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Prospective Country Evaluation

Guatemala

2020–2021 ANNUAL COUNTRY REPORT

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

DISCLAIMER

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Acronyms

ARV	Antiretroviral drug
ASI	Asociación de Salud Integral
AHF	AIDS Healthcare Foundations
CAS	Colectivo de Amigos contra el Sida [SR]
CCM	Country Coordinating Mechanism
CDC	US Centers for Disease Control and Prevention
CIESAR	Centro de Investigación Epidemiológica en Salud Sexual y Reproductiva
CONASIDA	National Multisectoral Commission of Organizations for Care and Prevention of Sexually Transmitted Infections / HIV / AIDS
CT	Global Fund Country Team
DHIS2	District Health Information System 2
DUFAI	Data Use for Action and Improvement
EMTCT	Elimination of mother-to-child transmission
FFI	Fundación Fernando Iturbide
GAC	Grant Approvals Committee
HIVOS	Humanist Institute for Cooperation with Developing Countries
HMIS	Health management information system
IGSS	Social Security Institute
IHME	Institute for Health Metrics and Evaluation
INCAP	The Institute of Nutrition for Central America and Panama
KII	Key informant interview
KP	Key population
M&E	Monitoring and evaluation
MoH	Ministry of Health
MSM	Men who have sex with men
NASA	National AIDS Spending Assessment
NGO	Non-governmental organization
NFM2	New Funding Model 2 (Global Fund 2017-2019 allocation cycle)
NFM3	New Funding Model 3 (Global Fund 2020-2022 allocation cycle)
NSP	National Strategic Plan
PAHO	Pan American Health Organization
PCE	Prospective Country Evaluation
PNS	National STI HIV/AIDS Program

PR	Principal Recipient
PU/DR	Progress update and disbursement request
RMEI	Regional Malaria Elimination Initiative
RSSH	Resilient and sustainable systems for health
SIGPRO	Sistema Integral de Gestión de Proyectos (Project Management Integrated System)
SIGSA	Sistema de Información Gerencial de Salud (Health Management Information System; HMIS)
SR	Sub-recipient
STI	Sexually transmitted infection
SW	Sex worker
TERG	Technical Evaluation Reference Group
ToR	Terms of Reference
UAI	*Unidad de Atención Integrada* (HIV Comprehensive Care Clinic)
VICITS	Vigilancia Centinela de las Infecciones de Transmisión Sexual
WHO	World Health Organization

Executive Summary

During the period 2020-2021, the Prospective Country Evaluation (PCE) commissioned by the Technical Evaluation Reference Group (TERG), investigated the reasons for changes throughout the grant cycle in Guatemala through the lens of focus topics. The PCE set out to analyze what, how and why the Global Fund's investments, and its business model, have facilitated or prevented the achievement of its objectives and contributed to the national response against HIV. To this end, the PCE focused on two topics: 1) investment in the HIV health management information system (HMIS) and 2) linkage of HIV positive cases to care and treatment. Emphasis was placed on the 2018-2020 HIV grant and the 2021-2023 HIV funding request. Connections to three of the Global Fund's specific objectives are singled out: i) resilient and sustainable systems of health (RSSH), ii) equity, and iii) sustainability.

Methodology. Data were collected from document reviews, observations of meetings and key informant interviews (KII). The interviews served to elicit the views of different stakeholders on priority issues in the country in order to better understand the grant cycle processes. The PPE analyzed the planned RSSH investments in the 2018-2020 and 2021-2023 HIV grant, hereafter referred to as NFM2 and NFM3 to determine which were referred to/classified as predominantly "system support" in the short term, as opposed to those for "system strengthening" in the long term. Each RSSH intervention/activity was ranked based on three parameters: scope, longevity, and focus. The RSSH analysis was adapted from the 4S framework used by the Technical Review Panel (TRP) for the 2017-2019 cycle.

Investment in HMIS in NFM2. Over the years, the Ministry of Health in Guatemala (MoH) has faced difficulties in reporting information in a timely and reliable basis due to an outdated and fragmented information system. The Global Fund has invested in improving the HMIS as part of RSSH since the first HIV grant in 2004. In NFM2, investment in the HMIS/Monitoring and Evaluation (M&E) module comprised the majority of the RSSH budget and increased substantially over the course of the grant. A significant portion of the budget was allocated to outfit the Principal Recipient (PR) with an appropriate information system. DHIS2, an open-source platform, was chosen to replace a licensed product used by the previous PR. In accordance with a plan to strengthen the HIV information system, endorsed by the MoH and other stakeholders in June 2018, the national HIV program would also opt for DHIS2. However, later that year, the MoH did not approve this plan and expressed its intention to use a licensed system.

During 2019, at the time of the first grant revision, the MoH presented a plan to lay the groundwork for a reform to the HIV information system, on a different platform than DHIS2. To date, discussions are ongoing as to which platform will be chosen. During the course of NFM2, respondents to KII indicated to the PCE team that it was unlikely that the MoH would adopt DHIS2, due to unfounded concerns that open-source platforms do not meet IT security elements. There were also fears of a prolonged dependence on the University of Oslo for technical support and maintenance. However, in the last months of 2020, the MoH held discussions with USAID and IntraHealth about a comprehensive reform of the entire HMIS (known by the acronym SIGSA), not limited to the HIV/STI sub-system, and indicated a renewed interest in building the system on DHIS2. Currently, there is no official position or any certainty that this will be the case. Such a turn of events could have important implications for the Global Fund's investments in the ongoing grant. However, the priorities imposed by the COVID-19 pandemic have slowed down the negotiations.

Progress in the implementation of core HMIS/M&E activities has been variable during the grant cycle. DHIS2, housed in the PR, is now capable of capturing data from Sub recipients (SRs) in the community and exporting it on a weekly basis to the HIV national program and SIGSA-Web. Budget allocated to DHIS2 roll out exceeded 99% absorption by September 2020. In

contrast, consultancies for the mapping and design of the new HIV and STI system for the MoH have been significantly delayed, with implications for NFM3. Surveys constitute another critical investment in the HMIS/M&E module, but they are also behind schedule, and data for target setting and intervention design had to be taken from other sources, e.g., UNAIDS or the HIV national program (PNS for its acronym in Spanish), and estimates of the PR INCAP. The COVID-19 pandemic, along with other factors, significantly interfered with the course of grant implementation.

Findings for the focus topic HMIS/M&E

1. The rigorous process of contracting out services by the PR and the HIV program, including surveys, delayed grant implementation and impacted the design of NFM3. The delays were attributable to several causes, including the slow process of formulating and approving the Terms of Reference (ToR), the paucity of responses to tenders issued in few channels, and the low quality of offers to bids. Disappointment of consultants who have been awarded the studies and who complain about the shortcomings of the ToR, excessive revisions to accept the products by the PR and HIV Program, and consequently postponement of payments, have further contributed to the mix.
2. HMIS/M&E investments show a trend towards alignment with the DUFAI Framework despite setbacks during implementation in NFM2. The alignment was assessed using the M&E profile outlined in the tool. Despite the fact that the investment design followed the DUFAI logic, actual performance was low in M&E actions linked to the National Health Program (PNS), partly due to the delay in signing an agreement with the PR, and subsequently due to disruptions caused by COVID-19. Research (surveys) to collect and update data programmed in NFM2 show a close alignment with the DUFAI M&E profile.
3. The allocation of the HMIS/M&E module increased substantially over the course of the grant cycle, driven initially by the influence of the Country Team (CT) and the TRP. During the latter stages of the grant cycle, there were indications of increased country ownership when the MOH took the initiative to reprogram funds to design a new information system for HIV. During the grant negotiation, there was a substantial increase of half a million dollars for the HMIS/M&E module, largely to fund the PR/SR information system. In the first grant review that took place in October 2019 to incorporate $2.7 million for Elimination of Mother-to-Child Transmission (ETMI) provided by Comic Relief, the MoH presented a critical route to move forward with the design of the new HMIS. However, after reprogramming USD 300,000 was approved for this purpose, by September 2020 only 7% of the funds had been spent.

Investment in Linkage to Care. The WHO defines linkage of an HIV case as the patient's entry into specialized care, measured from the date of diagnosis, or the date of initiation of HIV treatment depending on the availability of data. Linkage to care is part of the HIV continuum of care. In NMF2, actions were proposed to close the linkage gap to help improve the performance of the treatment cascade and achieve the Fast-Track Response targets set by UNAIDS (Fast Track Strategy, targets 95-95-95; UNAIDS 2014). The main strategy consisted of accompanying new cases (diagnosed by promoters in the community) to a Comprehensive HIV Care Unit (UAI) for clinical examination and enrollment in antiretroviral therapy (ART). Overall, the NFM2 funding request included approximately US$703,092 for linkage to care activities, corresponding to 4.7% of the total grant budget, distributed across several modules. During grant negotiation, the approved budget lowered to $617,497 due to updates in overhead costs, not due to cuts in services to key populations.

Findings for Linkage to Care. Notwithstanding the importance of linkage in achieving the UNAIDS targets, PCE has observed and reported that a remaining group of people is not being reached. In 2019, none of the SRs reached the 90% target. CAS had the best performance, successfully linking 77% of positive cases. In 2020, none of the SRs exceeded 70% linkage during the first half of the year, with the exception of CAS with 72%. Performance was curtailed by the COVID-19 pandemic. This is not unique to Guatemala; many of the barriers relate to the complex community environments where projects are implemented. The PCE conducted a root cause analysis and found four major challenges that affect performance as follows:

4. The current approach follows the design of the successful PEPFAR project for a clinical setting. Guidelines more suitable for work in the community were not developed, resulting in SRs operating without clear, evidence-based strategies for outreach. There are experiences that have proven to be effective for linkage; for example, strength-based counseling, which could be tested in the country. The manual for promoters and navigators recently published by the PR during NFM2 did not go deeply enough into the topic of linkage, which was a missed opportunity.
5. While linkage activities are among the top five performing indicators in progress reports (PUDRs), all SRs continue to face the challenge of reaching UNAIDS 90s targets for the cascade. However, there is little evidence that the country has taken advantage of revisions in the grant cycle to change course. Delays in contracting surveys that would have provided crucial data on key populations was another missed opportunity to improve strategies.
6. A number of supply-side factors beyond the control of the SRs or PR deter people from seeking HIV services, e.g., clinic schedules that conflict with working hours.
7. Stigma and discrimination constitute a persistent barrier on the demand side, particularly for transgender women, both because of their own fears and because of actual situations of mistreatment reported by them, which are less frequent in the case of MSM.

Conclusions

The PCE found an initial trend to change the trajectory of the HMIS throughout the grant cycle. During NFM2, the adoption of DHIS2 was an important step in addressing gaps in data collection for analysis and reporting. On the other hand, the reluctance of the MoH to leverage this investment reduced the potential for sustainability and compromised value for money (VfM). A reversal of the decision to use DHIS2 would imply a decisive change in trajectory in NMF3 that is yet to be agreed upon. Lack of political will and wavering leadership remain challenges to achieving a robust and modern HMIS.

The PCE found no evidence of a trajectory change in linkage to care. Although the TRP and the Country Team (CT) recognize (and have raised) the need for differentiated strategies to reach key populations, tangible progress has been moderate. As performance has leveled off, which is usually the case when a critical mass has been reached, there were few, if any, innovative actions to reach the missing portion of cases. Guatemala is not the only country in this predicament. Other countries and projects have found it equally difficult to reach the remaining 10-20% of cases.

Recommendations

The present report contains specific recommendations for stakeholders, including some for the PR (INCAP), for the Country Team, for the national HIV/STI program and for the CCM.

1. INTRODUCTION

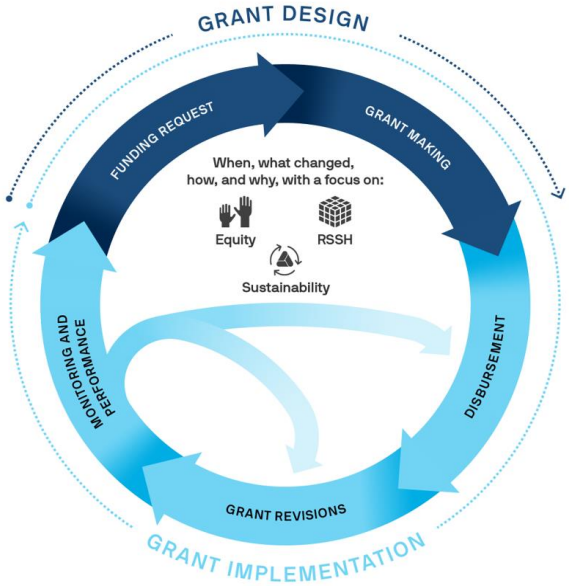
The Prospective Country Evaluation (PCE) is an independent evaluation of the Global Fund commissioned by the Global Fund's Technical Evaluation Reference Group (TERG) in eight countries, including Guatemala. The PCE aims to evaluate the Global Fund business model, investments, and impact to generate timely evidence to inform global, regional, and national stakeholders and to accelerate progress towards meeting the Global Fund Strategic Objectives[1]. CIESAR has partnered with the Institute for Health Metrics and Evaluation (IHME) and PATH to conduct a mixed-methods prospective evaluation in Guatemala since May 2017.

1.1 Grant cycle approach for PCE 2020

With guidance from the TERG, this year's evaluation focused on how the Global Fund grant cycle has facilitated or hindered the achievement of grant objectives during implementation within the 2018–2020 grant cycle, and if lessons learned from the current grant have been applied to the next funding cycle. In 2020, the PCE emphasized the 2018-2020 HIV Grant and the 2020 HIV Funding Request, approved for submission by the Technical Review Panel (TRP) in February 2020.

To understand how the grant cycle framework plays out in the country and ensure a deeper understanding of the changes that are made, the PCE identified two topic areas that were applied as a lens through which to evaluate the cycle: *Health Management Information Systems (HMIS)* and *linkage to care of HIV positive cases*. The PCE anchored analyses of drivers of change across the grant cycle by focusing on Global Fund investments within the topic areas. Through the lens of the focus topics, the research aims at understanding *what, how*, and *why* the Global Fund investments are leading to intended outcomes, and whether they are informing the design of NFM3 investments. Furthermore, the focus topics allowed the PCE to reflect upon whether and how the Global Fund investments are contributing to achieving the strategic objectives to strengthen resilient and sustainable systems for health (RSSH), equity, and sustainability.

Figure 1 Global Fund grant cycle framework



After presenting the focus topics, this report will present any interrelations between the two. Subsequently, the evaluators analyzed if there is a change in trajectory from NFM2 to NFM3

[1] https://www.theglobalfund.org/media/2531/core_globalfundstrategy2017-2022_strategy_en.pdf

in the Global Fund investment in the two focus topics. As closing remarks, the report delves into co-financing issues and strategic considerations based on the conclusions of the analysis.

1.2 Methods

Primary data were collected through document review, meeting observations and key informant interviews (KIIs) to explore issues in-depth as well as fact-checking interviews to fill information gaps (Table 1). KIIs elicited stakeholder perspectives on global- and country-specific evaluation questions and allowed the PCE to better understand grant cycle processes, including barriers and facilitators. Interviews contribute to data triangulation, interpretation, and validation of the results generated through quantitative analyses and document review.

Table 1 Process Evaluation Data Sources - Jan to Dec 2020

Process	Number	Description of data sources
Document review	Multiple	Funding request narratives, budgets, performance frameworks, and other associated submission materials (2018 and 2020), Documents for Grant Approvals Committee meeting, Data Use for Action and Improvement Framework, INCAP Dashboard, PU/DRs, HIV NSP, WHO, CDC, and UNAIDS technical documents, country studies by HIVOS and INCAP, others.
Interviews (36)	8 (HMIS) 28 (for L2C)[2]	PNS[3], PR INCAP, SIGSA, Dept. of Epidemiology, CT, CCM, AHF, LFA, technical partners, 2020 Funding Request consultant, SRs, UAI staff.
Fact checking/ validation (35)	11 (HMIS) 24 (L2C)	INCAP, PNS, SIGSA, Epi Dept., technical partners, SRs
Meeting observations	27	● Technical Work Groups preparing the funding request: HMIS/M&E, ETMI, Logistics, and Supply Chain, Combined Prevention, Human Rights, Treatment and Care ● Virtual meetings on Zoom for CT-INCAP-CCM discussions on the funding request ● Conference on the current situation of advanced HIV in Guatemala (CCM and ASI) ● Global Fund COVID-19 proposed committee (CCM)

Resource tracking analyses

The PCE conducted detailed financial analyses of Global Fund budget revisions throughout the grant cycle for active grants in NFM2 and all available budgets from the funding request to grant making for NFM3 (Annex 1, Financial Data Sources). The budget analysis was based on the grant cycle by disease, module, intervention, and focus topics. To identify modules, interventions, and activities that supported the focus topics of HMIS and Linkage to Care, a keyword search was conducted. Using the keywords (Annex 2, Table of Keywords) related to each focus topic, a systematic process was developed to search descriptions of modules, interventions, and activities within detailed budgets to identify any funds that may have been related to the focus topics. Additional qualitative information collected by CIESAR informed the final list of activities and interventions that were focus topic-related.

An analysis of financial absorption, defined as expenditure as a percentage of the budget, within and across grants was conducted using progress update and disbursement requests

[2] Linkage to Care
[3] National STI HIV/AIDS Program

(PU/DRs). To categorize performance in budget absorption, the PCE used simplified categorization similar to that in the Grant Rating Tool for NFM grants (with 4 categories instead of 5). (1) As each grant's PU/DR contains reported absorption at the module and intervention level by semester, the PCE can observe trends in absorption by semester and intervention. Based upon the keyword search of activity descriptions, interventions that were identified as having a majority of funds (>50%) related to the focus topics were tracked to indicate absorption related to focus topics throughout the grant cycle. Similarly, absorption for RSSH and HRG-Equity related modules and interventions were tracked throughout the grant cycle.

RSSH Support vs. Strengthening "2S" analysis

The PCE analyzed RSSH activities in NFM2 and NFM3 according to whether they contributed to "system support" or "system strengthening", drawing on definitions from Chee et al. (2013). (2) We developed a coding methodology, aligned to the Global Fund's RSSH modules in the modular framework, to designate each RSSH activity in the budget as either predominantly supporting or strengthening (Table 2). Three parameters–scope, longevity, and approach–were examined for each RSSH intervention/activity pair, adapting upon the methodology previously used by the TRP's examination of RSSH in the 2017–2019 funding cycle. (3) Support activities are not necessarily wrong but do not lead to the long-term strengthening of HMIS.

Table 2 Parameters for 2S Analysis

Parameter	System Support	System Strengthening
Scope	It may be focused on a single disease or intervention	Activities have an impact across health services and outcomes; systems may be integrated into the overall health sector
Longevity	Effects limited to the period of funding	Effects will continue after funded activities end
Approach	Provide inputs to address identified system gaps	Revise policies and institutional relationships to change behaviors and resource use to address identified constraints in a more sustainable manner

Two coders independently reviewed the funding requests and assigned each intervention and activity as "supporting" or "strengthening categories". A third coder then reconciled any discrepancies in coding. This analysis was conducted iteratively across all eight PCE countries.

1.3 Summary of Grants in Guatemala

Presently, Guatemala is implementing three grants, one per disease, and has successfully submitted and received approval for the 2021-2023 HIV funding request. Additionally, the Country Coordinating Mechanism (CCM) has approved and submitted the funding request for malaria, which is eligible for transition (Table 3).

Table 3 Summary of Active Grants and Funding Request in Guatemala

Disease focus	Amount US$	Focus	Start-end dates	Status	PR
HIV	14.7 million	Reduce HIV cases among key and vulnerable populations	Oct 2018 Dec 2020	Final Implementation	INCAP
	26.8 million		Jan 2021 Dec 2023	Grant Making	INCAP
Malaria	5.6 million	Malaria elimination	Jan 2019 Jun 2021	Late implementation	MoH
	4.7 million	Funding request tailored to transition (as indicated in Allocation Letter)	Jul 2021 June 2024	Eligible for transition Additional funding from RMEI	MoH
TB	5.8 million	Reduce TB cases among key and vulnerable populations in prioritized areas	Jun 2019 Jun 2022	Mid implementation	MoH

Source: Global Fund detailed budgets and associated narratives

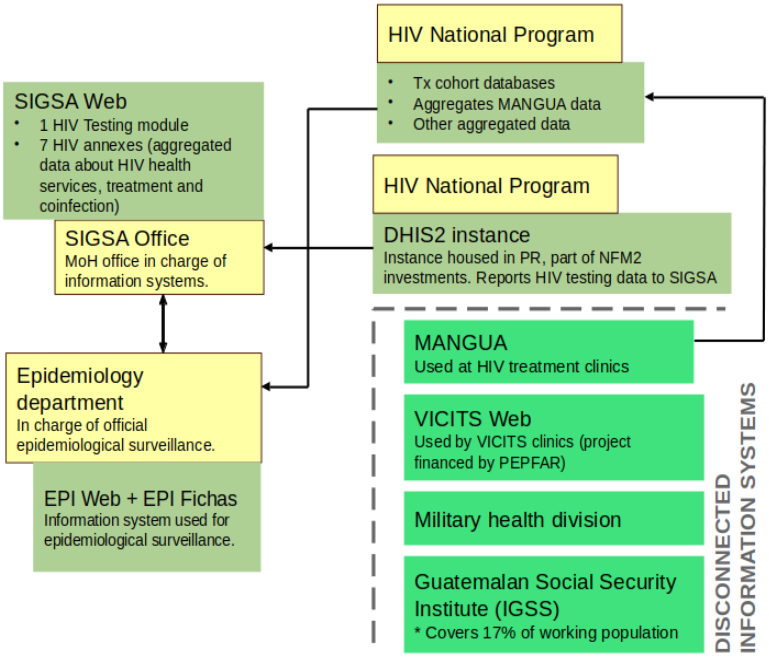
2. FOCUS TOPIC: HEALTH INFORMATION SYSTEMS/M&E

2.1 Background & Rationale

The improvement of information systems is an urgent necessity for the MoH in Guatemala. The Global Fund has provided support for this endeavor throughout the years, particularly for HIV. Close to 10% of all the investments in the NFM2 HIV grant and more than 50% of RSSH investments were allocated to the Health Management Information System/Monitoring and Evaluation (HMIS/M&E) module. The MoH has struggled to steer the national response to the epidemic in the absence of a strong HMIS. However, change has been slow due to several factors, including the inability of MoH to unify routine reporting internally and from other institutions that diagnose and treat cases of HIV/sexually transmitted infections (STI), i.e., the Social Security Institute, the Military Health Division and private providers, i.e., Hospicio San José and a weak leadership of the national HIV program.

Currently, the HIV/STI information system is fragmented in various subsystems that are not interoperable, rendering it unable to provide timely and trustworthy data to report on key indicators and enable decisions based on evidence. Figure 2 summarizes the present structure.

Figure 2 Current structure of the MoH HIV/STI information system



Source: CIESAR Design

The lack of a robust national health information system required the development of information systems specifically for Principal Recipients (PRs) in the past. The Global Fund has invested in two information systems[4], both housed in PRs, first for the Humanist Institute for Cooperation with Developing Countries (HIVOS) (the former HIV PR) and currently for The Institute of Nutrition for Central America and Panama (INCAP). The PR information systems have taken a high proportion of the investment in HMIS/M&E modules.

From 2013 to 2018, HIVOS used SIGPRO (*Sistema Integral de Gestión de Proyectos*[5]), which was shaped in the model of the Cuban public health information system. It was tailored to capture and report on the grant's performance framework, and intended to export routine data into SIGSA (*Sistema de Información Gerencial de Salud*[6]). Exchange of information between the PR and SIGSA occurred erratically depending on system management, both at the PR and MoH. While the system was considered functional for HIVOS's purposes, maintenance costs became a concern, with overall expenditures of US$210,000 for maintenance during the implementation period. In 2018, INCAP, the new HIV PR, also lacked a suitable information platform. Concerns about expensive licensing costs and the lack of country ownership contributed to a decision to discontinue the use of SIGPRO. Technical partners and the Global Fund supported INCAP in deploying District Health Information System 2 (DHIS2), an open-source, web-based HMIS platform used in many countries globally under the auspices of the University of Oslo. Many stakeholders hoped that the MoH would build upon this initial investment in DHIS2 to replace the deeply fragmented national HMIS long term.

[4] In addition to investments in health information management incurred by the first PR, World Vision
[5] SIGPRO: integrated system for project management.
[6] SIGSA: Health Management Information System; HMIS

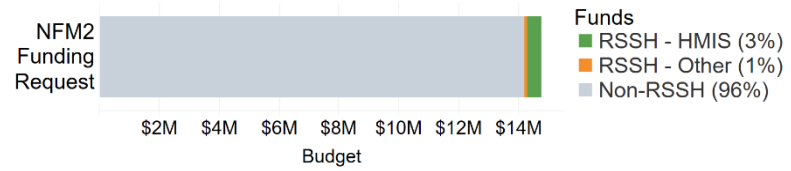
2.2 RSSH investments in NFM2 funding request and grant making budgets

There are four modules implemented in the NFM2 HIV grant dedicated to RSSH:

- HMIS/M&E
- Integrated Service Delivery /Quality Improvement
- Financial management systems
- National Health Strategies

Funds for RSSH aim to build the capacity of the MoH to manage the epidemics through a robust country-led information system and improve service quality at diagnostic centers and at the National Lab. However, the largest of all RSSH investments is in HMIS/M&E with an allocation in the funding request of 3% as shown in figure 3. After grant making, the share of RSSH grew to 9% due to an increase in the HMIS/M&E module budget. This share is similar to other PCE countries, where RSSH investment is 10% on average. The Global Fund wishes to focus on more effective, smarter investment in RSSH, rather than "supporting" investments, as recommended in the Strategic Review 2020: “identify what is realistic and within the scope of the Global Fund to achieve, and where this might link with the efforts of others operating in this space.” (4)

Figure 3 Budget allocation for information systems in the HIV funding request



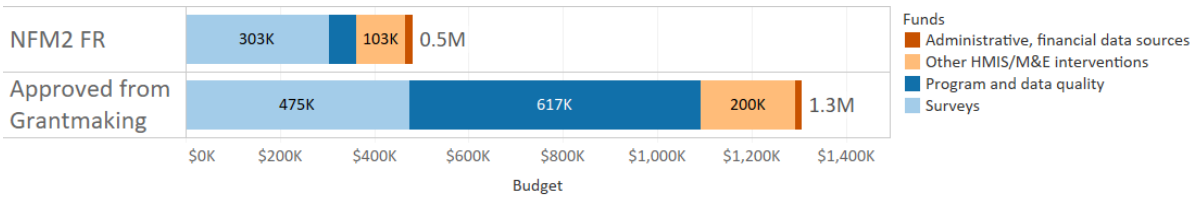
Source: Global Fund detailed budget GTM-H-INCAP 22 Feb 2018

Global Fund investment in HIV information systems in the NFM2 funding request

The HIV funding request for the period 2019 to 2020, approved by the TRP in February 2018, contained a US$480,400 investment for the HMIS/M&E module. During grant making (July 2018), there was a significant increase in HMIS/M&E funding. The budget for this module rose to US$1,307,381 (a 172% increase) as shown in figure 4.

Shifts in HMIS/M&E during grant making

Figure 4 Shifts in HMIS/M&E interventions approved in grant making



Source: Global Fund detailed budget GTM-H-INCAP July 2018

The main increase in Program and Data Quality was for information systems for the PR and SRS

Notably, the 2018 FR did not contain an investment to provide an information system for the PR. The CCM had voted to substitute the former platform, SIGPRO. At grant making, funds were reprogrammed for this purpose. Initially, a lump sum of US$0.5 million was allocated,

out of which, the roll up of DHIS2 amounted to US$305,033, an absorption close to 100% of the approved by the end of NFM2 (Sept. 2020, Contavisual report).

The increase in *Surveys* resulted from the need to offset existing gaps in the characterization of the epidemic, for example, there is scant knowledge on HIV in indigenous populations, prisoners, and youth.(5)

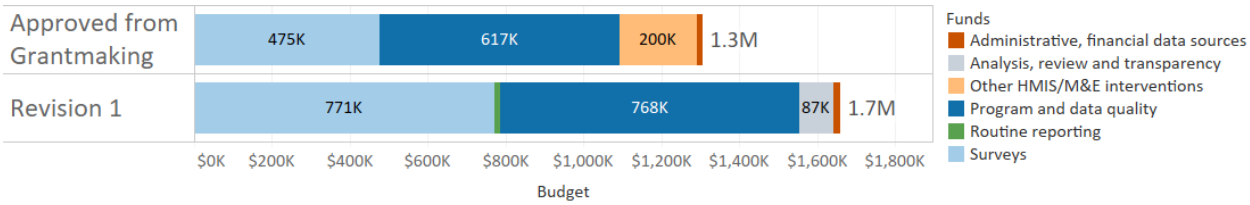
2.3 NFM2 Grant Implementation

Disbursements: In September 2018, the PR INCAP received notice of the approval of the HIV grant budget for the period 2019–2020 (Disbursement Number: GTM-H-INCAPP01-D01.0.1). The Global Fund also communicated that disbursements would be wired directly to the PR bank account, following the Disbursement Request. The first allocation for INCAP in 2018 was for US$1.6 million and disbursements have been on time since then, facilitating program implementation. By June 2020, the total amount disbursed to the PR was equivalent to US$9.7 million, and an additional US$1.6 million to other payees, out of the total US$14.7 million grant allocation, according to the Global Fund country team (CT) reports (not including additional allocation by Comic Relief which happened later on; discussed below). Delays and low performance in some interventions in the modules were not related to disbursements, but are related to other causes as explained further in this report.

Investment by the Global Fund in HMIS/M&E in NFM2: shifts during Grant Revision

A grant revision took place in October 2019, 15 months after grant making. The main driver was the need to incorporate funds from Comic Relief for the elimination of mother-to-child transmission (EMTCT). However, the PR and the HIV program took this opportunity to make reprogramming of funds for other modules. A further increase by US$353,305 was approved for the HMIS module as shown in figure 5.

Figure 5 Intervention shifts within HMIS/M&E module during NFM2



Source: Global Fund Detailed budget GTM-H-INCAP_ DetailedBudget_11-10.2019 Final

Three interventions had increases and two new ones were included during the revision, mainly in two interventions, *Surveys* (62%) and *Program and Data Quality* (24.5%). Also, funds were reprogrammed to increase the allocation for the National AIDS Spending Assessment (NASA). The reason was the need to collect missing primary data and hire international consultants. The two new interventions are *Routine Reporting* and *Analysis*, *Review, and Transparency.*

The increase in surveys intended to cover additional surveys to update information, largely at subnational level, on HIV prevalence and size estimates for KPs. By the time of the grant revision, there were positive balances that could be re-routed to cover the costly surveys.

During the grant revision, the MoH solicited US$300.00 to lay the groundwork for a new HIV information system as outlined in the HIV M&E Strengthening Plan, June 2019. (5) The plan depicts four objectives, including the following: “Improve the current information system to respond to the changes in the approach of the HIV epidemic and STIs,” by i) updating existing subsystems; and ii) designing a modular information system for HIV and STIs. In anticipation to this request, the CT asked the HIV program to define a “critical route.” The critical route

depicts two phases, the first one was to be implemented in NFM2, entails the **design** of the blueprint of the new system, and **a diagnosis** of the informatics equipment and connectivity throughout the health network. The second phase, planned for NFM3, would be the actual implementation of the new modular system. It is still to be decided by the MoH which platform they plan to use. The funds were approved in the revision.

Implementation Progress

The implementation of most interventions in the HMIS/M&E module were considered on course. **Surveys represented the exception, being seriously delayed throughout NFM2.** The causes for the delays in contracting out surveys are listed below:

- Although the studies were of high priority to guide implementation and inform NFM3, the PR struggled with drafting the ToR. Quality problems required detailed revisions by third parties (technical partners). The steep learning curve associated with their new role, compounded by the urgency of other tasks (e.g., laying out field strategies; selection and training of SRs), influenced the shortcomings in contracting out services.
- Once the ToRs were drafted, the CT and the HIV program requested further revisions. While this input was appreciated and useful, it took a toll on the efficiency of the process.
- Once the ToRs were approved, the PR received few responses to bids. The following reasons were raised by key informants: i) in a few of the studies, the compensation was considered insufficient in relation to the scope; ii) potential shortage of experts in the country in some fields of expertise, i.e., field epidemiologists, medical anthropologists; iii) claims by consultants, who did implement studies of excessive revisions resulting in an extension of timelines and loss of profit. The negative experiences caused disinterest in potential consultants by word-of-mouth and the non-participation in future bids of those who had, reducing the pool of experts.
- The PR generally did not publish tender bids in the national written press due to costs, instead relying only on postings on its website or social media channels. These are not well-known channels for consultants outside the immediate circle of the PR or the CCM. The CCM and UNAIDS did step in to help with wider dissemination, but the low response rate indicates the need for a better strategy.

The rollout of the DHIS2 testing module for the PR has been finalized successfully. After a year of work (Aug to Nov 2018 for design), and a longer than anticipated deployment in 2019 (attributed to contextual factors, not technology issues), the reporting tool in DHIS2 is fully operational and the PR is capable of exporting information weekly from sub-recipients (SRs) to SIGSA Web since the end of 2019.

The slower-than-expected rollout of DHIS2 is explained in part by initial challenges due to the inexperience of the PR in HIV work. As explained by the University of Oslo, after the initial design of the software to the country requirements (personalization), the PR required further support to define workflows and methodologies, for example for HIV testing in the community. The mobile application to collect data in the field required joint work between the University of Oslo (UiO), PR staff, and the SR promoters. Initially, there were shortcomings related to users as well as to the capacity of the smartphones and connectivity in some settings. Younger and more educated promoters proved more skilled in its use than those with lower levels of formal education and less experience with information technologies. Most promoters do not enter information directly in the smartphone in the field, fearful of thefts in the insecure areas where they work. Instead, they record data on paper copies and enter data into the mobile application

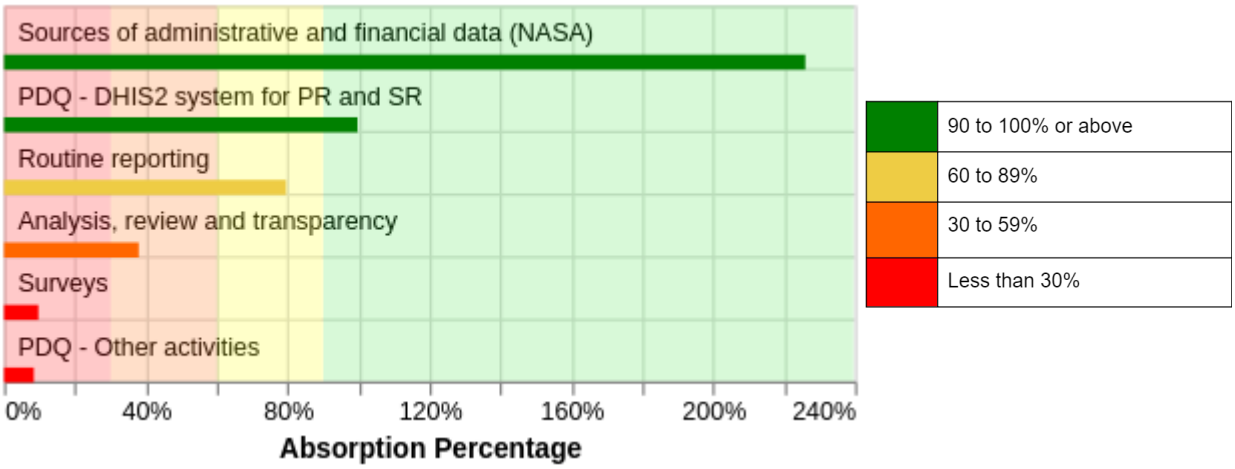
afterward. Although it takes an additional step, SRs also regard retaining a ‘paper trail’ as critical in case of technology failures and for legal purposes.

Implementation of activities to lay the groundwork for a new HIV/STI system for the MoH also referred to as the 'Critical Route' is not on course. During the grant revision, funds were added to hire consultants to design a new and more comprehensive HIV information system and to diagnose the status of connectivity and informatics equipment at notifying units of the MoH. Due to a prolonged tendering and contracting process, aggravated by the COVID-19 pandemic, the two consultancies were not completed in NFM2 and have been rescheduled for NFM3.

2.4 Absorption for the HMIS/M&E module

Out of five interventions in the HMIS/M&E module, only two had activities with a satisfactory budgetary absorption by November 2020: i) Sources of Administrative and Financial Data, with only one activity (National Aids Spending Assessment), and the ii) information systems for the PR and SR (DHIS2) in Program and Data Quality, as shown in figure 6 and presented in more detail in annex 4. Two interventions have activities with an execution below 30% (red), and two have absorption between 38 to 79% (orange to yellow), comprising mostly capacity-building workshops directed to civil society and SRs. Interventions related to the adoption, design [building upon the core of DHIS2], and implementation of DHIS2 for the PR, and related training activities for PR and SR staff have absorbed well. On the other hand, the intervention Surveys has a very low absorption due to the serious delays in awarding contracts; only three out of nine surpassed 20%, with an overall absorption of 9.5%. Because of this situation, the majority of planned surveys were rescheduled for NFM3. Refer to annex 4 for detailed absorption by activity and a list of the surveys planned for NFM2

Figure 6 Overall absorption of interventions in the HMIS/M&E module in NFM2[7]



Source: ContaVisual, September 30, 2020, matched with Implementation Letter 4, Nov. 2020

Another area of low absorption was related to funds earmarked for the HIV Program. These activities were compromised by a slow process to sign a cooperation agreement between the PR INCAP and the MoH. As a result of bureaucratic challenges, the PR could not transfer funds to the MoH without a formal agreement, causing the activities bound by the agreement to be delayed, i.e., training activities involving MoH staff.

[7] Surveys (average) is the average absorption for all surveys

NASA, which had a slow start in the first semester, went significantly over budget, from the US$20,000 allocated to US$47,000 spent. This can be explained by the need to hire international consultants who charge higher rates, who in turn had to hire a local team to collect missing data. The substantial increase was justified by the urgency to count on the data to write the NFM3 funding request. There was no capacity in the country to conduct or lead such work. The report is finalized and presently in revision by UNAIDS.

2.5 NFM2 Results and Achievements in HMIS

In NFM2, domestic indicators were included in the Performance Framework to assess interoperability between HIS through a Unique ID Code (CUI in Spanish); and use of data to create data dashboards. The results against these milestones are monitored by the Global Fund. Other than that, it is challenging to measure the results of the investment in HMIS (or RSSH) for lack of other parameters to gauge improvements.

The strategic framework for Data Use for Action and Improvement (DUFAI) at the country-level outlines how the Global Fund will support countries to improve capacity for data collection and analysis. (6) To track the progress of investments in this context, the framework defines a country-level M&E system profile to assess performance. The PCE has applied this framework to assess HMIS achievements in NFM2. Refer to Annex 3 for detail on advances according to the M&E systems profile framework.

The initial rollout of DHIS2 was satisfactorily achieved in the second semester of 2018 with the technical assistance of the UiO to the PR. During 2019, the UiO provided support to the PR to implement DHIS2 beyond the system itself but extended their scope to additional requirements. The inexperience of the PR took a toll in the initial implementation and inevitably led to several modifications in the system parameters. By the end of February 2019, the SRs were finally selected and the training phase took place, including the usage of the mobile App for smartphones. To date, DHIS2 is running smoothly and the system is generating data for the HIV program and standard indicators in the PF. DHIS2 is not used by any of the three national disease programs (HIV, TB, or malaria). Directives from SIGSA and the HIV/STI national program expressed in KII that the MoH would not pursue building upon the DHIS2 web platform, stating a preference for licensed, closed-source software, regardless of investment at the PR level and recommendations by the Global Fund. The reasons are not clearly understood by the Global Fund or technical partners because in June 2018 the HIV program, authorities from SIGSA, and the Epidemiology department agreed upon and endorsed a plan for strengthening the HIV information system (*Plan de Fortalecimiento del Sistema de Información de VIH*, May 2018). Discussions centered on the action plan to build a new modular HIS for HIV, preferably in DHIS2. Later in the year the MoH failed to approve the plan and withdrew from the assistance offered by USAID/MEASURE Evaluation (PEPFAR) for this purpose.

Findings in the HMIS/M&E module

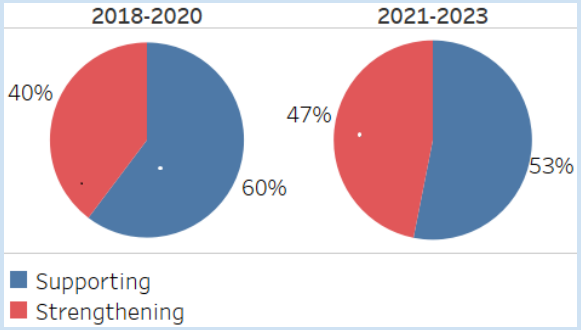
The rigorous process led by the PR and the HIV program to contract services, including surveys, delayed the implementation of the grant and had consequences for NFM3 design. The combination of a new PR (with limited experience in HIV and Global Fund grant processes) and a protracted review and approval process constrained the implementation of surveys. These delays had consequences in data that were not available and a detrimental effect on the ability to set accurate targets and better-informed strategies for NFM3.

Investments in HMIS/M&E show a trend towards alignment with the DUFAI Framework despite the drawbacks during the implementation of NFM2. The alignment was assessed using the M&E profile defined in the tool. As mentioned above, even when the design of

investments followed the rationale of DUFAI, the actual performance was low in M&E actions linked to the PNS, in part due to lag in signing the agreement with the PR, and later due to disruptions caused by COVID-19. The surveys to collect key data are featured in the DUFAI framework, showing good alignment to the M&E profile in NFM2.

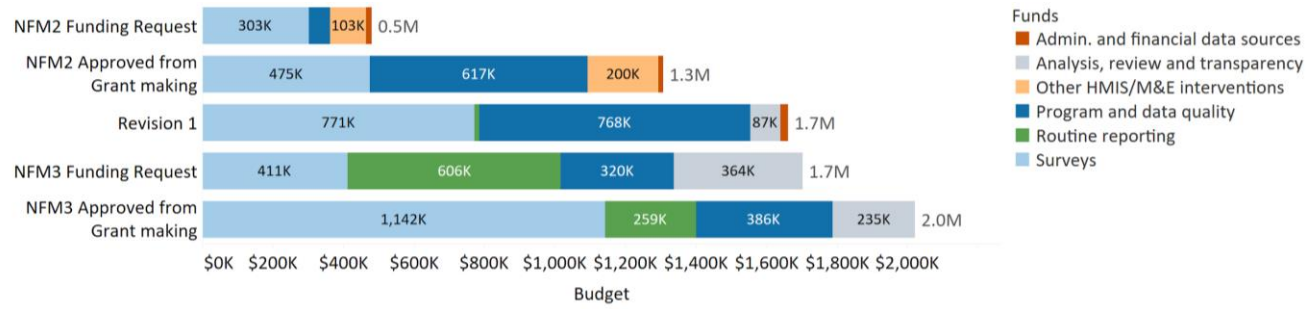
The HMIS/M&E module allocation increased substantially over the course of the grant cycle, driven initially by the need to address the TRP recommendation. During later stages of the grant cycle, there was an indication of increased country ownership over HMIS and the MoH took the lead to include funds to design a new information system different from DHIS2. During grant making, there was a substantial increase in funding for HMIS/M&E, much of this toward DHIS2 to facilitate monitoring and reporting by the PR. The MoH seized the opportunity to reprogram funds for a new information system during a grant revision required to incorporate US$2.7 million earmarked for EMTCT (from Comic Relief). At this stage of the grant cycle, there was growing consensus within MoH (including PNS, SIGSA, the Epidemiology Department, and UAIs) of the need to replace the archaic and fragmented HMIS used at that time, and to seek support from the Global Fund to design a new system. During grant revision, the MoH requested funds to begin laying the groundwork for a new system, the implementation of which is planned to begin during NFM3.

Relationship with Strategic Objectives of the Global Fund

Sustainability	RSSH
Sustainability is a multi-dimensional concept, encompassing financial, political, and programmatic elements. The apparent reluctance of the HIV program to adopt DHIS2 presented challenges for the long-term financial sustainability of HMIS investments, due to the licensing costs associated with Oracle, the preferred platform. Political will and country ownership has been a persistent barrier to efforts to strengthen information systems. More recently, there have been positive signals related to sustainability. The MoH as a whole has indicated a willingness to adopt DHIS2 for the entire ministry, which could increase financial sustainability. Leadership from the highest levels of the ministry in this endeavor is likely to increase sustainability. However, overcoming any residual opposition within SIGSA and ensuring buy-in to scale-up of DHIS2 will be critical to ensuring the longer-term sustainability of these investments. To date, there is no official position on this initiative	Over 50% of RSSH investments in the NMF2 grant in Guatemala are allocated in the HMIS/M&E module. As reported, 47% of activities planned for NFM3 are designed to strengthen the system, up from 40% in NFM2. This is consistent with findings for RSSH investments in Guatemala which show a slight shift toward strengthening investments in NFM3.  While there is a slight increase from NFM2 to NFM3 in activities designed to strengthen the system, there is no evidence in Guatemala (or in other PCE countries) of a “shift from short-term, input focused support…towards more strategic investments that build capacity and lead to sustainable results.”(7) While some level of systems support is undoubtedly required, this runs counter to the stated desire by the Global Fund to invest in more strategic strengthening interventions (see page 13 for more details).

2.6 NFM2 to NFM3: Business as usual vs. change in trajectory

Figure 7 HMIS/M&E module-level budget shifts



Source: Global Fund detailed budgets

The proposed NFM3 investment in HMIS/M&E increased by 15% compared to NFM2, from US$1.7 million to US$2 million. This increase is explained by 1) a substantial addition of funds for *Surveys* during grant making; and, 2) an increase in the budget for *Program and data quality* to complete groundwork for the new system proposed by the MoH for US$98,270, and 3) a substantial allocation for technical assistance to review and improve primary data sources for HIV program. The allocation toward the new system represents 25% of the total allocation for Program and data quality. After grant making, the HMIS module has 12 surveys/studies, out of which four are new, one was planned for NFM2 but the tender bid was deserted, and an additional seven are transferred from NFM2 because they were not completed during 2020 due to the COVID-19 pandemic which prevented fieldwork to take place, although the contracts had been awarded. The surveys that were rescheduled for NFM3 include the HIV seroprevalence and size estimates for several KP groups, and a program evaluation of the HIV/STI implementation.

The substantial decrease in the budget for *Routine Reporting* is due to the elimination of some budget lines for procurement of computer equipment, software licenses for Microsoft Office for the MoH, and travel-related expenses for the development, piloting, and training of the new information system. However, the budget for the consultancy to design the new system is allocated in this intervention: US$125,000 was transferred from NFM2. Other budget lines for procurement of 80 laptops and licenses for Microsoft Office for the HIV program and two community VICITS were maintained.

The decrease observed for *Analysis, Revisions, and Transparency* was due to the elimination of several budget lines for travel-related expenses and materials for meetings that the MoH had intended for data analysis, monitoring of advances in EMTCT, and reproductive health interventions for the MoH. A new allocation to support monitoring and supervision of activities for the HIV program (US$162,919) was introduced.

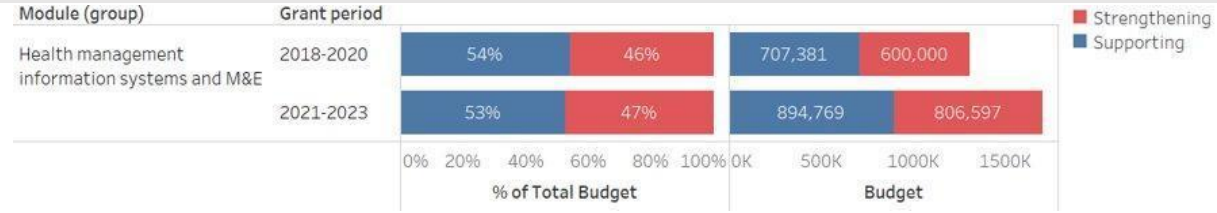
To assess how investments in NFM3 are learning from and improving upon previous efforts, the PCE inquired about **what is different now** from previous efforts to improve HMIS. The unanimous response was that this time there is an **unprecedented generalized consensus between the parties involved**. The consensus is not only to change to a new system but a decision to let go of the obsolete but familiar subsystems. As expressed in a KII with PNS, "we have been able to get everyone on board." The CT expressed the same conviction that there is a commitment to work together. The MoH authorities recently disclosed a plan to holistically reform HMIS and a renewed interest in using DHIS2, in contrast to SIGSA's stance against open-source software in the MoH. Reconciling these divergent views will be critical. There is

no official position yet from the authorities. The current pressure on the MoH to launch the vaccination campaign against COVID-19 is a priority diverting the attention of the Minister and high authorities faced with public criticism for lack of progress in procuring and administering vaccines.

The PCE used the Global Fund Framework for Action - DUFAI to assess whether the HMIS investment in NFM3 represents a change in trajectory. (6) As in NFM2, the PCE sees a trend in NFM3 to align with the business model described in the DUFAI framework. There are advances in two out of five components based on the DUFAI profile: Component 1: Investing in country data systems and analytical capacity and Component 3: Systematic data analysis and data synthesis). Even though the other three components do not show significant change, there is a trend towards alignment with this framework, refer to Annex 3.

RSSH Supporting vs. Strengthening '2S' Analysis

To assess change in trajectory for RSSH toward investments intending to strengthen the health system (rather than simply support disease program functions), the PCE adapted the 4S analysis applied by TRP consultants in 2018 to compare the final approved NFM2 budgets with NFM3. (8) We found a slight increase in the level of funding for strengthening investments in NFM3, compared to NFM2. The level of strengthening interventions was higher for Guatemala compared to other PCE countries, a promising feature as Guatemala prepared to implement one of the largest grants in recent times. As the malaria and TB programs are currently in transition (as of the NFM3 grants), prioritizing strengthening activities is essential to improving the long-term sustainability of investments. HMIS investments that are deemed supportive are driven in part by substantial funding for several surveys, characterizing KPs and updating HIV prevalence estimates. These surveys were not implemented in NFM2 and instead shifted to NFM3. Although supportive rather than strengthening, they are crucial for the national HIV response. Moreover, it is hard to find financing for surveys from other sources.



Source: Global Fund detailed budgets

The PCE identified a nascent potential for a change in trajectory in NFM3, once the planned actions are executed. It is promising that the recently appointed Minister of Health intends to reform the entire HIS. The Global Fund and technical partners (i.e., USAID-PEPFAR) are committed to invest and support this endeavor. SIGSA directives, responsible for the HIS, must also be on board to achieve success and sustainability. In terms of the response to the epidemic, the efforts of the HIV program to better coordinate between Epidemiology and SIGSA produced improvements in data collection tools (SIGSA Sida, Epi Ficha) and reporting on the PF and the cascade indicators. All the parts must strive to follow the joint national plan (2019) to truly change the trajectory of HIS in the country in the established term."

3. FOCUS TOPIC: LINKAGE TO CARE

3.1 Background & Rationale

In Guatemala linkage to care is defined as the completion of a first medical clinic visit after HIV diagnosis[8].(10) It is a crucial early step in the HIV care continuum and a necessary precursor for enrollment in antiretroviral (ARV) therapy. The NFM2 grant aimed to close the gap between newly diagnosed positive cases and linkage, thus contributing to achieve the UNAIDS Fast Track targets by 2030 (95-95-95 Treatment targets). (11) The main strategy was to accompany new cases to an HIV Comprehensive Care Clinic (Unidad de Atención Integrada - UAI) and make sure the person was evaluated and enrolled in ARV therapy and follow-up care, according to protocol

Despite the importance of linkage in achieving the UNAIDS targets, the PCE has observed an average performance by SRs. In the last three years, none of the SRs reached the 90% target and none surpassed 80%. The Global Fund has highlighted persistent gaps in the continuum of care in Guatemala, specifically in the linkage of positive cases, and the inability of the current HMIS (SIGSA) to track outcomes.

The dilemma of SRs in linking cases to care is not unique to Guatemala. Other countries face similar levels of performance and indeed, many of the barriers are contextual and inherent to working in complex community settings. Even well known projects, with sound linkage strategies, report similar rates of success. For example, the ARTAS project, implemented in several cities in the USA, linked 78% of patients within six months, and the Extended Counseling project in Uganda linked 68%. (12) The recent UNAIDS update on the treatment cascade (September 2020) reports that globally, only 67% of positive persons who know their diagnosis are enrolled in ARV treatment, an indirect measure of success of linkage to care. (13) Linkage to care strategy in NFM2 was anchored on the work of “multipurpose promoter/navigators,” not very different from the strategy implemented by former PR, HIVOS. In the absence of a community-tailored protocol, the current strategy draws elements from the successful project funded by PEPFAR and implemented by Universidad del Valle in three VICITS clinics. (14) The model was based on navigators promoting testing in the clinics and, if positive, escorting the patient to the UAI to be linked to treatment, and continuous emotional support. The model has been very successful, currently linking 85% of newly diagnosed cases. (15) Few, if any, necessary adaptations were made to this clinic-based model for community settings, and the need to hone promoters’ counseling skills after a positive diagnosis was overlooked.

Guatemala is set to reform the HIV HMIS to better track indicators to assess trends and the effect of interventions on the epidemic. Indeed, the MoH cannot report on linkage to care because SIGSA Web does not capture the variables. The country has published four reports on the Treatment Cascade Continuum but as yet has not been able to include data on the second pillar (linkage). The Global Fund has invested in M&E systems in the HIV program as part of the HMIS funds. As a result, there is more information available for analysis at the central level, including partial data on linkage to care for KPs.

There are clear associations between linkage to care and the Global Fund’s strategic objectives on equity and sustainability. Implementing effective linkage strategies is essential to attain equitable access to care and treatment services, and is especially critical for KPs,

[8] The definition of linkage is not fully standardized but PAHO and WHO agree that “it should be defined as patient entry into specialized HIV care after diagnosis, more specifically, the time between the HIV diagnosis date and either the first clinic attendance date, first CD4+ count, viral load date *or* HIV treatment start date, with prompt linkage measured within 3 months."(9)

who often encounter stigma and discrimination. Nevertheless, the sustainability of linkage to care investments is questionable because the performance for linkage resides not within the MoH, but in civil society organizations. The prevention activities targeting KPs in Guatemala are 98% dependent on foreign aid, out of which 67% comes from the Global Fund.

3.2 NFM2 Funding Request: Intended strategies and investments

Overall, the NFM2 funding request had an allocation of approximately US$703,092 for linkage to care activities, corresponding to 4.7% of the total grant budget, distributed in several modules.

As in NFM1 under HIVOS, the community field promoters were hired for the following activities: i) counsel and screen KPs; ii) confirm results; iii) accompany positive persons to a UAI, and iv) walk the person through the UAI to enroll them in care and treatment (referred to as 'navigation'). In NFM2, two activities were added to the promoters' responsibilities: i) to offer basic advice on human and legal rights, and ii) conduct exit interviews in health facilities to assess satisfaction with care[9].

In NFM2, there is an allocation for salaries to hire promoters by SRs, proportionate to estimated targets. The KPs considered are men who have sex with men (MSM), transgender women (TG), female sex workers (SW)[10] and prisoners. A fee of up to US$20 per positive case was budgeted to cover travel-related expenses to the UAI. In NFM1, the budget included a higher travel subsidy for both patients and promoters and a meal for the patient. The largest share of the linkage budget was allocated to salaries and operation costs for UAI clinic-based staff of a single SR hired to support adherence and retention of positive persons linked by promoters. The grant also included a budget for prevention activities in prisoners, including information packages, condoms, and HIV rapid tests. The Minister of the Interior is responsible for covering the linkage of positive inmates to health facilities run by the penitentiary system, as well as providing care and treatment.

3.3 Global Fund investment in linkage to care in NFM2: shifts during grant making (July 2018)

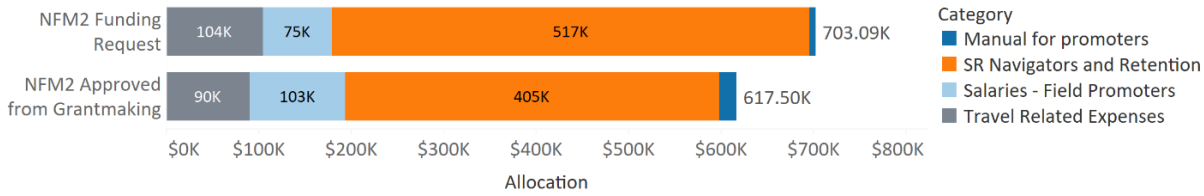
During grant making, the approved NFM2 HIV funding request budget shifted from US$703,092 to US$617,497, an overall decrease of 12%, mostly due to optimization of the budget. The overhead costs for the organization tasked with follow-up of adherence and retention were significantly reduced during grant making from US$149,814 to US$50,061, based on former PR´s rates. The overall allocation decreased by US$112,000, refer to figure 8, budget line, “SR: Navigation and Retention.” On the other hand, the budget line for salaries for SRs increased during grant making to allow more hires, from 71 to 334 promoters, based on estimates of the hypothetical burden of work.

During grant making, the total allocation for travel expenses lessened to match the estimated number of persons to be linked by SR based on more realistic positivity yields according to historical trends and by geographic catchment area.

[9] Both activities were part of HIVOS's ambitious and specific strategy to address human rights, which became significantly downsized in NFM2. HIVOS also assigned a specific budget line per SR to train their staff on linkage and navigation that was reduced in the new grant.

[10] Treatment and care for SWs were taken over by the MoH in 2018, as specified in the iterated funding request. The funds for travel for linking SWs were reprogrammed at the time of the first grant revision in October 2019.

Figure 8 Linkage to Care budgetary shifts during NFM2 grant making



Source: Global Fund detailed budget GTM-H-DB-INCAP July 2018

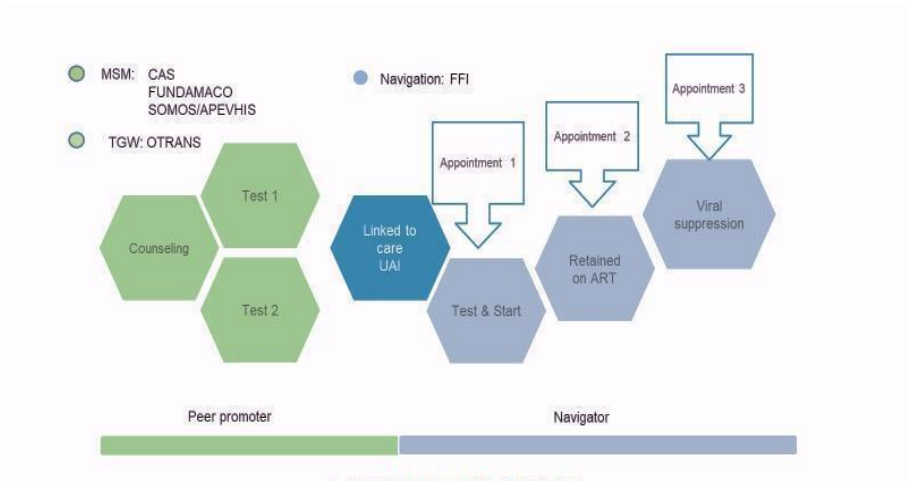
3.4 Grant Implementation

Once the grant was approved, INCAP tendered the selection process for SRs, ending up with five organizations hired to provide prevention, including activities for linkage to care: one SR for transgender women (OTRANS), three for MSM (CAS, Fundamaco, and the APEVHIS/SOMOS partnership), and one for sex workers (OMES), which only offered prevention. The PR INCAP took over the implementation of preventive activities for prisoners because there were no bidders on the tender due to the reluctance of NGOs to work in prison settings lacking proper safety and security measures.

To conduct outreach activities, each SR hired and trained multi-purpose promoters. There were short delays in the start-up of activities due to establishing agreements between the PR and each SR, and because of the time it took SRs to hire staff and plan logistics. The PR had planned to train promoters once the Manual for Promoters and Navigators was available. However, by the time the manual was finalized and published, the plans were curtailed due to the COVID-19 lockdown. Training is currently postponed indefinitely.

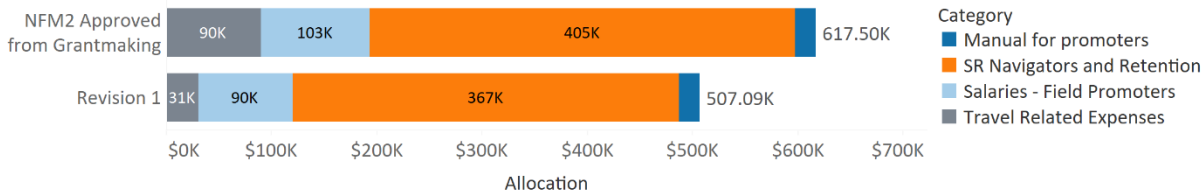
Early in implementation, during February 2019, the UAIs management expressed concerns about overcrowding, exacerbated by having promoters accompany patients to their first visit. They proposed instead having a single navigator for all newly diagnosed cases at each clinic. The PR complied and redefined functions for the NGO Fundación Fernando Iturbide (FFI), hired for adherence and retention. Clinic-based navigators were contracted per facility, which took over the positive cases from the SR promoter and walked them through the first three clinic visits (figure 9).

Figure 9 Pathway for linkage to care 2019–2020



3.5 Global Fund investment in linkage to care in NFM2: shifts during grant revision

Figure 10 Shifts in Linkage to Care budget from grant making to Revision 1



Source: Global Fund detailed budget

In October 2019, the HIV grant was revised to incorporate additional funding that became available from Comic Relief to fund EMTCT. During the revision process, several other modifications were made to the HIV grant. During the grant revision, the budget for linkage to care of KPs lessened from US$617,497 to US$507,093. Again, the decrease was attributable to economies in several budget lines based on actual quotes and further budget negotiations at the time of selection of SRs. Travel-related expenses to link sex workers were also reprogrammed because most SWs receive counseling and testing services at MoH health facilities responsible for care and treatment for SWs since 2018. Thus, the allocation of budget to link SWs appears to have been an oversight amended during grant revision. The allocation for travel-related expenses was also reduced because of a three-month lapse to start implementation, including the time required to select, hire, and initial training for SRs.

The amount allocated for salaries, planned for 320 promoters for MSM at grant making, was reduced based on a better understanding of workload. The number of promoters was in flux and by the end of 2020, SRs had hired 93 promoters. Even though, the absolute number of transgender women to be linked decreased, the number of promoters for OTRANS increased from 14 to 17 because their geographic scope extended to the whole country (22). The allocation for FFI was further reduced to meet the real needs, as estimated in their technical and financial proposal to the PR.

During grant making, the PR participated only with three persons and the CT led most of the target revision. Therefore, changes were likely to occur once SRs were hired and the PR gained a better understanding of the needs for staffing, travel expenses, etc. At the grant making stage, the budget allocations were based on looser estimates, so grant revision 1 provided a convenient opportunity for adjustments.

Although SRs were falling short of global linkage targets set by UNAIDS (90% of new cases) there were no substantial changes to the implementation approach during grant revision. The exchange of good practices and building upon successful ones was not distinctly observed. Neither was testing current evidence-based strategies such as strength-based management. Undoubtedly, the PR has gained experience in the Global Fund model, and be more apt to utilize revisions in NFM3.

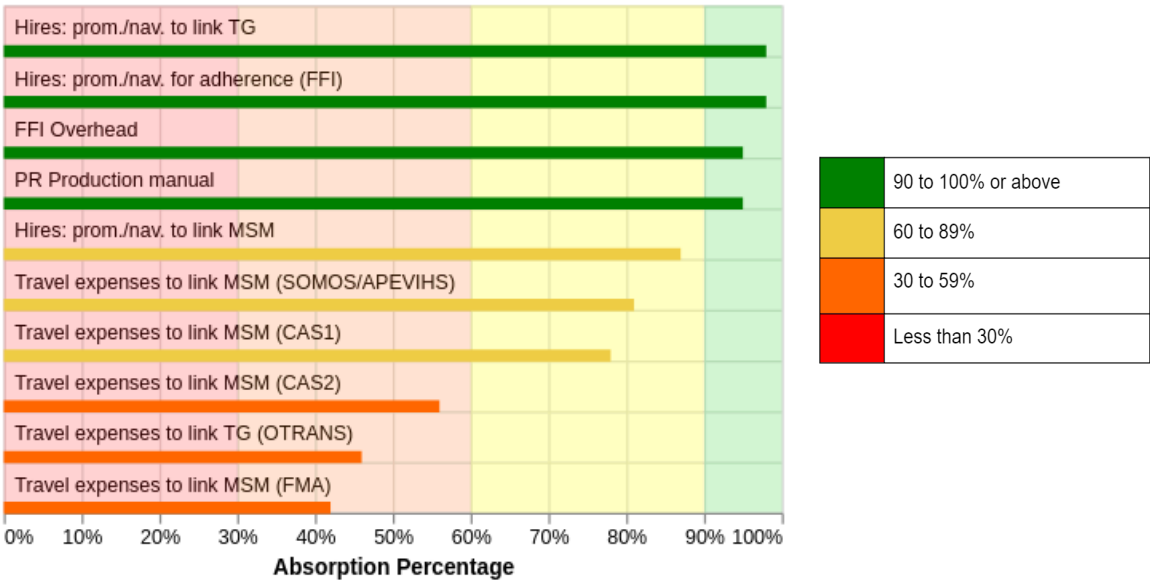
3.6 Absorption analysis for activities related to linkage to care

A lag in startup caused savings from activities programmed but not executed during the first quarter of 2019 while SRs were selected and hired. By the time implementation was up to speed, the pandemic prevented many outreach activities, and generated savings because activities could not be implemented (i.e., for travel and training/supervision per diems).

Figure 11 shows that three out of five activities with low absorption (between 40% and 60%) are travel-related expenses. Data from SRs OTRANS and Fundacion Marco Antonio (FMA) show that regardless of having executed above 90% of the budget to hire promoters, they

were not able to continue traveling to link cases due to the epidemic. When compared to performance, as discussed in the next section, OTRANS has only linked 58% of positive cases in 2020, and FMA only 64%, which explains the low absorption of travel-related expenses budget. Six out of 11 budget lines have absorption between 80%–95%: salaries for promoters, overhead for FFI, and the publication of the long due Manual for Promoters and Navigators in January 2020 (planned for mid-2019)[11]. FFI had low absorption (60%) for follow-up of adherence (travel and per diems). This is attributed to the lower-than-planned performance of SRs, which was lagging in the number of positive cases detected *and expected to be linked to treatment*, and also due to COVID-19.

Figure 11 Absorption of Activities related to Linkage to Care



Source: ContaVisual, September 30, 202

In summary, absorption is high at 92% and 98% for salaries and organization overhead; as well as fixed costs, which are not dependent on a specific performance level. Absorption of link-related expenses varied by SR dependent on the positivity yields (number of persons screened and found positive). The average absorption of the budget destined to link positive MSM was 64% and 46% for transgender women.

3.7 Performance of linkage to care

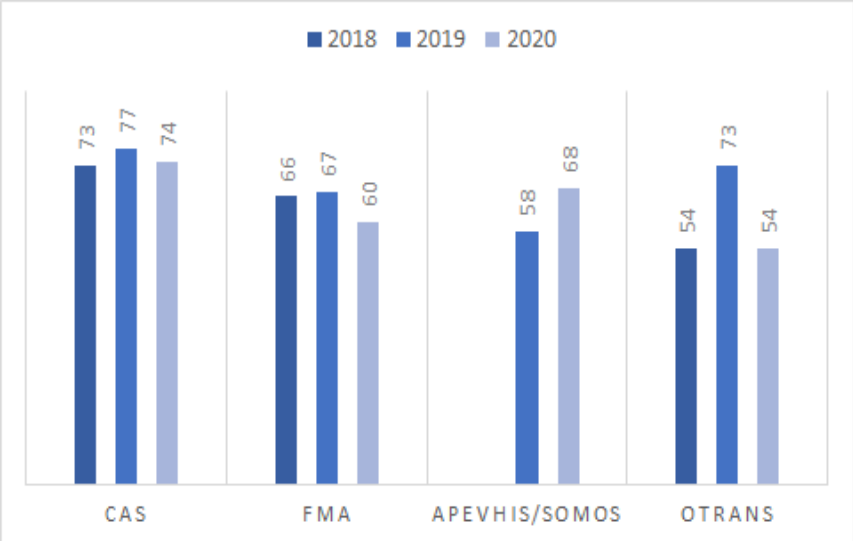
SRs did not achieve the 90% target for linkage and the performance of individual SRs did not vary significantly throughout NFM2 (see figure 12).(16) The outlier is APEVHIS/SOMOS, who had an upturn in the first semester of 2020, despite the COVID-19 disruption. It can be attributed to a decision made early in the year to place less emphasis on providing physical outreach in "hot spots" (venues well known to be MSM meeting points), and rather rely on a wider variety of social media to detect hidden MSM. APEVIHS/SOMOS went on to set appointments for home visits or meeting in convened places, providing for more privacy and confidentiality.

Although all SRs fell short of achieving the 90s targets, they did a good job in linking 79% of compliant cases within one week of their diagnosis. (16) A small percentage of cases

[11] The cost of the manual was revised and cutback based on updates on quotes.

diagnosed by SRs are linked to care by other providers. By the end of 2020, the Social Security Institute (IGSS) had linked thirteen cases but provided proof on only three.

Figure 12 Percentage of newly diagnosed cases linked to care by SRs, January 2018 to December 2020



Source: PR INCAP Dashboard generated by DHIS2 Reporting Tool, generated Jan 10, 2021

Linkage of positive transgender women remains lower, with some periodic variations, since the beginning of implementation. The performance of OTRANS peaked in 2019 at 73% but otherwise has been under 55%. Their failure to link more transgender women is related to fear and distrust of public health services due to experiences of stigma and discrimination and other demand-side factors, including high rates of addiction, reliance on sex work, limited social support, and low educational levels. (10,20) Outreach work by OTRANS was particularly impacted by the COVID-19 lockdown because of the lack of public transportation to cover their wide geographic catchment area. Two KP are not included in the graph, prisoners and female sex workers, both linked and reported by the public sector, as noted above. In the Progress Report to June 2020, no new positive cases in sex workers were reported.

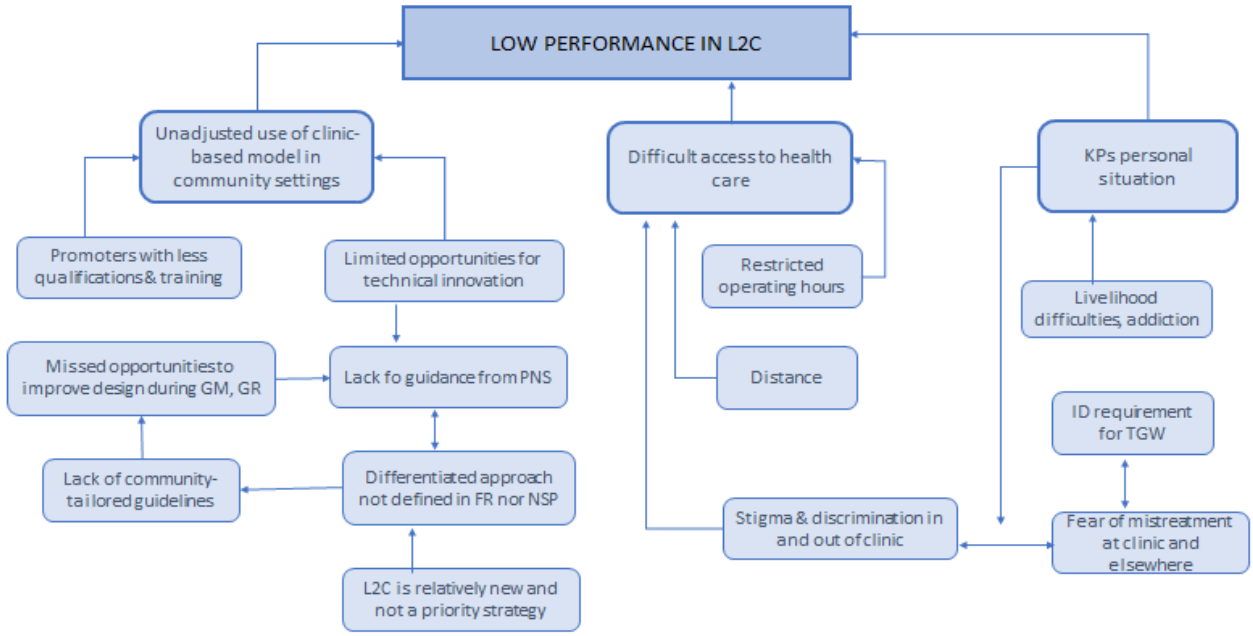
COVID-19 Grant Revisions & Effects on implementation

The implementation of the grant was abruptly interrupted by COVID-19. In March, the government declared a state of emergency and a strict lockdown that suspended all non-essential work and mandated the suspension of all public transportation. Additionally, several municipalities restricted the entrance of non-residents to their towns, including SR promoters. PR INCAP canceled all field activities and directed staff to work from home. SRs also closed their headquarters and drafted contingency plans, offering testing at safe premises (clients' home or work), as well as self-testing.

Prevention and testing targets were negatively impacted, especially during April and May. In August, both PR and SRs were back in their offices, following standard prevention protocols. As COVID-19 spread throughout the country, the risk of field staff coming into contact with infected persons increased; several were quarantined, further limiting the number of people in the field. Funds from non-executed activities related to linkage were reprogrammed to respond to the COVID-19 pandemic: savings came from unused travel expenses and FFI operation costs.

The PCE conducted a Root Cause Analysis (RCA) and found four important challenges contributing to SRs' low performance (figure 13).

Figure 13 Root Cause Analysis on low linkage to care performance



1. The standard procedure used for linkage, based on a multipurpose peer promoter, has not evolved to achieve better results. Promoters needed specific training on post-diagnosis counseling, which was not considered in the present guidelines by the PR. Strength-based counseling has proven effective and has been described in detail in at least three locally produced training manuals[12] as well as those produced by LINKAGES and IAS for other parts of the world; it is not clear why it was not included in the PR manual[13]. Linkage of new cases diagnosed outside a clinical facility poses specific challenges, in particular the ability of promoters to build trust and confidence, and foster support networks. Currently, SRs do not follow clear evidence-based strategies for linking positive cases found in the community, systematically addressing risks and strengths. Adaptations to individual context are especially important in municipalities with high population mobility, and remote locations, where peer support could be particularly feeble. The approach is modeled on a successful clinic-based project funded by PEPFAR. Navigators in this project were college graduates, well-trained in strength-based counseling, equipped with mobile electronic medical records, and support by a clinical psychologist to refer patients. In contrast, SR promoters tend to have less formal education and their training is not standardized. The quality of post-diagnosis counseling has not been assessed. The existing information gaps on specific characteristics of KPs and subgroups have not been filled. Three studies included in the HMIS/M&E module that should have contributed to refine linkage strategies were not completed.
2. The Global Fund grant cycle provides several opportunities to change the implementation approach. There have been missed opportunities to redirect the course of linkage to care strategies during the NFM2 grant cycle, notably during grant revision. This could be attributed to insufficient community-tailored guidelines and evidence on best practices, either from the PNS or the PR, which have left promoters somewhat adrift, trying their best under challenging environments. The key studies planned as part of NFM2 on RSSH investments were not implemented timely (and have indeed been postponed until NFM3),

[12] OPS 2006, PASMO 2008, IntraHealth/Capacity Project 2018
[13] INCAP (2019). *Manual de Descripción de las Intervenciones por Poblaciones Clave Priorizadas*

and their findings were not available to inform a change in approach. Even more, the necessary learning curve of the new PR might have played a role, too, as INCAP was not familiar with the Global Fund model.

The newly issued manual for promoters and navigators developed by the PR INCAP during the 2018-2020 grant was a good step toward standardization and quality improvement. Nevertheless, it is quite general in the guidelines on linkage and the actual navigation process. The PR manual provides a cursory section on linkage to care as well as on counseling; strength-based counseling is not even mentioned. Furthermore, there were few attempts to garner best practices from experienced SRs or to analyze the variables that could explain the reasons for their success, or lack of, to link new cases to care. According to several SRs, the PR is focused on fulfilling the indicators in the PF, and there have been few opportunities to analyze other sets of data.
Linkage to care as a discrete intervention is relatively new in Guatemala, and the benefits and drawbacks of various strategies have not been subjected to technical debate. During the early development of the NFM3 funding request, for example, most of the discussions focused on who would conduct linkage and navigation (a dedicated SR or the same SRs doing prevention), and less on how it would be conducted. Innovation and creativity require decisive leadership and often require learning a different set of skills and moving away from familiar practices.

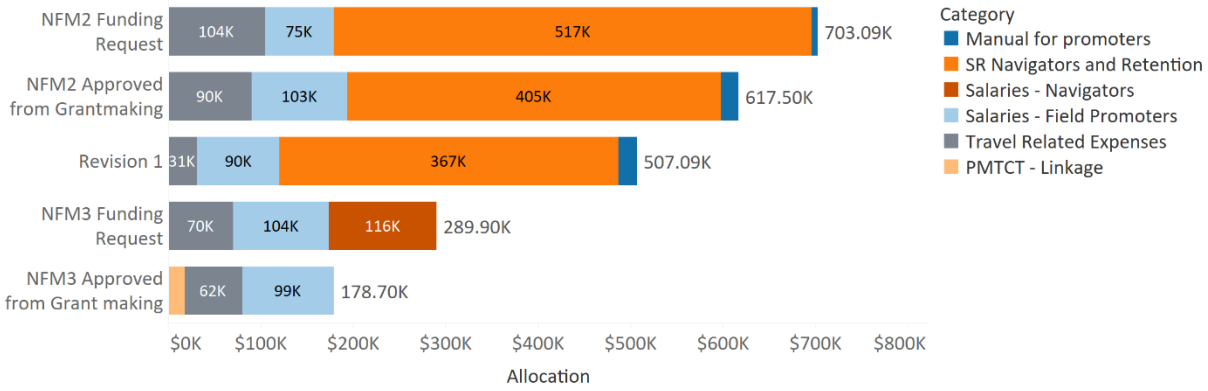
3. Supply-side issues beyond the control of the SRs or even PR are clear deterrents to linking new cases to care at HIV clinics. HIV clinics are geographically dispersed, requiring some patients to travel long distances. Distance to clinics, especially for patients on long-term treatment regimens, is a clear disincentive for those living far from urban centers. Most of these clinics operate on a restricted schedule, and patients who work have a harder time accessing care and treatment. Offering extended hours would be desirable and was proposed by many key informants, but UAI staff interviewed by the PCE considered this option unlikely due to limited funds and bureaucratic procedures required to obtain permits for personnel to work outside of business hours or to create new positions. For example, HIV clinics in Guatemala City (accounting for 75% of all care and treatment) are overcrowded, taking only a fixed number of new patients per day. The opportunity cost of the initial evaluation is high, often taking a full day. Some clinics require an initial two-day evaluation, which increases costs and complicates work permits. In addition to physical access, there are also noted supply-side issues in providing respectful care for KPs, most prominent when caring for transgender women.

4. Fear of stigma and discrimination presents a persistent demand-side barrier, particularly for transgender women. A myriad of factors constrains linkage to care for KPs, including dependence on sex work, co-morbidities such as drug and alcohol addiction, poor health literacy, and denial of diagnosis. These are well-known barriers that require specific strategies, especially for transgender women. Fear of mistreatment by service providers and breach of confidentiality are common to all KPs but particularly affect transgender women. KPs often face multiple levels of stigma. In the small LGBT community, there is also anxiety about being seen at the UAI that could elicit conjectures about their serological status, in special for those engaged in sex work. Stigma and mistreatment at health facilities by staff are well-known barriers to care, more acutely felt by transgender women. (18-20) The lower performance of OTRANS is also explained by the specific barriers faced by transgender women. (15,19) One such barrier is the denial of their gender identity by registration staff in the health facility. Guatemalan transgender citizens are allowed to change their legal name, although their national ID will show a disparity between the gendered name and sex at birth. OTRANS has estimated that close to a third of transgender women have been able to change the name on their ID cards to reflect their current gender. (21) At the clinic, a transgender woman without a corrected ID card will be

called by her male birth name, indicating disrespect and lack of recognition of her identity. Notwithstanding these difficulties, 79% of all new cases (75% for transgender women) are linked within one week of diagnosis. For those who resist, SRs often enlist the help of field supervisors and psychologists. In some instances, the positive person chooses to receive care from other providers, including the social security health facilities. Further, some “lost cases" turn out not to be newly diagnosed, but rather HIV+ persons pretending not to know their serologic status. SRs can spend considerable time engaging these cases to care; one of them, for example, found that 15% of their diagnosed cases pertained to HIV+ MSM. The reasons for passing as a new case to get an HIV test as not been assessed.

3.8 From NFM2 to NFM3: Change in trajectory?

Figure 14 Grant cycle Linkage to Care budget allocations from NFM2 to NFM3



Source: Global Fund detailed budgets

The NFM3 funding request did not contain significant changes to the strategy for linking newly diagnosed cases to care. Most of the observed modifications in the NFM3 funding request involved reverting to interventions implemented during NFM1 or to those proposed but not implemented during NFM2. The changes included: salaries for promoters dedicated only to linkage to care, called "promoter-navigator"; and for in-house navigators for five VICITS clinics, including the provision of travel assistance to KPs newly diagnosed at these clinics. For the sake of reducing the time between diagnosis and linkage to care, SR promoters will not perform confirmatory testing. There is mention in the FR of use of differentiated strategies for subpopulations, but are not clearly depicted. There are scant guidelines for vulnerable populations, such as migrants, people in rural areas, and indigenous communities. Some key informants have indicated that these strategies will be better tailored after the three surveys initiated in NFM2 are completed in NFM3. The allocated budget is much lower, as it does not include salaries for dedicated navigators, formerly performed by SR FFI. There is a slight increase in both travel expenses and promoters' salaries.

Improvement of the documentation/registry of linkage to care at the UAIs has been proposed. However, the coverage indicator for linkage to care, SCT-7, has been removed from the performance framework. Instead, two new indicators will be used: one for measuring positivity and another for measuring the number of new cases receiving ARV. The PR, however, will continue to track the linkage to care indicator as an internal measurement.

Other proposed changes for treatment, testing, and prevention will likely have an indirect but positive impact on linkage to care, as well as in the continuum of care. These changes include the following measures: i) extension of office hours during the workweek, and on Saturdays from 8 am to 2 pm) at the three large UAIs located in Guatemala City, Escuintla, and

Malacatán; ii) shortening the time of medical examinations; and iii) provide multi-month prescriptions of ARV to stable patients (an intervention already underway in some facilities). In COVID-19 time, these measures will also reduce crowding and need for physical contact. The FR also addresses the need to generalize post-test counseling by allocating funds to hire psychologists for most community clinics. It also includes funds to support three community clinics, one for MSM and one for transgender women in Guatemala City, and a third one for all KP in another unspecified town, as well as the renewed use of the mobile clinic (from an earlier grant) for a wandering transgender population.

An important change in the new grant is the way coverage targets will be measured. Well up to the NFM2 grant, targets involved predominantly the implementation by the PR and SRs. In NFM3, the PR will be required to report on the achievements of all national implementers, including technical partners, IGSS, MoH, and other implementing units to reflect national achievements.

3.9 Modifications during grant making in NFM3

The overall budget for activities related directly to linkage decreased by 40% during grant making, from US$289,903 to US$178,702, as shown in figure 14 above.

Following on recommendations from the Global Fund, during grant making an allocation for EMTCT was added to finance the development of a strategy to effectively link to care any pregnant women found positive for HIV, syphilis, and/or Hepatitis B (rescheduling of Comic Relief funds - budget line 324). Another significant change was the elimination of funding for navigators for five VICITS clinics, previously allocated in the module *treatment, care, and support*. These navigators were expected to manage care for active cases in the cohorts and seek cases lost to treatment, but the PR could not justify their position, as was asked by the CT. In the NFM3 grant there is allocations for personnel for two VICITS clinics: one physician, a nurse, a psychologist, and a social worker. There was a cutback on travel-related expenses for linkage to UAI and VICITS for MSM, based on the number of revised positive yields adjusted by site (municipality). A difference in NFM3 will be that promoters will not confirm positive cases in the community. In the 2021-2023 grant, confirmatory tests will be taken at UAIs. The promoters need only to bring the newly diagnosed case to a UAI to be confirmed and linked to care; navigation and follow-up will be picked up by UAI-based staff. A potential resource for navigation is the staff of technical partners also working in UAIs, e.g., IntraHealth and AHF.

Another significant shift occurred in the *behavioral change* intervention in the *Prevention* module, mainly due to the reduction in the number of promoters. Based on the productivity analysis requested by the CT, it was decided that it was not efficient to keep the existing number of promoters, thus cutting back by five persons bringing. About a reduction US$4,600 in the budget line for salaries. The CT also requested an accurate characterization of KP to tailor effective strategies to reach the most vulnerable. To resolve this gap, the SRs provided input to the PR to develop a detailed description of each KP (22), as well as a prevention strategy (15) for neglected subpopulations, which were mentioned, but not well defined, in the funding request. It is expected that these efforts will help to develop more effective and differentiated strategies for prevention, testing, and linkage to care. During grant making, the interventions that directly affect linkage to care (salaries and transportation expenses) were reduced for a variance of -45%. Regarding interventions indirectly related to linkage to care (support to UAI to extend schedules after hours, adherence interventions, and information system) the allocations were reduced by 13.5%, mainly due to the elimination of allocations to remodel UAIs and build warehouses, and the elimination of virtual training on testing,

diagnosis and treatment of opportunistic infections. as shown in table 5. Overall, the budget for linkage to care decreased by 18.5% including both direct and indirect interventions.

Table 4 Changes in the budget after grant making– FR detailed budgets (US$)

L2C interventions	Funding Request	Grant Making	Variance
Directly related	$289,902.94	$161,003.58	-45%
Indirectly related	$1,273,092.76	$1,113,424.92	-13%
Total	$1,562,995.70	$1,274,428.50	-18.5%

Relationship with Strategic Objectives

Sustainability

Despite commitments by the MOH to take over donor-financed initiatives, experience indicates that the MoH struggles to abide by such commitments (e.g., with VICITS clinics). For HIV, the vast majority of interventions for KPs, including prevention and linkage to care, remain heavily dependent on external resources. Currently, across all 18 UAIs, there are only two navigators funded by the MoH, both in Guatemala City. According to stakeholders, it is highly unlikely that the MoH will hire more navigators, as several UAI are short on the medical staff, and navigators are not considered a priority. Other donors are providing additional support in linkage to care, as it is not foreseen that the figure of a navigator will be adopted by the MoH in the long term.

Several stakeholders have stated that it is highly unlikely the MoH will ever provide comprehensive prevention to KPs. In their view, it would be more feasible to hire a CSO to conduct these activities. However, contracting with CSOs has become a legal labyrinth. Given concerns about the programmatic and political sustainability of KP investments, the CT has asked for a consultancy to understand the legal pathways in which a CSO could be hired. Using the findings of this consultancy to develop a strategy to ensure KPs continue to receive the services they require will be critical to the long-term sustainability of Global Fund investments.

Equity

SRs have been unable to implement truly differentiated strategies for their target KPs, thus constraining efforts to ensure more equitable access to care services for all KP. Likewise, determinants of access to HIV care to specific subgroups of KP have not been addressed.

Despite the levelling off in performance, performance by SRs, there were no notable shifts in the approach during implementation in NFM2, or any significant course correction planned for NFM3. Indeed, in response to concerns about the efficiency of promoters in identifying new HIV cases, during grant making there were cutoffs in the number of promoters to be hired by SR in NFM3. This decision might reflect a trade-off between equity and efficiency. This should be monitored during NFM3 implementation, as well as the modality of navigation, yet to be decided, with potential participation of resources from other technical partners.

4. COUNTRY COMMITMENTS

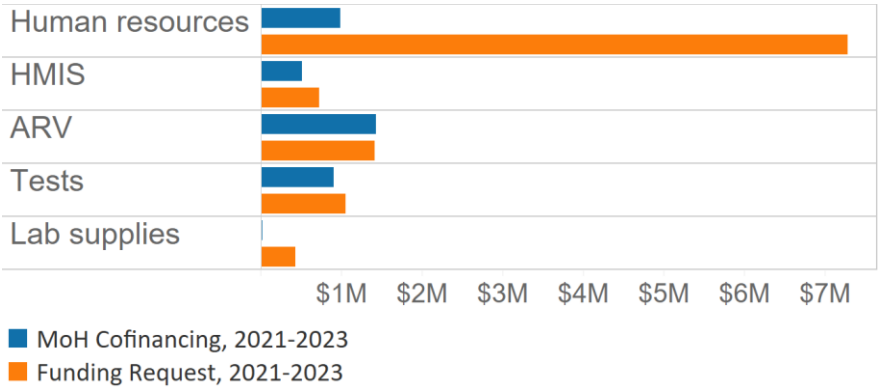
4.1 Co-financing and Sustainability

In each grant, the MoH has committed to co-financing 15% of the total amount allocated by the Global Fund. MoH invests the amount of co-financing in the following items: i) absorption of personnel hired by the grant, ii) purchase of ARVs, iii) other pharmaceuticals, iv) reagents for viral load and CD4 testing, and v) expenses associated with procurement. The MoH exceeded its co-financing commitments for 2018-2019 by 282%. However, the efforts are not enough, because the KP interventions are dependent on external donors and there are no visible means to give some type of support to community clinics, which risks the sustainability of grant interventions.

Another commitment was to establish an agreement between MoH and the Social Security Institute (IGSS) to allow harmonization of treatment guidelines, standardization of care protocols, and joint purchases to achieve scale economy. To this end, the MoH and IGSS signed an agreement in November 2018; subsequently, IGSS signed an agreement with the Pan American Health Organization (PAHO) in July 2020 to obtain substantial savings by using their regional procurement mechanism. Both agreements will improve the care of HIV-positive persons in the country.

The MoH also committed to improving HIV budget reporting at the central level and decentralized health facilities. If this information is readily available, it would allow better control of funds and prevent misuse and transfers to other programs or activities. The need for this was stressed during the Country Dialogue by health staff. The NFM2 funding request also included a commitment from the CCM and CONASIDA to reach agreements to report contributions of the private sector for HIV prevention. At present, CONASIDA has not been reactivated and the financial landscape submitted with the NFM3 funding request does not include private sector investments. Despite efforts to improve co-financing, there exist unresolved gaps that interfere to achieve medium-term sustainability, as noted in figure 15.

Figure 15 MoH co-financing vs. Global Fund investment, 2021–2023



Source: Funding Request 2021–2023, June 23, 2020

To guide the path to sustainability during the 2017–2020 grant, the Global Fund supported the CCM to hire a consulting firm to draft a National Strategy for Sustainability for HIV/AIDS. During the Country Dialogue workshops, participants raised some issues and proposals similar to those raised in the strategy. Subsequently, the work groups proposed interventions and actions with sustainability in mind. The funding request takes up several of the proposals outlined in the strategy, particularly the following issues: the urgency of improving the supply chain, including logistics and storage; decentralization of ARV delivery; and the creation of an integrated, interoperable information system between the MoH and other relevant institutions.

5. CONCLUSIONS

The PCE found the following facilitators and bottlenecks for the areas investigated in the two focus topics in NFM2.

Facilitators and Bottlenecks

Type	Facilitators	Bottlenecks
Specific to the country	• Greater political will at various levels within the MoH to move forward with a comprehensive reform of the HMIS. • The publication in June 2019 of an updated **Plan for Strengthening HMIS and M&E [and the response to the epidemic]** by the national HIV Program (PNS), which depicts country commitments to improve data collection and data use for action. • The PNS is presently writing an updated manual for counseling, which includes guidelines for linkage and approaches for KP and other vulnerable subgroups.	• Lack of agreement on an adequate platform to replace the present fragmented HMIS precludes the MoH from counting on key epidemic indicators for decision-making. • Need to build stronger skills for strategic and adaptive management to correct course during execution, when necessary. • Persistent gaps in epidemiological data affected planning and programming when writing the NFM3 FR. • Low utilization of the current NSP (2017-2021), largely attributable to interventions not being costed. • Persistent lack of domestic funding for prevention interventions related to KP, which compromises the sustainability of Global Fund (and other donors) dependent actions. • Slow-moving administrative procedures, including contracting and initial start-up of SRs. • The onerous bidding process for consultancies caused that information relevant to the implementation was not available timely for some of the more specialized topics, e.g., prevalence data and population size updates. • The completion of studies and surveys once awarded, was affected by lengthy and frequent reviews by the PR or the PNS, which caused inconvenience to the consultants and postponed payments. • The FR depicts the overall strategies for serving the key population, but the PR and SRs are responsible for defining their own strategies to provide differentiated care. This was not observed in all cases, resulting in somewhat uniform approaches for all KP groups and vulnerable sub-groups. • Low use of existing national and international manuals and guidelines for linkage and counseling. Thus, investment is allocated to producing new materials rather than building upon existing resources that have been tried

Type	Facilitators	Bottlenecks
		and validated in diverse experiences, e.g., PASMO, CAS, PAHO, and USAID/IntraHealth, and others. • Bureaucratic processes in the MoH to update and write norms, which causes health staff to lack guidelines during variable periods in the implementation of programs. It also affects standardization.
Business Model	• A streamlined and resourced CCM facilitated a more inclusive process for writing the FR. • The opportunity to negotiate crucial aspects of the FR during grant making, a very unique Global Fund mechanism, resulted in: i) increased investment in the HMIS/M&E module, ii) concerted shifts in budget between the CT, the PR, and the MoH to address programmatic changes from the FR to GM. • The decisive commitment of the CT throughout the grant cycle to improve HMIS/M&E and the overall implementation of the grant. • Timely disbursement of grant funds to PR INCAP by the Global Fund. • Flexibilities to redirect grant savings expediently to aid country response to COVID-19.	• The CT requested that some of the ToR for specialized consultancies to pass through reviews by technical partners before approval. This detailed review has become a bottleneck. • The country did not seize the opportunity of grant revisions to redirect some interventions during the grant cycle, underutilizing the flexibility offered by the Global Fund model. It is unclear as to the underlying reasons, possibly attributable to the learning curve that the new PR necessarily experienced. • Frequent rotations of staff and charges in the PNS make it difficult to consolidate proper grant management, including the option of reprogramming funds to reorient activities/strategies and the creation of synergies.

The degree of influence of the Global Fund's business model has been different in the two focus topics. The CT and the TRP have been highly influential in driving improvements in the HMIS in Guatemala, especially for HIV. As a result, the 2018-2020 grant contained a significant investment for DHIS2 deployment to allow the reporting of Performance Framework (PF) indicators by the PR and SRs. The PR has also played a critical role in facilitating dialogue and driving greater coordination around the HMIS and M&E. Measuring the return on HMIS investments, despite comprising a significant share of RSSH investments, is not readily feasible due to the few of indicators in the PF. The PCE attempted to assess trajectory change using the Strategic Framework for the Use of Data for Country-level Action and Improvement (DUFAI framework) and found evidence of change in two of the five components: country information systems and systematic data analysis.

Despite a leveling off in linkage performance throughout NFM2, the PCE found no evidence of notable course corrections to improve performance. This may be attributable, in part, to information gaps on other vulnerable population groups, beyond MSM and transgender women. The pandemic also caused negative effects on outreach activities and disrupted operations in UAI temporarily.

As a result, there was little evidence of innovation in linkage to care strategies. Although the TRP and the CT also recognize and have raised the need for differentiated strategies to better address KP, there has been tangible progress in linkage. The literature points to similar results

in other countries when programs reach a critical mass and make a "last-ditch" effort to find the hidden and non-compliant cases to achieve the 90s UNAIDS targets in 2020.

A key challenge remains the wavering political will to strengthen HMIS. Some stakeholders were optimistic that the investment in DHIS2 would provide a foundation upon which to grow future investments in HMIS strengthening. However, SIGSA has repeatedly indicated its preference for closed source platforms, such as Oracle, which is used in other government agencies. SIGSA's reluctance has raised concerns about value for money due to licensing costs and disregard for the investment in DHIS2 for the PR. While a broad recognition of the need for a modern, public health-oriented information system exists, there is not widespread support for DHIS2 by SIGSA who has the authority to decide on HMIS. Both the PR as the HIV program reiterated that SIGSA is the competent authority in the MoH and they have to follow its mandate. Unfortunately, SIGSA representatives seldom participate in grant-related meetings.

At a CCM meeting this year, representatives of civil society organizations and the government cited the high costs of customizing the DHIS2 software to the country's needs as the main barrier to adoption. Since the last change in ministerial authorities, there has been an expression of renewed interest in DHIS2, but there is no official position yet.

As is the case in the rest of the world, the country is currently struggling to control the COVID-19 epidemic to the detriment of other health programs. Public dissatisfaction with the slow management of the pandemic is a risk to the stability of the high authorities in the MoH. It remains to be seen how the MoH manages to overcome the challenges imposed by the pandemic and prevent backsliding in the control of the three epidemics and in fulfilling grant commitments.

6. RECOMMENDATIONS

FOR PR INCAP

1. Peer promoters require skills related to HIV but also skills to provide effective counseling and support and improving performance on linkage requires improved training. The manual for promoters developed by INCAP during the 2018-2020 grant is a good first step but lacks detailed guidelines on linkage and the entire navigation process. The HIV program is currently developing an extensive counseling manual with in-depth guidelines. It is recommended that the PR take advantage of this opportunity and add a section on improving interpersonal communication skills to their manual. It would also be useful to include a complementary toolbox, e.g., Maslow's hierarchy of needs triangle and counseling checklists which have been incorporated by other partners into manuals.[14]
2. The NFM2 investment in DHIS2 for the INCAP has improved the availability of timely, trustworthy data to inform decision-making. In NFM2 the PCE recommends that during planned quarterly meetings with SRs[15], the objective should be to use the data to explain performance and guide amendments along implementation. This may require activities to build capacity in the PR in data use. Lessons learned should also be drawn from the experiences of the SRs as implementation moves forward to avoid retaining approaches that are not rendering the expected outcomes.

[14] The following technical partners have produced manuals on counseling: PASMO in 2008; CAS in 2016; IntraHealth in 2018; and by technical cooperation partners such as PAHO in 2006 and 2015; FHI 360/LINKAGES in 2017; AIDS Alliance in 2016, and the International AIDS Society in 2018).

[15] Quarterly meetings were not held as planned during 2020 because of COVID-19 disruptions.

3. The need for differentiated strategies for transgender women is particularly urgent. In NFM2, quite uniform strategies were used for all KP groups, with few innovations or tailoring. Based on data collected by the SRs, profiles of reluctant KP subgroups should be analyzed and used to improve the efficiency of linkage.
4. Although the HIV program, the PRs and the SRs have identified a multiplicity of barriers for linking positive cases, few robust interventions have been proposed to overcome them. In the current grant, SR promoters will continue to link while navigation within the UAIs will be carried out by designated staff from other technical partners. The PCE recommends three actions as follows:
    a. Periodically, it is advisable to verify the emotional state of the promoters themselves and ensure that they have the appropriate psychological support.
    b. It is important not to lose sight of the fact that outreach activities are part of the continuum of care. In this sense, fluid communication between promoters and navigators in the UAIs should be warranted, involving affected persons to address specific needs.
    c. SRs are successful in linking 78% of cases in the first week after a positive diagnosis, a commendable feat. However, reaching the remaining percentage requires a substantial additional investment of time and motivation. The PCE recommends that this factor be taken into account when assessing the productivity of promoters.
5. To overcome the scant response to some tenders, the PR could consider posting through other channels. This could include the employment pages of newspapers, and business and employment-oriented online networks like LinkedIn.
6. To improve efficiency in the approval ToRs for contracting out services, the PR should streamline internal processes, request technical assistance when necessary, and establish work plans and flow charts with clear timelines for reviews. These deadlines must be met by the MoH and other participants at the risk that late responses will not be considered. At all costs, the PR itself or the MoH should avoid becoming the bottlenecks themselves.

FOR THE MoH AND THE HIV PROGRAM

1. The new HIV information system to be developed during the current grant (for the period 2021-2023) is a great opportunity to innovate. The MoH should take advantage of the current synergy where all stakeholders, including SIGSA authorities, are sitting at the table intent on achieving jointly what other efforts have failed to do. The PNS must consolidate and exercise leadership in this reform to ensure ownership and sustainability.
2. The PNS is currently developing extensive guidelines on counseling. The manual should provide detailed information not only on what to say but also on how to say it. The PNS could rely on the e-learning module, approved by the MoH, to improve these skills. The use of checklists or algorithms for the counselor is also recommended to optimize and systematize counseling. Likewise, although the manual states that a differentiated approach is one of its objectives, it does not contain specific guidelines in this regard.
3. There is a need to develop standardized navigation guidelines. These should be developed together with the UAIs, given that navigation is carried out in their facilities and is an essential part of successful retention and viral suppression.
4. Interventions targeting key populations continue to rely largely on external funding. The results of the analysis of the legal frameworks that prevent the MoH from contracting with

NGOs should be used to develop options for contracting SRs and other civil society NGOs that currently subsist on the Global Fund support. Otherwise, the prospects for sustainability of interventions aimed at HIV prevention among key populations and vulnerable groups will be seriously compromised.

5. In light of the delays in the implementation of the HIV seroprevalence survey, population sizes, and other studies in vulnerable populations, updated data will not be available until the second half of the 2021-2023 grant. However, the information derived from the surveys is urgent and their implementation should be accelerated to inform the interventions for the next HIV grant and provide timely input to the new HIV National Strategic Plan (NSP).

FOR THE GLOBAL FUND COUNTRY TEAM

1. It is essential to address the problems encountered in the tendering processes and the identification of potential consultants. To shorten timeframes, the Global Fund should grant more autonomy to the PR and rely less on external actors. Consultations with experts in particular fields should be arranged and scheduled for a prompt response, e.g., one week.

FOR THE COUNTRY COORDINATING MECHANISM (CCM)

1. The CCM could exercise its role, through the MoH representative on the board, to summon greater participation of SIGSA authorities and technicians. They are often absent when critical grant issues are discussed, e.g., the advantages and disadvantages of the available information platforms (software).
2. The CCM should also ensure that the data from the dashboards generated by DHIS2 and the PNS situational rooms are analyzed in periodic meetings with the PR, SRs and the PNS. Based on this information, and the progress reported by the SRs, action should be taken to correct the course of specific strategies/programs when necessary. The analysis sessions between the CCM technical body and the grant implementers are the best opportunity to come up with properly informed solutions.

GENERAL RECOMMENDATION FOR THE CCM AND MoH

The PCE found increased alignment with the Global Fund strategic framework for data systems and data use (DUFAI) from NFM2 to NFM3 according to the M&E systems profile described in it. The PCE recommends that during NFM3 grant implementation, grants for HIV, TB, and malaria continue to follow this framework to improve and standardize data systems and data use. One of the first operationalization steps described in this framework is to coordinate with external and internal partners including local academic institutions to successfully apply and implement the framework.

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Annex 1

Table of financial data sources

Progress update and disbursement request

Grant	PU/DR time period	file name
GTM-H-INCAP	S1-S2 2018	GTM-H-INCAP_Progress Report_30Jun2019_v10_30082019_RevALF english version.xlsx
GTM-H-INCAP	S1-S2 2018, S1 2019	GTM-H-INCAP_PUDR_31Dec2019_ALF_final.xlsx
GTM-H-INCAP	S2 2019	GTM-H-INCAP_Progress_Report_Jan-Jun2020_25102020.xlsx
GTM-M-MSPAS (Jan 2019 - July 2021)	S1 2019	GTM-M-MSPAS_Progress Report_30Jun2019_REV LFA.xlsx
GTM-M-MSPAS (Jan 2019 - July 2021)	S1-S2 2019	GTM-M-MSPAS_PUDR_LFA_final.xlsx
GTM-T-MSPAS	S1 2019	GTM-T-MSPAS_Progress Report_31Dec2019_v Rev ALF_02032020.xlsx
GTM-T-MSPAS	S1-S2 2019	GTM-T-MSPAS_PU_30Jun2020_ 18112020_RevALF07122020 - Editable.xlsx

Detailed budget

Grant	Budget Version	Version Date	File Name
GTM-H-INCAP	Approved from Grant making	Jul 2018	FR100-GTM-H_DB_INCAP_ 04-07-2018.xlsx
	Revision 1	Oct 2019	Copia de GTM-H-INCAP_DB_11.10. Final_For PR.XLSX
	Revision 2	Sep 2020	GTM-H-INCAP_DB_final.xlsx
	Revision 3 (Implementation letter 4)	Nov 2020	GTM-H-INCAP_DB_final_Actualizado08112020.xlsx
GTM-M-MSPAS	Approved from Grant making	Jan 2019	1c.GUA-M-MSPAS_Budget 2019.xlsx
	Revision 1	Feb 2020	DB-GTM-M-MSPAS_04.11.19 FO sign-off.xlsx
	Revision 2	Dec 2020	GTM-M-MSPAS_DB_final.xlsx
GTM-T-MSPAS	Approved from Grant making	Jun 2019	Copia de GTM-T-MSPAS_Budget_08022019 aprobado.xlsx
	Revision 1	Oct 2020	GTM-T-MSPAS_Budget_final_300920.xlsx

Annex 2

Table of keywords used initially to identify activities for focus topics

HIV Linkage to Care	Health Management Information System
Transporte de navegadores	DHIS2
Transporte de personas VIH	análisis de datos
Transporte para promotores	análisis de tendencias
Asistencia tecnica para manual	estudio
Manual de capacitación para promotores/navegadores	sistemas de información
navegadores	ingreso de la información
vinculadores	monitoreo y evaluación
promotores	M E PNS
promotores multifuncionales	sigsa
fundacion iturbide	epidemiologia
ffi	fuentes primarias
HH	equipo de computo
TRANS	asistencia tecnica
PPL	reuniones
mujeres embarazadas	capacitaciones
	encuesta

Annex 3

M&E systems profile for Guatemala

The Global Fund Framework for data use for action and improvement (DUFAI) specifies a set of indicators that form a profile to assess the performance of GF investments to achieve better data systems and data use policies. The indicators in the profile are specific and limited to relevant conditions across GF grants; however, the framework is not limited to this profile since it describes the GF business model concerning data systems and data-related policies in public health. Therefore, this profile should not be taken as the only source of guidance for the Global Fund grants to design interventions for data systems. We refer the reader to the framework document to learn in detail the Global Fund business model for data systems. Beyond the specific activities mentioned in the profile indicators, there is plenty of room for innovative interventions aimed at improving data systems and data use at the country level.

The following table contains the M&E systems profile for HIV grants in Guatemala at three points in time: status before NFM2, NFM2 achievements, and NFM3 expected to change in trajectory.

Table 1. Guatemala's M&E systems profile for HIV before NFM2, during NFM2, and expected change in trajectory during NFM3

Legend

- Achieved or planned to be implemented in the future
- Delayed or achieved partially
- Not achieved

Indicator	Description	Status (before NFM2)	Achievements during NFM2	Expected change in trajectory for NFM3
INV-1.1.1	Health sector National Strategic Plan is valid	NSP valid		
INV-1.1.2	Disease-specific National Strategic Plan is valid	HIV NSP is valid		During grant making, CT requested that the next HIV NSP, to be developed during 2021, be costed.
INV-1.1.3	Health sector costed M&E Plan exists for the NSP	No costed M&E plan for the public health sector. However, interviews with people in M&E departments showed there are activities for improvement of HMIS and epidemiological instruments. However, these activities were not listed in any publicly available costed plan.		
INV-1.1.4	Disease-specific costed M&E Plan exists for the NSP	Current HIV NSP contains an M&E plan but expires in 2021 and is not costed.		During grant making, CT requested that the next HIV M&E NSP be costed.
INV-1.2.1	Percentage of health facilities or reporting units that submit monthly/quarterly reports to the HMIS	Official HMIS (managed by SIGSA) has full coverage with occasional connectivity issues and computer equipment gaps. Official HMIS is known to have problems with under-reporting, late reporting and low data quality.	NFM2 invested in a connectivity diagnosis of the health network (however, it has been delayed due to COVID-19). It also included investments in capacity building for M&E in the program. These investments contribute to improving reporting.	GF will invest in new HIV HMIS and include computer equipment for prioritized health facilities.
INV-1.3.1	Are the aggregate disease data integrated into (or interoperable with) the national HMIS	Yes. Disease data is available, usually in disaggregated form.	DHIS2 is designed to be interoperable with SIGSA Web system. Disaggregated testing data from the SR has been integrated into SIGSA since late 2019.	

Indicator	Description	Status (before NFM2)	Achievements during NFM2	Expected change in trajectory for NFM3
INV-1.3.2	Does the national HMIS have dashboards (or similar) for analyzing the WHO standard indicators for the specific disease/program	No automated dashboards exist in the program at the time; data is collected and integrated manually by the HIV program. Data is analyzed in situational rooms made by the program.		The new HIV HMIS is expected to fill this gap by having centralized data on the epidemic. However, no specifications about this have been provided.
INV-1.4.1	Data quality rating from country data quality assurance (based on timeliness, completeness and accuracy)	MEASURE Evaluation of HIV M&E showed low capacity to provide quality data in 2018. However, the WHO DQR process has not been implemented to assess data quality.		
INV-1.4.2	Data quality rating from National Data Quality Reviews (DQR)	WHO's DQR framework has not been applied to the HIV program M&E systems in Guatemala.		
INV-1.4.3	Data Quality ratings from Global Fund targeted DQR/spot checks	No		
INV-1.5.1	Data disaggregated by age for the Global Fund core list of indicators reported in the PU/DR?	Yes, these are requirements from the GF since before NFM2.		
INV-1.5.2	Data disaggregated by sex for the Global Fund core list of indicators reported in the PU/DR?			
INV-1.5.3	Sex-disaggregated data for 15-19 and 20-24 age groups for HIV treatment cascade indicators available?			
INV-1.5.4	Key population size estimate (Sex Workers, Men Who have Sex with Men, People Who Inject Drugs, Transgender)	Low-quality estimations were seen in NFM2 FR, usually one-size-fits-all methodologies.	NFM2 grant had plans for population size studies. However, these were not implemented on time due to COVID-19 and have been postponed to 2021.	
INV-1.5.5	Key population HIV prevalence (Sex Workers, Men Who have Sex with Men, People Who Inject Drugs, Transgender)	No prevalence studies done by MoH. Spectrum estimations have been used instead of prevalence studies.	NFM2 grant had plans for prevalence surveys. However, these were not implemented on time due to COVID-19 and have been postponed to 2021.	NFM3 includes a seroprevalence study for KPs.
INV-1.6.1	National HMIS capturing key aggregate LMIS indicators or interoperable with the national LMIS at district and/or facility level?	LMIS is not centralized; each health facility keeps track of their own stocks and supply chain, diseases programs track their distributions.		
INV-1.7.1	System (paper or electronic) in place for national reporting on community-level service delivery	Some data from community-level services is available and is backed by paper and electronic systems. However, it is known that HMIS is not capable of monitoring NGOs that provide HIV services, which makes it necessary for the GF to invest in external information systems (i.e., SIGPRO for NFM1 and DHIS2 for NFM2).	Data on testing from PR's information system (DHIS2) is imported into SIGSA Web. In the previous grant SRs had to enter data in both systems manually. DHIS2 is open-source, while SIGPRO (from a previous grant) was closed-source software licensed for the previous PR.	The new HMIS for HIV is expected to better integrate community health systems data as well as data from private and public health.
INV-1.7.2	Community health information system integrated (or interoperable) with the national HMISat district and/or facility level			
INV-1.7.3	Data quality review process in place for community reporting	No	NFM2, GF invested in data quality reviews for SRs.	NFM3 contains investment in data quality as well
INV-1.8.1	Does the country have a system for mortality and cause of death reporting in the national HMIS	Yes		

Indicator	Description	Status (before NFM2)	Achievements during NFM2	Expected change in trajectory for NFM3
PM-2.1.1	Recommended indicators for AGYW included in the PF	No (Guatemala is not part of the GF AGYW focus countries)		
PM-2.1.2	Countries report on AGYW indicators in the performance frameworks	No (Guatemala is not part of the GF AGYW focus countries)		
PM-2.2.1	Risk category based on program quality scoring for HIV, TB and malaria	No		
DA-3.1.1	3-6-monthly sub-national analysis by the first administrative level (region/province) done by central level	No		
DA-3.1.2	3-6-monthly sub-national analysis by the second administrative level (district/county) done by the first level	No		
DA-3.2.1	Disease-specific program review with epi and impact analysis done in the last three years	No		
DA-3.2.2	Program reviews conducted, in the last three years, quality assured according to WHO standard	Yes	One program review was in NFM2 to be carried out in 2020. It had to be tendered several times for lack of applicants. It is now ongoing and expected for June 2021.	Program review to be implemented in NFM3.
DA-3.3.1	Assessment or review of M&E systems for AGYW has been conducted and action plan for program improvement developed applicable to the 13 Global Fund AGYW focus countries)	No (Guatemala is not part of the GF AGYW focus countries)		
DA-3.4.1	Assessment or review of design, implementation and systems to monitor delivery of service packages for key populations done	Not as part of the national program. GF has designed and implemented delivery of service packages for KPs and has implemented monitoring systems for them.		
DA-3.4.2	Action plan developed for key population program improvement based on rigorous and sound assessments	No		
DA-3.5.1	Comprehensive health system analysis conducted including HR, finance, supply chain and other health systems aspects (system efficiency)	No		
DA-3.6.1	Systematic analysis of mortality and cause of deaths done in the last 3 years	No		
DA-3.6.2	HIV treatment cascade analysis conducted - general population, key populations, PMTCT, TB/HIV	Reports of HIV treatment cascade have been made, but an important gap remains as linkage to care is not being measured.	This is expected to change with the new epidemiology instrument for HIV that was part of NFM2 investments, but implementation in health facilities was postponed until 2021.	The new HIV HMIS is expected to improve the HIV treatment cascade indicators and their availability in real time.
EVA-4.1.1	Did the planned evaluation take place (for focused countries)	Guatemala is not part of the focused countries list.		

Indicator	Description	Status (before NFM2)	Achievements during NFM2	Expected change in trajectory for NFM3
DU-5.1.1	Documented evidence of use of program review results for i) strategic reprogramming; ii) NSP development or adjustments; iii) improved allocative efficiency; iv) targeted investments including new funding decisions, etc.	No		
DU-5.2.1	Does the country have evidence of use of evaluation findings, for strategic investments/ funding request development (for focused countries only)	No		

Annex 4

Budget absorption of activities and interventions in the HMIS module

Intervention	Activity	Approved budget	Budget during implementation	Executed	Absorption
Administrative and financial data sources	Study of Total Expenditure on HIV Prevention and Care	$20,000.00	$20,000.00	$45,221.75	226.11%
Analysis, review and transparency	Support to the Ministry of Health in M&E actions of the NSP in the Health Areas	$94,113.87	$55,919.08	$21,093.57	37.72%
	Workshops with senior government officials, civil society, bilateral and multilateral organizations CCM	$1,259.70	$939.10	$939.10	100.00%
	Workshops with civil society for the development of sustainability strategies in HIV	$2,769.84	$2,673.26	$2,673.26	100.00%
Program and data quality	Training in filling out the HIV epidemiological surveillance file Personnel from VICITS, DAS, UAI IGSS, Military Health	$31,264.95	$31,264.95	$0.00	0.00%
	Consulting for the strengthening of the LMS logistics information system	$40,000.08	$31,250.04	$10,427.29	33.37%
	Recruitment of data entry operators to enter SR information	$5,453.24	$2,590.51	$2,590.51	100.00%
	Strengthening of the NSP systems	$300,000.00	$300,000.00	$21,311.53	7.10%
	Information systems for the PR and Sub-recipients	$434,243.52	$305,033.06	$304,109.2	99.70%
	Analysis of M&E trends within a defined period workshops	$64,686.20	$43,124.14	$0.00	0.00%

Routine reporting	Training workshop for M&E managers, coordinating supervisors in Web data capture and user configuration	$11,679.94	$6,231.91	$3,164.82	50.78%
	Training workshop for promoters in charge of M&E and supervision in the application of DHIS2 on mobile phones for MSM population	$4,731.91	$4,706.21	$4,706.21	100.00%
	Training workshop for promoters in charge of M&E and supervision in the application of DHIS2 on mobile phones for the female sex worker (FSW) population	$2,131.67	$1,664.86	$1,664.86	100.00%
	Training workshop for promoters in charge of M&E and supervision in the application of DHIS2 on mobile phones for the PLHIV and PDL population	$1,618.27	$0.00	$0.00	0.00%
	Training workshop for promoters in charge of M&E and supervision in the application of DHIS2 on mobile phones for the TRANS population	$2,380.25	$2,380.00	$2,380.00	100.00%
Surveys	Consultancy for study of prevalence of incidence of OIs	$25,000.00	$25,000.00	$6,957.42	27.83%
	Consultancy to carry out study to measure size of MSM, FSW, TRANS key populations	$290,523.76	$250,523.76	$0.00	0.00%
	Study of the behavior and prevalence of HIV in Mayan and Garifuna populations of Guatemala	$200,000.00	$125,133.78	$25,026.78	20.00%
	Project implementation evaluation study	$100,000.00	$92,066.67	$10,650.45	11.57%

	HIV Prevalence Study in PDL	$100,000.00	$82,178.57	$12,326.79	15.00%
	Study of service satisfaction among users of clinics and health services	$15,000.00	$15,000.00	$0.00	0.00%
	Study for the review of clinical records to obtain the baseline measurement of indicators related to new cases of	$40,000.00	$20,000.00	$0.00	0.00%
	Study on the inclusion of PLHIV in Communication for Development C4D	$5,000.00	$5,000.00	$4,734.70	94.69%
	Study on young people receiving Comprehensive Sexuality Education	$15,000.00	$15,000.00	$1,430.62	9.54%
Total		$1,806,857.20	$1,437,679.90	$481,408.93	33.49%

Source: Internal INCAP PR Accounting Records

Budget absorption of interventions in the HMIS module

Intervention	**Approved budget**	**Budget during implementation**	**Executed**	**Absorption**
Surveys	$790,523.76	$629,902.78	$61,126.76	9.70%
Analysis, review and transparency	$98,143.41	$59,531.44	$24,705.93	41.50%
Program and data quality	$875,647.99	$713,262.70	$338,438.60	47.45%
Routine reporting	$22,542.04	$14,982.98	$11,915.89	79.53%
Administrative and financial data sources	$20,000.00	$20,000.00	$45,221.75	226.11%
Total	**$1,806,857.20**	**$1,437,679.90**	**$481,408.93**	**33.49%**

Source: Internal PR INCAP PR Accounting Records