health facilities28 delivering antiretroviral treatment services. This is due to the antiretroviral treatment guidelines, which allow only the few designated “referring doctors” to provide HIV care. No plan exists to train additional doctors or implement task shifting at lower levels.

Similarly, the antiretroviral treatment guidelines do not allow multi-month antiretroviral dispensing to stable HIV patients. This could make access to HIV care easier for patients living far from antiretroviral treatment clinics. The access challenge is a main contributing factor to the high rate of lost to follow-up patients, which was 25% in 2020 and 26.4% in 2021.29

Regarding the prevention of mother to child transmission (PMTCT), up to 95% of pregnant women were screened for HIV30 in 2021. However, only 43% of identified HIV positive cases received antiretroviral treatment during their pregnancy. This is due to the antiretroviral treatment access challenge described above, the lack of functional referral system and insufficient integration of PMTCT with sexual and reproductive health care services. The low PMTCT coverage would prevent the country from reducing the current mother to child HIV transmission rate (41%)31 to below the target of 5% by 2025.

Coverage of viral load testing (30%) remains low32 due to test centralization in one laboratory. The project to decentralize viral load testing across the country by acquiring GeneXpert machines is on track.

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24 The Technical Review Panel (TRP) is responsible for evaluating funding requests submitted by beneficiary countries
25 UNAIDS Madagascar database 2020
26 UNAIDS Madagascar database 2020
27 UNAIDS Madagascar database 2020 and routine HMIS data from the National AIDS control programme (PNLIST)
28 NFM 3 HIV Performance Framework
29 The country has 2,847 health facilities (source: National development plan for health Sector Madagascar 2020 – 2024). As at end of December 2021, 119 health centers provide HIV care
30 NACP data sheet on lost to follow up, 2021 and PUDR, 2020
31 Progress Update Disbursement Report (PUDR) as at end of December 2021
32 UNAIDS fact sheet – Mother to child transmission rate (accessed on 20 July 2022)
## Agreed Management Action 1

The Secretariat will work with the Ministry of Health, development partners and program implementers to:

- Guide and prioritize HIV interventions across geographical regions and set positivity targets for key populations in each region to achieve grant targets.

- Identify and address key policy and operational barriers including task shifting to improve HIV prevention, care and treatment services.

**OWNER:** Head of Grant Management Division

**DUE DATE:** 31 October 2023
4.2 Insufficient planning, monitoring and limited accountability over the 2018 and 2021 LLIN mass campaign

The Secretariat’s oversight over the LLIN mass campaign needs strengthening to more timely identify and address potential risks to the effectiveness and accountability of this key malaria prevention activity.

Malaria case management is relatively good with 98% of suspected cases diagnosed and 85% confirmed cases treated in health facilities. Malaria related death, however, increased in 2021 by 31% \(^{33}\) compared to 2018 after a 29% decline observed in 2019 and 2020. This is attributed to the late referral of severe malaria cases and coverage gaps for malaria treatment. Malaria cases have more than doubled from 1.07 million \(^{34}\) in 2018 to 2.5 million \(^{35}\) in 2021 despite the completion of the LLIN \(^{36}\) mass campaign in 2018 and 2019.

In-country stakeholders have yet to identify the root causes of the resurgence, but some potential contributing factors may include:

- more favourable transmission dynamic (e.g., flood)
- improved reporting of cases in the health management information system
- limited effectiveness of prevention method, namely the 2018 LLIN mass campaign distribution.

The results of the 2018 mass campaign shows that 82% of households hold at least one LLIN, but use rate is low (68%). \(^{37}\) The distributed LLINs have a limited durability (two years instead of three) due to inadequate use and reduced effectiveness of the LLIN insecticide. \(^{38}\)

The OIG noted limited assurance from the Global Fund Secretariat over LLIN mass campaigns, although this activity accounts for half of the malaria grant. The Local Fund Agent (LFA) review for this activity was limited to routine expenditure controls and analysis of the campaign micro-plan. The audit identified various weaknesses around monitoring, traceability and accountability for the LLIN mass campaign.

Non-compliance with World Health Organization (WHO) recommendations

To achieve universal coverage for more effective vector control, the WHO recommends one LLIN per 1.8 people. \(^{39}\) This was not complied with in 27% (26 out of 101) of the districts served; the coverage ratio was below the recommended ratio by 21% to 39%. Similar to the 2018 mass campaign, non-compliance was due to the gap between the quantification of LLINs, which was based on estimated population, and the actual registered population which exceeded the latter by 26% in 2021.

This gap could reduce the effectiveness of vector control due to the low LLIN use rate, which was highly dependent on compliance to the recommended ratio in 2018 (from 82% when the ratio is met to 50% in non-compliant cases). \(^{40}\) No logistic mechanism was put in place to partially or totally cover districts in need of additional bed nets, although excesses of LLINs were noted in 38 other districts. A routine LLIN distribution in communities is planned to fill the gap in certain districts which record a ratio below the requirement for LLIN universal coverage.

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\(^{33}\) This refers to an increase from 927 reported deaths in 2018 (World malaria report 2021, page 260) to 1,215 deaths in 2021 (PSI-M PUDR 2021)

\(^{34}\) World Malaria Report 2021, page 238

\(^{35}\) PSI Malaria Progress Update and Disbursement Request (PUDR) as of 31 December 2021

\(^{36}\) LLIN: Long Lasting Insecticidal Net

\(^{37}\) Madagascar LLIN mass campaign distribution report, 2018, page 9

\(^{38}\) Source: PMI Vector link Madagascar: follow up study on 2018 LLIN mass campaign distribution. Various studies have shown that the LLIN continues to offer protection even if the level of insecticide has reduced: https://malariajournal.biomedcentral.com/articles/10.1186/s12936-019-2656-7

\(^{39}\) WHO recommendations for achieving and maintaining universal coverage with LLIN – page 2

\(^{40}\) Report for 2018 LLIN mass campaign distribution in Madagascar, page 9
Limited reliability of household registration process

The quality of this process is key to ensure that all populations in need are properly identified and served. Regarding the 2021 mass campaign, the registered population exceeded the projected population by 26% as noted above. The variance was not adequately investigated and explained before the distribution phase. A data quality assessment was conducted on a sample of districts, but most districts with more than 40% variance were not selected for that exercise. This calls into question the relevance of the data quality assessment and the registered population.

Unsupported expenditure amounting to US$0.59 million

The external auditor of the Project Management Unit (UCP) within the Ministry of Health identified payments made to beneficiaries without evidence of receipt of funds. The payment was made through mobile money transfer and fund collection at the bank. A proper risk assessment was not performed to identify and prevent risks of undocumented payment when these new means of payment were used for the 2018 mass campaign. An initial review during the campaign would have helped identify these irregularities at an early stage and prompt action to reduce the risk of loss.

Agreed Management Action 2

The Global Fund will work with the Ministry of Health and implementers establish an assurance framework over each key milestone of the next LLIN mass campaign.

OWNER: Head of Grant Management Division

DUE DATE: 30 September 2023
4.3 Improvement needed to ensure quality-assured health commodities and accountability across the supply chain

Most key health commodities were available in the current implementation period despite some challenges in the storage conditions. Various health products worth US$2 million are at risk of expiry or deterioration if not timely distributed.

Except for HIV Determine test kits, which experienced recurring stock-out, key first-line medicines for HIV and TB as well as malaria rapid tests were continuously available in the current funding cycle (from January 2021 to April 2022) at both central and peripheral levels. At least 25% of health facilities reported temporary stock-out of first-line antimalaria drugs mostly in the first semester of 2021 due to COVID-19 disruptions that increased delivery time for drug manufacturers.

Actions were started to improve drug availability across the in-country supply chain. For example, Madagascar does not implement last mile distribution for malaria commodities, but a plan to incentivize health facilities to collect drugs is underway. Functional committees are in place to monitor supply chain aspects for each disease program. Despite some delays, an electronic Logistic Management Information System (eLMIS) project is on track to provide real-time visibility on inventories at peripheral levels. In the meantime, health facilities have started reporting their monthly stock balances in the DHIS 2.41

One of the main challenges for the supply chain rests with drug quality, which may be affected by the sub-optimal storage conditions and the risk of commodities expiry at the central level.

Poor storage conditions and lack of quality controls and pharmacovigilance risk compromising product quality

The central medical store (SALAMA) is ISO 9001 certified for the supply of health products and has good storage conditions. At district and health facility levels, however, the storage conditions are sub-optimal due to limited storage space, overloaded warehouses, lack of temperature and humidity control, waterproofing issues, lack of storage pallets and shelves and no fire extinguisher. About 50% of district warehouses in the country were reported to have small storage capacity.42 Mitigation measures to improve storage conditions in warehouses are either not well designed or not timely implemented.

- **Delayed rehabilitation of 10 district warehouses in NFM 3**

  Although this activity was expected to be completed by the end of June 2022 and sites were identified, the procurement process to select suppliers is not yet finalized. This is due to insufficient coordination between the RSSH Principal Recipient and the Ministry of Health Directorate, which is responsible for implementing this activity.

- **Delayed payment of storage fees to district warehouses**

  The purpose of the storage fees is to help improve the services in district warehouses. At the time of the audit, less than 50% of district warehouses were paid due to delays in signing contracts with beneficiaries.

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41 DHIS 2 is a web application designed to collect, validate, and analyze health information data from health facilities and districts.
42 RSSH funding request 2020 – NFM3

25 November 2022
Geneva, Switzerland
**Limited impact of storage investment**

300 pallets and 400 shelves out of the 1,000 initially planned were procured as part of the current funding cycle, amounting to US$110,700. District and referral hospital warehouses received on average one or two of each item. Since one or two pallets/shelves only cover a small storage area in these health facilities, conditions did not significantly improve.

The lack of good storage conditions at peripheral levels could compromise the quality of health products dispensed to patients. Since the beginning of NFM 3, no in-country drug quality control has been carried out (the last one was in August 2019). This is a key step to ensure that products are of good quality for dispensing, especially considering the storage challenges.

**Risk of expiration for COVID-19 and HIV products**

Antiretroviral medicines (paediatric and second line) amounting to US$110,716 (i.e., 19.6% of total antiretroviral medicines procured in 2021) are overstocked, and therefore at risk of expiring in the next 12–18 months due to low demand from health facilities.

Regarding the C19RM related procurement, most products received since November 2021 have not been distributed at the time of the audit in June 2022, despite weekly reminders from the MOH Program Management Unit (Principal Recipient) to the MOH Secretariat responsible for developing distribution plans. COVID-19 related laboratory cartridges worth US$0.37 million expired in May 2022. Health products amounting to US$1.64 million\(^1\) at the two MOH warehouses are yet to be distributed and at risk of expiry or at risk of being improper for consumption due to bad storage condition.

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\[^1\] The quantities of products at risk of expiring are determined on the basis of their monthly average distribution and remaining shelf life.

**Agreed Management Action 3**

The Secretariat will work with the Ministry of Health, development partners and program implementers to strengthen the supply chain from the central warehouse to point of care through the development of a supply chain strategy.

**OWNER:** Head of Grant Management Division

**DUE DATE:** 31 December 2023
The Global Fund has instituted safeguard measures in grants managed by government Principal Recipients to reduce the high fiduciary and financial risk in Madagascar. Inadequate design and non-compliance to existing guidelines, however, compromise the transparency and competitiveness of procurement process as well as achieving value for money.

Principal Recipients in the portfolio includes two government organizations and two international non-government organizations: Population Services International (PSI) and Catholic Relief Services (CRS). To mitigate financial and fiduciary risks, the Global Fund together with another partner, leverage the services of a fiscal agent to oversee and strengthen capacity of government Principal Recipients. The Project Management Unit (UCP) within the MOH manages grants from the Global Fund and other development partners.

All four Principal Recipients are adequately staffed for financial and procurement management. They have a manual of procedures to address key aspects of accounting, finance, procurement and asset management. At the time of the audit, these procedures were being revised at the request of the Global Fund Secretariat.

In response to the recurring issues of financial mismanagement identified at one government Sub-Recipient (SR), the Principal Recipient of the malaria grant has enforced a zero cash policy and dismissed the finance team of this SR. A new team had yet to be recruited at the time of the audit.

As part of this audit, the OIG verified 32% of transactions incurred from 2019 to 2021 for all implementers. Although no material non-compliant expenditures have been identified, various control gaps around transparency and competition of local procurement indicate a need to increase oversight over this activity.

The OIG identified the deficiencies below in the design and effectiveness of PSI’s procurement process.

- **Procurements valued at US$0.55 million were found to be less competitive because the Principal Recipient adopted either single sourcing or request for quotation, contrary to more competitive processes in their procurement guidelines**, arguing that these were emergency procurements. In cases where the Principal Recipient adopted competitive procurement methods, the deadline given to potential bidders was short compared to similar deadlines by other implementers in Madagascar. Technical bids were also reviewed by one person, instead of a committee. This could compromise the objectivity of the procurement process.

- **Inadequate request for quotation (RFQ) process**

  The OIG had no evidence that Principal Recipient consistently requested quotations from at least five suppliers as required by their procurement manual. We found 69% (18 out of 26) of relevant procurements had less than five quotations. The Principal Recipient could not provide sufficient evidence (e.g., unclear email dispatch) to determine whether a minimum of five quotations were requested as part of the procurement process.

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44 Under this safeguard policy, the Principal Recipient makes direct payment to suppliers and beneficiaries on behalf of concerned Sub-recipients.
At CRS, the OIG noted inefficiencies in the procurement process in two cases. As a result of shortened delivery deadlines (15 days) for the procurement of 153 computers (US$75,670), 13 out of 16 bids received were rejected. The contract was then awarded to one supplier offering lower-quality computers at a similar price compared to other competitors with better offers. The supplier also delivered the products within 60 days instead of the required 15 days, without being charged a penalty as required in the contract. Similar examples were observed for the procurement of solar kits amounting to US$168,578 with CRS.

With respect to the Project management Unit (Unité de Coordination des Projets - UCP) within the Ministry of Health (MOH), the following observations affecting the objectivity of procurement process and compliance to contract arrangements were noted.

**Inadequate segregation of duties to request quotations and evaluate bids**

- A single person evaluated the technical and financial bids for 28 national tenders amounting to US$0.58 million. The procurement committee then endorsed the bid analysis without any further review.
- A single person is involved in the entire procurement process including maintaining supplier lists as well as requesting, collecting and analysing quotations and then selecting suppliers. During the period under review, this involved quotation requests amounting to US$0.20 million.

**Non-compliance with contracts arrangements**

- The 5% to 10% retention\(^4\) as required in procurement contracts for renovation and equipment purchase was not applied, amounting to US$1.51 million. In these situations, the Principal Recipient has no leverage in case of issues with products delivered in the period covered by the holdback.

Based on the allegations received and the control gaps in the procurement process, there is a high risk of collusion between implementer staff and suppliers in Madagascar. In this environment, strengthening the procurement procedures as well as tight compliance monitoring is key to ensure procurement transparency and objectivity.

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**Agreed Management Action 4**

The Secretariat will conduct a risk assessment of Madagascar non-health procurement policy and practice and update the relevant GF grant related procurement guidelines.

OWNER: Head of Grant Management Division

DUE DATE: 30 September 2023

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\(^4\) A holdback is a portion of the purchase price that is not paid at the closing date. It is meant to secure a future obligation or until a certain condition is met.
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. 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 Madagascar: comparison of OIG and Secretariat risk levels

OIG and Secretariat risk levels were aligned, except for on “HIV program quality” and “in-country supply chain.”

HIV program quality
The risk level for this component is rated "Moderate" by the Secretariat, while the OIG rates it as "High." It is made up of two sub-risks:

- HIV program design and relevance (Secretariat: Moderate // OIG: High)
- HIV program quality and efficiency (Secretariat: Very High // OIG: High)

In both cases, the OIG rating and the Secretariat rating are not aligned. The OIG rating is mainly driven by the lack of impact from the Global Fund investment even if some improvements are noted in the program results. Deficiencies noted in the design and implementation of HIV interventions suggest a higher risk to achieve expected impact.

In-country supply chain
The Secretariat has rated this component as “Very High,” while OIG rates it as “High.” It includes the following sub-risks:

- Forecasting, quantification and supply planning (Secretariat: High // OIG: High)
- Warehouse and distribution systems (Secretariat: Very High // OIG: High)
- Logistic management information system (Secretariat: Very High // OIG: Very High)

There is a misalignment for the risk rating of “Warehouse and distribution systems.” Although warehouse conditions raise serious concerns, the distribution arrangement has helped to ensure the continuous availability of key health products at health facilities - except for Determine HIV tests and antimalaria drugs (ACTs). For these two exceptions, the root cause was either beyond the control of the country (case of ACTs) or relates to an aspect of the program.