



Audit Report

Global Fund Grants to the Republic of Benin

GF-OIG-19-005
8 March 2019
Geneva, Switzerland

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The Office of the Inspector General (OIG) safeguards the assets, investments, reputation and sustainability of the Global Fund by ensuring that it takes the right action to end the epidemics of AIDS, tuberculosis and malaria. Through audits, investigations and advisory work, it promotes good practice, reduces risk and reports fully and transparently on abuse.

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Audit Report

OIG audits look at systems and processes, both at the Global Fund and in country, to identify the risks that could compromise the organization's mission to end the three epidemics. The OIG generally audits three main areas: risk management, governance and oversight. Overall, the objective of the audit is to improve the effectiveness of the Global Fund to ensure that it has the greatest impact using the funds with which it is entrusted.

Advisory Report

OIG advisory reports aim to further the Global Fund's mission and objectives through value-added engagements, using the professional skills of the OIG's auditors and investigators. The Global Fund Board, committees or Secretariat may request a specific OIG advisory engagement at any time. The report can be published at the discretion of the Inspector General in consultation with the stakeholder who made the request.

Investigations Report

OIG investigations examine either allegations received of actual wrongdoing or follow up on intelligence of fraud or abuse that could compromise the Global Fund's mission to end the three epidemics. The OIG conducts administrative, not criminal, investigations. Its findings are based on facts and related analysis, which may include drawing reasonable inferences based upon established facts.

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1. Executive Summary

1.1. Opinion

Benin has made significant progress in the fight against the three diseases, despite challenges related to program implementation. Malaria mortality reported cases dropped from 2,261 cases in 2012 to 1,646 cases in 2016. Benin adopted the new recommended treatment strategy of test-treat-retain (TTR) in 2017, bringing the number of people living with HIV (PLHIV) on treatment to 38,396, representing 55% coverage. This means that Benin has one of the highest treatment coverage levels in the West and Central Africa region (35% of treatment coverage on average). Challenges remain, however: access to quality malaria services is low, particularly at the community level; there are no appropriate national guidelines for therapeutic education for Prevention of Mother-to-Child Transmission (PMTCT); and data unavailability and inconsistencies impede effective monitoring and decision making. Program mechanisms are currently **“Partially Effective”** in providing adequate quality of services to patients, and reliable data for decision-making.

Good practices are noted in supply chain management. Health products are secured, stored and distributed in a timely manner, particularly from the central to the district level. There are challenges around quantification of health products, particularly for malaria, and around data management, despite strong commitment from partners and the Benin Government to secure the required health commodities. Issues remain around the human resources needed to manage the supply chain, and the government’s failure to fulfill its procurement commitments for malaria elimination. These challenges have resulted in tensions over health product stocks at central level as well as stockouts and disruption of patient services at facility and community levels. Improvements could be achieved through effective data supervision, timely procurement planning and strengthened staff capacity for the supply chain. This area is rated **“Partially Effective”**.

1.2. Key Achievements and Good Practices

Progress on the three diseases: The Global Fund and other stakeholders’ investments in Benin have significantly contributed to major achievements in all three diseases. The distribution of 6.5 million bed nets during the current grant as well as the provision of malaria treatment and services in all health facilities, including at community level, contributed to malaria deaths decreasing by 27% between 2012 and 2016. Furthermore, between 2011 and 2016, malaria cases confirmed through testing rose from 354,223 to 1,219,975 due to increased use of Malaria rapid diagnostic tests (RDTs). Coverage of HIV-affected patients under treatment has reached 55%, and 99% of pregnant women attending antenatal clinics are admitted to PMTCT sites, 96% being screened for HIV. With the implementation of nutritional and socio-economic support, the TB treatment success rate in Benin exceeds 89%, compared to an average of 79% in West and Central Africa.

Increased funding to improve supply chain and data quality. The Global Fund and partners have supported various supply chain initiatives. The supply chain assessment financed by USAID has helped identify options to address weaknesses in delivering health commodities¹. Annual quantification exercises are led by the National Diseases Programs and delivered through Technical Working Groups that include all technical and financing partners, including the Global Fund. Responding to human resource limitations for managing health commodities at the peripheral level, the Global Fund has earmarked funds to hire pharmacists

¹ Benin National Supply Chain Assessment – March 2016

at the district level to improve health commodities management and enhance the availability of health products at health facilities and community levels.

1.3. Key Issues and Risks

Non-compliance with procurement planning and staff capacity deficiencies: stock tensions at the central level and stock-outs at the lowest level are due to non-conformity with the consolidated procurement plan. Besides delays in delivering health commodities, whether by the Government or by partners supporting health commodities procurements, there has been a failure to mobilize the Government budget (e.g. malaria drugs supposed to be supplied by the Government were not procured in 2017 and 2018).

Furthermore, even where national supply management guidelines and procedures exist and are adequate and clear, compliance with those guidelines is rarely respected by managers at district and community levels. This affects drug availability and the treatment dispensed within communities. A key root cause is the low number of trained pharmacists (there are no pharmacists at the eight district warehouses and hospitals audited) which contributes to inconsistent supply chain management practices.

Limited quality of services: In 10 of Benin's 34 health districts, Global Fund-supported malaria treatment focuses only on communities. Treatment quality does not systematically comply with national treatment guidelines: registers show more cases treated than testing positive, negative test cases being treated, and positive test cases not being treated. The uneven quality of services dispensed is due to the limited capacity of community health workers (CHWs) who lack malaria health care-related training as well as support and supervision from health facility nurses.

For HIV, there are no appropriate national guidelines for therapeutic education, affecting the quality of guidance provided to pregnant women living with HIV. Services vary depending on each midwife's understanding, and sometimes are not even performed. In addition, there are delays in performing² tests to diagnose HIV infection in infants, affecting their health care. 28% of HIV-positive women do not give birth in PMTCT sites and 38% of children do not benefit from PCR testing within their first 60 days of life.

Community data not reported through the national system: Malaria data reported from each community is not aggregated at the health facility level due to the lack of adequate tools. Instead, the health facility sends a detailed report for each community to the health district. Limited human resources and a heavy workload at the district level (a single statistician at the district level covering on average 270 community health workers) makes it challenging to capture such disaggregated data. As a result, and as health facilities do not send community reports to upper levels directly, the reporting of community data in the national information health system is affected. The community data being reported to the Global Fund comes from a parallel system maintained by a sub-recipient (Catholic Relief Services). The design of this current reporting is not sustainable, as it is not based on the national system; it only oversees regions covered by the Global Fund and does not guarantee strong assurance over the information reported.

² 6-8 weeks is the recommended timeline for PCR completion, WHO.

1.4. Rating

Partially Effective	Objective 1: Assess the design and the effectiveness of community program management and supervision mechanisms to provide quality health care and accurate, complete and timely data for decision-making.
Partially Effective	Objective 2: Assess the design and the effectiveness of supply chain mechanisms to ensure good quality and timely medicines to patients for the three diseases.

1.5. Summary of Agreed Management Actions

In response to the findings relating to the supply chain, the Secretariat has agreed to support the Ministry of Public Health and partners to develop a logistic surveillance report on a monthly basis to monitor the stock status and the available buffer stock of malaria health commodities at central level, district zonal warehouse level and health facility level.

In response to the findings on community level data, the Secretariat has agreed to support the Ministry of Public Health and partners to update the health facilities reporting template to integrate malaria community data and to conduct a reconciliation exercise for the malaria community data reported through the national system with data reported by its sub-recipient. They will also update the therapeutic education standards and tools, and re-train midwives and health staff working in Prevention of Mother-to-Child sites in the use of these standards and tools.

2. Background and Context

2.1. Overall Context

Benin has a population of 10.9 million³, 47.3% of whom live in urban areas. Despite a substantial reliance on re-exports and transit trade with Nigeria, Benin has maintained moderate real Gross Domestic Product (GDP) growth (from 2.1% in 2015 to 2.5% in 2017), in part thanks to its tertiary (50% of GDP) and agriculture (25% of GDP) sectors.

Seeking to boost development, in 2016 the new administration adopted the “Programme d’Actions du Gouvernement” (PAG). Structured into different flagship projects, it includes a significant health care component.

Despite some progress and political willingness, development challenges remain. With 40% of the population living below the poverty line, Benin ranks 163 out of 189 in the UN Development Programme’s Human Development Index⁴.

Health sector structure

Below the central level, 12 Departments coordinate and implement the national strategy at the intermediate level. Benin is divided into 34 health districts and 77 communes, hosting 1,434 health facilities, including 45 maternity hospitals and over 900 maternity wards. The country’s health budget currently represents 4.6% of GDP and 8.3% of total public expenditure⁵, significantly below the 15% agreed at the 2001 Abuja conference.

As well as a lack of human resources (7.7 health workers per 10,000 people, compared to the WHO recommendation of 25 per 10,000), the health system faces an imbalanced geographical distribution of the workforce, with 79% of staff concentrated in urban centers⁶. Additionally, attendance rates at health centers remain low (48.9% in 2015), partly due to their poor geographical and financial accessibility.

To tackle the health problems hindering the country’s development, the Ministry of Health has developed a second National Health Development Plan for 2017-2021, incorporating the PAG, the Sustainable Development Goals and international commitments. Besides optimizing human resources, the new strategy aims to offer better quality of services through stronger partnerships and improved financing and management of the health sector.

2.2. Differentiation Category for Country Audits

The Global Fund has classified the countries in which it finances programs into three overall portfolio categories: focused, core and high impact. These categories are primarily defined by size of allocation amount, disease burden and impact on the Global Fund’s mission to end the three epidemics. Countries can also be classed into two cross-cutting categories: Challenging Operating Environments and those under the Additional Safeguard Policy. Challenging Operating Environments are countries or regions characterized by weak governance, poor access to health services, and manmade or natural crises. The Additional Safeguard Policy is a set of extra measures that the Global Fund can choose to put in place to strengthen fiscal and oversight controls in a particularly risky environment.

³ World Bank

⁴ UNDP human development indicator, 2017

⁵ Funding request SRSP August 2018

⁶ PNL 2017-2021 Strategy

Benin is:

- Focused: (Smaller portfolios, lower disease burden, lower mission risk)
- Core: (Larger portfolios, higher disease burden, higher risk)**
- High Impact: (Very large portfolio, mission critical disease burden)

- Challenging Operating Environment
- Additional Safeguard Policy

2.3. Global Fund Grants in the Country

The Global Fund has signed over US\$386 million and disbursed US\$320 million in the fight against HIV/AIDS, tuberculosis and malaria in Benin since 2004. The Global Fund has also supported health system strengthening through a US\$25 million Performance Based Funding grant from July 2014 until March 2018.

As of December 2017, the portfolio had the following active grants:

Grant number	Principal recipient	Component	Grant period	Signed amount (€)
BEN-H-PSLS/P04	Programme Santé de Lutte contre le SIDA	HIV	01-Jan-2016 to 31-Dec-2017	21,473,500
BEN-H-PlanBen/P04	Plan International, Inc.	HIV	01-Jan-2016 to 31-Dec-2017	6,604,162
BEN-M-PNLP/P02	Programme National de Lutte contre le Paludisme	Malaria	01-Jan-2016 to 31-Dec-2017	29,554,830
BEN-T-PNT/P04	Programme National contre la Tuberculose	Tuberculosis	01-Jan-2016 to 31-Dec-2017	5,805,039
BEN-S-PRPSS	Health System Performance Program	Health System Strengthening	01-Jul-2014 to 30-Jun-2017, extended until March-2018	25,661,343
Total				89,098,874

The malaria grant's main activity is the distribution of Insecticide-treated nets. The former Principal Recipient, Catholic Relief Services (an international NGO), acts as a sub-recipient managing the community programs, focusing specifically on treatment for children under five years old.

2.4. The Three Diseases



HIV/AIDS: The Global Fund is the largest donor for HIV, accounting for over 70% of total HIV funding.

38,396 people currently receive antiretroviral therapy, representing coverage of 55%.

HIV prevalence (15-49 adult population): 1%

Adults and children living with HIV: 70,000⁷



Malaria: The Global Fund is the second largest donor, accounting for 36% of total Malaria funding.

Malaria remains the number one killer of children under five in Benin.

6,549,876 Insecticide-treated nets distributed in the 2017 mass campaign⁸

1.15% of global disease burden

Estimated Malaria cases (2016): 3,230,000

Estimated Malaria deaths (2016): 6,000⁹



Tuberculosis: The Global Fund is the main donor, accounting for 92% of total tuberculosis funding.

The Benin incidence rate (including TB+HIV) is estimated at 58 per 100,000 [37-82], down from 69 per 100,000 in 2007 and 86 per 100,000 in 2000.¹⁰

TB Cases notified in 2017: 3,662, 91% being laboratory-confirmed pulmonary TB cases

Estimates of TB mortality in 2017 (HIV positive and HIV negative combined): 1,500¹¹

⁷ UNAIDS 2017

⁸ PUDR S2 2017

⁹ World Malaria Report

¹⁰ World Bank Data

¹¹ WHO Global TB report 2018

3. The Audit at a Glance

3.1. Objectives

The OIG specifically assessed the design and the effectiveness of:

- Community program management and supervision mechanisms to provide quality health care and accurate, complete and timely data for decision-making;
- Supply chain mechanisms to ensure good quality and timely medicines to patients for the three diseases.

3.2. Scope

The audit was performed in accordance with the methodology described in Annex B and covered the period June 2016 to June 2018. It covered the grants that were active during this period, and also included a financial review of the Health System Strengthening grant's transactions during its extension period (December 2017 to March 2018).

As part of the fieldwork, OIG visited 4 departments and 6 health administrative districts. This included 218 community health workers, 10 health centers, 5 district warehouses, 6 hospitals and 2 departmental offices.

3.3. Progress on Previously Identified Issues

OIG conducted a diagnostic review in Benin in 2012, covering the six grants that were active at the time. While good practices were observed, the review identified a number of risks and offered eighteen recommendations to mitigate them and ensure more efficient program implementation.

An action plan was subsequently agreed upon by the stakeholders. In particular, it included:

- revising objective and target indicators to better inform decision making
- improving financial management
- ensuring a more accurate forecasting and quality of drugs and commodities
- strengthening Country Coordinating Mechanism oversight

Previous OIG assignment in the Republic of Benin

Diagnostic Review of Global Fund Grants to the Republic of Benin
OIG-12-001.

4. Findings

4.1. Supply chain effectiveness is limited by lack of government budget support and non-compliance with guidelines

Benin's Supply and Inventory Management System has clear national guidelines procedures which describe the entire supply chain cycle, a quality assurance system and a logistic management information system (LMIS). The guidelines are supplemented by the Global Fund's Standard Operating Procedures.

Procurement of health commodities in Benin is in line with national guidelines. The Global Fund's Pooled Procurement Mechanism procures health commodities, in compliance with the prequalification system recommended by WHO. Quality control is done based on samples taken upon receipt of commodities, which are analyzed by a WHO Prequalified Quality Control Laboratory.

However, despite a robust supply chain framework, stock tensions and stock-outs are observed at both central and lower levels.

At the central level, stock shortages are due to poor adherence with the consolidated procurement plan.

Annual quantification exercises are led by the National Disease Programs and are performed through two Technical Working Groups (TWG). The first group includes technical partners and the second group includes financing partners (WHO, UNICEF, UNAIDS, Plan Benin and REBAP+ for HIV; USAID, Chemonics, UNICEF and CRS for Malaria). Both groups include the Department of Pharmacy, Medicines, and Diagnostics (Direction de la pharmacie, du médicament et des explorations-DPMED) attached to the Ministry of Health and the Central Procurement Agency for Essential Medicines (Centrale d'achat des médicaments essentiels-CAME). These working groups meet on a quarterly basis to monitor stock levels of health commodities, the adequacy and the availability of the stock needed, and to warn of any potential stock-outs or issues at the central level.

The quantification exercise follows a set methodology and considers the previous year's consumption data, the needs from each population type and treatment regimens (community health workers, Health Training, Private Sector for malaria; first and second line regimens, PMTCT and opportunistic infections for HIV), and reserve stocks and CAME's available usable stocks. Based on this, a consolidated procurement plan is designed, where each partner and the government commit to ordering set quantities of commodities, as per an agreed delivery schedule.

Malaria drug management in Benin is characterized by low levels of stocks. Availability at the central level is less than the three month recommended buffer stock. Stock tensions appeared during the second half of 2017 and in 2018. In November 2017, in an attempt to mitigate the risk of stock-outs at the central level, the National Malaria Disease Program made an emergency order of malaria drugs for infants¹² through the Global Fund's Pooled Procurement Mechanism. However, by the time quarantine removal and quality control had been processed and the drugs delivered, some peripheral structures had already experienced stock-outs for certain drugs:

- In the N'Dali Parakou (NP, Borgou) district warehouse (Dépôt Répartiteurs de Zone - DRZ): between December 2017 and March 2018, there were 23 total days of infant malaria

¹² Artemeter Lumifantrine 6 (AL6), used to treat infants

drug¹³ stock-outs,. There was however no apparent programmatic impact, as adequate stocks of paediatric drugs were available as substitutes for infant treatment;

- In the Nikki/Kalale/Perere (NKP, Borgou) district warehouse, there were 46 days of infant malaria drugs stock-outs¹⁴, from 31 December 2017 (expiry date of the latest available stock) to 15 February 2018. There was also a concurrent stock-out in adult drugs (same formula)¹⁵, preventing substitution by cutting tablets. Other treatments were used as substitutes to the Infant malaria treatment.

At the central level, the situation remains challenging, as evidenced by the stock-out in Rapid Diagnostic Tests (RDT) in the second quarter of 2018. These tensions stem from non-fulfillment with the agreed consolidated procurement plan. This has created an unmet gap in the malaria drugs to be delivered as per the planned schedule, and led to a reduction in reserve stocks. In particular:

- While the government initially committed to funding 8% of malaria needs, it did not manage to purchase its agreed share of drugs and commodities, due to a lack of budget and complex public procurement processes.
- Delays in some of the partners' procurement processes postponed the initially agreed delivery date of malaria drugs. For instance, 22% of infant malaria drug stock¹⁶ was delayed by four months during January-September 2018, especially at the community level.

Unlike the malaria program, the Government was able to raise a sufficient budget for the procurement of HIV commodities. According to the consolidated procurement plan, the Government committed to procuring 30% and 40% of required HIV commodities in 2017 and 2018 respectively. However, the procurement process used by the Government is heavy, generating delays in HIV commodity deliveries. For example, the government order of HIV commodities for 2017 had still not been delivered as of September 2018, resulting in a 9-month delay. While this was mitigated by the buffer stock level (reducing it to less than four months), it still resulted in low stocks at the peripheral level.

Delays in procurements financed by the government represent a significant risk of stock tensions and even stock-outs. While a new procurement procedure is being discussed for the 2019 state budget, it has not yet been finalized.

At lower levels, limited staff capacity adversely affects drug availability.

The CAME has achieved good performance in the storage and distribution of health commodities, and in its control and regulation of orders made by the district warehouses (DRZ). There is good traceability of health commodities throughout the distribution chain. No losses or diversions were observed. After performing stock inventories, no differences were found between stock sheets and physical stock counts, at all levels.

However, some stock tensions at lower levels – district, health facilities and community workers – occurred due to poor compliance with national supply management guidelines. While the reporting and replenishment tools in place at health facilities and DRZ levels are available and adequate, the quantities and frequencies of replenishment orders are not always suitable and often require re-adjustments by the CAME. Specifically, the following were noted:

¹⁴ Artemether-Lumefantrine (AL) 6

¹⁵ Artemether-Lumefantrine (AL)12, AL18, and AL24

¹⁶ Artemether-Lumefantrine 6 (AL6)

- Deficiencies at the district and health facility levels in complying with health commodities replenishment formulas that must take into account essential parameters (supply period, average monthly consumptions, safety stock, usable stock available).
- Insufficient adherence with the CAME quarterly replenishment schedule by the DRZ and with the monthly schedule by health facilities, which can lead to oversupply and drug expiries, or to stock outs at lower levels. This was the case in the second half of 2017, when the five DRZs visited made on average five orders of infant malaria drugs¹⁷, instead of the two prescribed.

To compensate, CAME re-adjusted DRZ's orders as a result of inaccurate quantifications/orders, or depended on its own stock. This was the case for the two CAME regional agencies visited. With DRZ placing more orders than initially envisaged in the guidelines, quantification adjustments by CAME and poor compliance with the national supply management guidelines increase workload as well as the risk for potential stock outs and delivery disruptions. Finally, changes in initial DRZ orders are not being tracked, preventing order fulfilment rate monitoring.

Together, these order management challenges impact the availability of health commodities:

- Of the five health districts visited, three experienced an average stock-out of 29 days for PMTCT drugs in the second half of 2017, despite the availability of these commodities at the central level.
- Of the 10 health facilities visited, three experienced stock-outs averaging 31 days for PMTCT drugs and 45 days for malaria drugs, despite stock availability at the DRZ level and at the central level.
- During the first half of 2018, of the 218 community health workers' stock records reviewed, 35% did not experience stock-outs of infant malaria drugs¹⁸, 33% experienced stock-outs of less than one month, and 27% faced stock-outs of one to two months.

Lack of trained staff in the supply chain also affects drug management. Among the five district warehouses and three district hospitals visited at the peripheral level, none had a pharmacist and no member of staff had benefited from logistic management training.

Agreed Management Action 1

The Secretariat will support the Ministry of Public Health, PMI and Chemonics to develop a logistic surveillance report on a monthly basis to monitor the stock status and the buffer stock available of malaria health commodities at central, district, zonal warehouse and health facility level.

Owner: Head, Grant Management Division

Due date: 28 February 2020

¹⁷ Artemether-Lumefantrine (AL) 6

¹⁸ Artemether-Lumefantrine (AL) 6

4.2. Community-level care and health activities need updated policies, enhanced training and supervision, and better data reporting

The national strategic plan for the fight against malaria in Benin 2017-2021 has a general objective to reduce malaria-linked mortality by 25% compared to 2015. Specifically, this requires that 99% of suspected malaria cases in set areas benefit from biological tests at the community level and 99% of patients suffering from confirmed uncomplicated malaria are treated with ACTs by community health workers.

A Community Strategy Policy has been defined and implemented at the central level, and the recruitment of community health workers is made in coordination with the community and local authorities. As part of the Global Fund grant, community health worker activities have been implemented in 14 out of Benin's 34 Health districts. 10 of the 14 health districts benefit from the complete package and 4 districts (in Cotonou) only benefit from the promotional package. Representatives of the 2,748 community health workers selected have been trained in malaria case management. As per national policies, they are supervised by primary health care nurses (*Infirmiers chefs de poste*). These activities are supported by a sub-recipient (CRS), which has its own facilitator to help community health workers perform their activities.

While the community strategy is well defined, improvements are required in complying with malaria treatment protocols, in reporting data and in covering the overall Prevention of Mother-To-Child Transmission chain.

i) Compliance with malaria treatment protocols

Treatment dispensed to patients at the community level suffers from uneven quality and non-adherence with treatment protocols. For example, for the 119 community health workers reviewed, 153 malaria cases were treated yet only 115 cases tested positive. 54 cases were treated despite their RDTs results being negative, and six cases of positive RDTs were not treated. In terms of root causes, our audit noted that improvements are needed in the following areas:

- **Training:** community health workers' training should be performed according to the recommendations in the Facilitator Manual. Half of the one-week training course is supposed to be dedicated to the theoretical aspects of malaria case management, and half to its practical aspects. However, all the health workers interviewed said only one day was dedicated to practical aspects.
- **Supervision:** As per the Malaria National Strategy plan, the CHWs' work is to be supervised by the primary health centers (FOSA). However, this supervision is not being carried out. Of the 10 FOSAs visited, only one had performed on-site supervision of community health workers. This lack of supervision is mainly due to limited human resources and the difficulty of accessing those areas covered by CHWs. As a result, there is no oversight on the community health care activities being provided by the CHWs.

ii) Reporting of malaria data from the community level

Malaria data from the community level are not being reported through the national Health Information System. For Global Fund reporting purposes, the sub-recipient's parallel system is used (CRS), despite there being limited quality controls over the data.

According to the National Strategic Monitoring and Evaluation Plan for the Fight against Malaria 2017-2021, data reporting at all levels (including community level) should follow the

national monitoring and evaluation scheme, known as the National System of Information and Sanitary Management.

FOSA's data are supposed to be sent to the health district, to be incorporated into the District Health Information System (DHIS2), accessible to all Health System stakeholders in Benin. However, for the Global Fund grant, CRS (a sub-recipient) has put in place a parallel system whereby it collects data from the community level and sends them directly to the PR at the central level, who in turn completes a Progress Update and Disbursement Report for the Global Fund Secretariat. Because the sub-recipient CRS is the only stakeholder with control over the data produced, there is a lack of independent oversight on the data provided and a lack of quality assurance mechanisms. This could lead to potential mis-reporting of results and non-sustainability of the health information system in reporting complete and accurate community activities.

Benin's national Health Information System does not benefit from reliable and timely malaria data from the community level, due to the fact that data are not being systematically and directly reported into the national system. Tools for aggregating community case management have not been developed at the FOSA level, limiting data quality and their use at the health district level. The district statistician is supposed to receive monthly reporting, but this is not being systematically transmitted by FOSA. When it is, it consists of disaggregated documentation, gathering each community health worker's reports, making data aggregation and reconciliation challenging (a single district statistician covers on average 30 primary health centers and 270 community health workers). Given that CRS has reporting processes in place at the community level, the central level tends to rely solely on them.

iii) Uneven quality of data and quality of services impact progress on Prevention of Mother-To-Child Transmission (PMTCT)

Benin has made significant progress in the fight against HIV/AIDS. 56% of people living with HIV are under ARV treatment, and the Mother-to-Child Transmission rate fell from 14.1% in 2008 to 6.7% in 2016. Similar improvements are noted in the testing and treatment of pregnant women: as of December 2017, 99% of pregnant women were attending antenatal clinics (ANC) and benefiting from HIV testing. Of the 0.75% of pregnant women diagnosed as HIV positive, 90% are put on ARVs to reduce mother-to-child transmission.

Despite satisfactory testing and treatment of pregnant women, gaps remain. In 2017, 28% of HIV-positive pregnant women did not give birth in PMTCT sites, meaning that deliveries were not necessarily performed under the recommended protocol. While 83% of children born to HIV-positive mothers are tested for Polymerase Chain Reaction (PCR)¹⁹, 35% of these tests are not performed within the required timeline of 6 to 8 weeks post-partum, and there is no system in place to monitor that HIV positive babies are put on treatment.

The residual transmission rate from HIV positive mother to child has decreased from 14.1% in 2008 to 6.7% in 2016. However, the overall prevalence of HIV infection among children born from HIV positive is 2.3%, compared to the national target rate of 2%²⁰. The rate was 2.1% among children whose mothers received ARV therapy during pregnancy, compared to 11.4% among those whose mothers did not receive ARV treatment. Reasons for this include:

¹⁹ PCR is a test that can be used to screen the donated blood supply and to detect very early infections before antibodies have been developed. The performance of the test at 6 weeks of age gives a good sensitivity (>98 percent) with the various methods and is considered programmatically more efficient

http://www.who.int/hiv/paediatric/EarlydiagnostictestingforHIVVer_Final_Mayo7.pdf

²⁰ PSLs PMTCT 2016 report in collaboration with ONUSIDA, UNICEF and WHO

- *Poor therapeutic education on PMTCT:* 60% of midwives interviewed did not feel comfortable providing therapeutic education to women living with HIV. Lack of time was cited as the main reason for not providing therapeutic education, with midwives feeling overwhelmed by the rest of their responsibilities, especially at the health facility level. In addition, the tools in place to guide health professionals in PMTCT education are limited. While therapeutic education standards are in place, these were designed to European standards and do not take Benin's sociological environment into account, and less emphasis is made on education in the PMTCT training manual for midwives.
- *Non-respect of national guidelines for the testing of infants:* While WHO recommends PCR diagnosis to be completed within 6 to 8 weeks of infant life, a sample of PMTCT registries highlighted that 38% of blood specimens were only collected after 60 days of infant life. This lack of timeliness leads to difficulties in following up on cases, generates uncertainty and stress for families, and can affect timely treatment administration.

Agreed Management Action 2

The Secretariat will support the Ministry of Public Health and partners to:

- Update the health facilities reporting template to integrate the malaria community data;
- Conduct a reconciliation exercise for the malaria community data reported through the national system (SNIS) with data reported by CRS;
- Update the therapeutic education standards and tools and re-train the midwives and the health staff working in PMTCT sites on the updated therapeutic education standards and tools.

Owner: Head, Grant Management Division

Due date: 30 June 2020

Table of Agreed Actions

Agreed Management Action	Target date	Owner
<p>The Secretariat will support the Ministry of Public Health, PMI and Chemonics to develop a logistic surveillance report on monthly basis to monitor the stock status and the buffer stock available of malaria health commodities at central, district, zonal warehouse and health facility level.</p>	<p>28 February 2020</p>	<p>Head, Grant Management Division</p>
<p>The Secretariat will support the Ministry of Public Health and partners to:</p> <ul style="list-style-type: none"> • Update the health facilities reporting template to integrate the malaria community data; • Conduct a reconciliation exercise for the malaria community data reported through the national system (SNIS) with data reported by CRS; • Update the therapeutic education standards and tools and re-train the midwives and the health staff working in PMTCT sites on the updated therapeutic education standards and tools. 	<p>30 June 2020</p>	<p>Head, Grant Management Division</p>

Annex A: General Audit Rating Classification

<p>Effective</p>	<p>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.</p>
<p>Partially Effective</p>	<p>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.</p>
<p>Needs significant improvement</p>	<p>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.</p>
<p>Ineffective</p>	<p>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.</p>

Annex B: Methodology

The OIG audits in accordance with the global Institute of Internal Auditors' (IIA) definition of internal auditing, international standards for the professional practice of internal auditing (Standards) 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 our auditors to provide high quality professional work, and to operate efficiently and effectively. They also help safeguard the independence of the OIG's auditors and the integrity of their work. The OIG's Audit Manual contains detailed instructions for carrying out its audits, in line with the appropriate standards and expected quality.

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 takes place at the Global Fund as well as in country, and is used to provide specific assessments of the different areas of the organization's activities. 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.