Global Fund Prospective Country Evaluation (PCE)

Final Inception Phase Report for PCE in Uganda, Guatemala and Democratic Republic of the Congo

October 12, 2017

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Abbreviations

ACHEST African Centre for Global Health and Social Transformation

ACT Artemisinin Combination Therapy

ANC Antenatal Care

ART Antiretroviral Therapy

ARV Antiretroviral (drug)

CCM Country Coordinating Mechanism

CEP Country Evaluation Partner

CHEW Community Health Extension Workers

CIESAR Centro de Investigación Epidemiológica en Salud Sexual y Reproductiva

COE Challenging Operating Environments

CQI Continuous Quality Improvement

CSOs Civil Society Organizations

CT Country Team

DHIS District Health Information System

DHT District Health Team

DRC Democratic Republic of the Congo

HSDs Health Sub-Districts

FBOs Faith Based Organizations

FCI Fact-Checking Interview

FPM Fund Portfolio Manager

GBD Global Burden of Disease

GEP Global Evaluation Partner

GF Global Fund to Fight AIDS, Tuberculosis and Malaria

GHI Global Health Initiative

GoU Government of Uganda

HMIS Health Management Information Systems

HC Health Center

HDP Health Development Partners

HRH Human Resources for Health

HSC Health Services Commission

IDRC Infectious Diseases Research Collaboration

IGSS Guatemalan Institute of Social Security

IHME Institute for Health Metrics and Evaluation

IPTi Intermittent preventive treatment in infants

IPTp Intermittent preventive treatment in pregnancy

IRS Indoor Residual Spraying

ITN Insecticide-Treated Bed Net

IUTLD International Union against TB and Lung Disease

JMS Joint Medical Stores

KII Key Informant Interviews

LFA Local Fund Agent

MAP Malaria Atlas Project

M&E Monitoring and Evaluation

MoFPED Ministry of Finance, Planning and Economic Development

MoH Ministry of Health

MSM Men who have sex with men

NASA National Aids Spending Assessment

NDA National Drug Authority

NMS National Medical Stores

NRHs National Referral Hospitals

PCE Prospective Country Evaluation

PEPFAR US President's Emergency Plan for AIDS Relief

PFP Private for Profit

PfPR Plasmodium falciparum parasite rate

PLHIV People living with HIV

PMI US President's Malaria Initiative

PNFPs Private Not for Profit Organizations

PR Principal Recipient

PSM Procurement and Supply Management

RCA Root Cause Analysis

RSSH Resilient and Sustainable Systems for Health

SHA System of Health Accounts

SR Sub-recipient

TASO The Aids-Support Organization

TB Tuberculosis

TERG Technical Evaluation Reference Group

ToC Theory of Change

UAC Uganda AIDS Commission

UNAIDS Joint United Nations Program on HIV and AIDS

USD United States Dollar

VL Viral Load

VHT Village Health Teams

VfM Value for Money

WHO World Health Organization

Executive Summary

Introduction

The prospective country evaluation (PCE) provides an opportunity to examine critical processes, outputs, outcomes, and impact of Global Fund investments through a comprehensive country-level lens using a diverse array of data and methodologies. The IHME/PATH Global Evaluation Partner (GEP) is working with Country Evaluation Partners (CEPs) in three countries: Uganda (IDRC), Guatemala (CIESAR), Democratic Republic of the Congo (PATH DRC). The PCE is divided into two phases: Inception Phase (May-September 2017) and Evaluation Phase (October 2017 – February 2020). This report focuses on activities during the Inception Phase, and lays out our proposed activities and analyses for the Evaluation Phase.

Global Level PCE Activities

Global level activities have included the establishment of a global Theory of Change, development of collaboration principles between consortia, identification of evaluation questions and articulation of methodological plans and data sources on process evaluation, partnership analyses, resource tracking, impact evaluation and value-for-money assessment.

Uganda PCE

Activities in Uganda have included stakeholder mapping, gaining an understanding of the information landscape (both epidemiological and financial), stakeholder consultations, planning and completion of an evaluation workshop, identification and prioritization of country-specific evaluation questions, data mapping, identification of country advisory panel members, and planning for in-country dissemination activities.

Guatemala PCE

Activities in Guatemala have included a country onboarding meeting for the CEP, stakeholder mapping, gaining an understanding of the information landscape (both epidemiological and financial), stakeholder consultations, planning and completion of an evaluation workshop, identification and prioritization of country-specific evaluation questions, data mapping, identification of country advisory panel members, and planning for in-country dissemination activities.

DRC PCE

Activities in DRC have included a country onboarding meeting for the CEP, stakeholder mapping, gaining an understanding of the information landscape (both epidemiological and financial), stakeholder consultations, identification of sample provinces for the PCE, planning and completion of an evaluation workshop, drafting of country-specific evaluation questions, data mapping, identification of country advisory panel members, and planning for in-country dissemination activities.

PCE Evaluation Methods Proposal and Work plan

This report details proposed methods and an associated work plan for the Evaluation Phase that build on findings from the Inception Phase. Given the prospective nature of the evaluation, we anticipate there will be modification throughout the course of the evaluation phase, but the overall scope of the evaluation is unlikely to change. Core methods related to process evaluation, partnership analyses, resource tracking studies, capacity development plans, impact evaluation, and value-for-money assessment are described. Process evaluation will utilize key informant

interviews, systems thinking, process tracking, case studies and continuous quality improvement to understand the process of acquiring Global Fund support and implementing activities. Partnership studies will utilize document review, interviews evaluation workshops, actor mapping and network analysis to understand the strategic enablers of partnerships. Resource tracking will use the SHA 2011 approach to identify to the extent possible, where and how Global Fund and non-Global Fund resources have been budgeted and spent. This will include how Global Fund and non-Global Fund resources such as government expenditure interact. Impact evaluation will use all available data sources and innovative statistical models, e.g. geospatial analysis, to measure outputs and outcomes and relate preceding steps in the causal chain to these downstream measures, e.g. relating monetary spend to intervention coverage. Value-for-money assessment will use process evaluation and impact evaluation results to assess some aspects of efficiency, effectiveness and equity. Finally, a menu of capacity development workshops and training sessions have been developed collaboratively with the CEPs in order to grow the experience and expertise of country partners.

Chapter 1 Introduction

1.1 Background

The Prospective Country Evaluation (PCE) is an independent evaluation of the Global Fund. The PCE aims to evaluate the Global Fund's business model, investments, and impact, in order to generate evidence in real time to inform global, regional, and country stakeholders and accelerate progress towards meeting the Global Fund's Strategic Objectives. These objectives are 1) Maximize impact against HIV, TB and malaria; 2) Build resilient and sustainable systems for health; 3) Promote and protect human rights and gender equality; and 4) Mobilize increased resources.

The Global Fund's Technical Evaluation Reference Group (TERG) developed criteria¹ to identify a limited number of countries for PCE. On that basis, the following eight countries were selected for PCE: Cambodia, Democratic Republic of Congo (DRC), Guatemala, Mozambique, Myanmar, Senegal, Sudan and Uganda. Three global-level evaluation partners (GEPs) are supporting an evaluation partner within each country: IHME/PATH (DRC, Guatemala and Uganda), Johns Hopkins University (Mozambique and Senegal) and Euro Health Group (Cambodia, Myanmar and Sudan). The IHME/PATH consortium is working with the following country evaluation partners (CEPs):

- Uganda: Infectious Diseases Research Collaboration (IDRC)
- Guatemala: Centro de Investigación Epidemiológica en Salud Sexual y Reproductiva (CIESAR)
- DRC: PATH Country Office in DRC

The PCE plan of work includes two phases: Inception Phase (March-September 2017) and Evaluation Phase (October 2017-March 2020). In short, the Inception Phase is a designated planning and development period in which partnerships are formed, and early investigative work completed, to better understand context, priorities, and opportunities at the country and global levels. The Evaluation Phase depends largely on the results of the Inception Phase. The specific PCE evaluation questions, components, activities, and methodologies are informed by what is learned and produced during the Inception Phase.

This report details progress made during the Inception Phase of the PCE, outlining both completed activities and the development of key evaluation questions, and details plans for moving forward with the Evaluation Phase in Uganda, Guatemala, and DRC.

1.2 PCE Overview

The PCE approach is unique in that it goes deeper than an ordinary evaluation and broader than a traditional thematic review. It is an opportunity to explore what is working (or not) in more detail, and to understand why. The PCE aims to assess the whole Global Fund impact chain, from inputs to grant application to implementation and, ultimately, to impact (Figure 1). The PCE evaluates activities beyond specific Global Fund-supported programs, considering the processes and systems that led to decisions. In doing so, the PCE will identify and disseminate

¹ Criteria for selection to PCE include the size of investment, regional diversity and balance of diseases. The rationale is that selection of countries based on these criteria can provide good insight not only about them, but also about other countries receiving GF investments, especially in their regions.

best practices to improve the Global Fund model. Because it is prospective, the PCE offers opportunities for dynamic, continuous learning and problem solving.

To conduct the PCE, we will utilize an evaluation framework by which each of the four Strategic Objectives for 2017-2022 can be tracked and measured prospectively. The framework will provide a conceptual model describing processes and causal mechanisms by which Global Fund investments and inputs lead to outputs and coverage, outcomes, and eventually impact on these three diseases. As described later in this report, we intend to implement a mixed methods approach using multiple sources, types of data (e.g. interviews, observations, surveys, health management information systems (HMIS), administrative documents, and primary data collection) and analytic approaches. Specific approaches like partnership studies, root-cause analysis and geospatial analysis will be used to triangulate the answers to multifaceted evaluation questions from different perspectives.

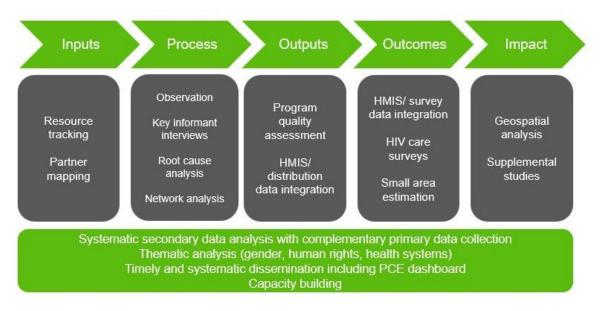


Figure 1 Key evaluation components across the full results chain.

PCE researchers from both the GEPs and CEPS have worked in collaboration to define evaluation priorities and questions. In doing so, we explored the following high-level topic areas:

- What impact has the Global Fund had on AIDS, TB, and Malaria burden of disease?\ What is the impact by gender?
- What are the best practices and key challenges countries face when applying for funding?
- Are Global Fund investments reducing human rights and gender-related barriers to HIV, TB, and malaria services?
- How does the Global Fund enable or impede strengthening systems for health?
- How well are key and vulnerable populations defined and addressed through Global Fund investments?
- How does the Challenging Operating Environment policy support relevant countries?
- How does the Sustainability, Transition and Co-financing policy help prepare countries for transition? Does it lead to an increase in national investment overall? Does it lead to

an increase in national investment for key and vulnerable populations, human rights, and/or resilient and sustainable systems for health?

- How efficiently are programs and their activities implemented?
- How effectively do partnerships work at the country level?

1.3 PCE Inception Phase Objectives

The primary objectives for the PCE Inception Phase are summarized in the following paragraphs, and more specifically detailed throughout the remaining chapters of this report.

Global Theory of Change (ToC) development

Nearly all evaluation components are in some way dependent upon an underlying ToC, which acts as a roadmap for the evaluation and basis for synthesizing and communicating results. A shared ToC also facilitates harmonization across GEPs. As such, one of the first products of the PCE is a global ToC with in-depth elaboration on crosscutting thematic areas. The Global ToC will help define country-specific evaluation questions, keeping in mind important contextual and epidemiological factors. The country-specific evaluation questions will be mapped to the Global ToC to assess whether additional concepts and/or pathways should be inserted into the Global ToC.

Harmonization across Global Evaluation Partners (GEPs)

The existence of other GEPs necessitates collaboration across the three PCE consortia. One objective of the Inception Phase is to identify the extent to which harmonization is both possible and desirable. We expect the degree of harmonization will vary for each evaluation component based on a number of country-level factors (e.g. context, critical evaluation questions, data availability, etc.) and consortium expertise. Harmonization between GEPs will include overlap in a variety of mechanisms, including some methodological approaches and dissemination of results.

Country Evaluation Partner (CEP) orientation and input

The success of the PCE is dependent upon engaged and empowered CEPs in each country. The CEPs, and individuals within the CEP teams, are starting at various levels of familiarity with the Global Fund business model and the different evaluation methods we intend to utilize. Orientation of each CEP regarding activities, evaluation objectives, and the overall approach to the PCE is critical, thus creating a solid foundation for the Evaluation.

Country-level stakeholder mapping and engagement

Country-level stakeholder mapping and engagement is another key early task for the Inception Phase. In order to effectively evaluate Global Fund in-country performance, it is essential to identify, understand, and develop relationships with the partners involved. We anticipate ongoing dialogue with stakeholders and continuous relationship building over the entire course of the evaluation.

Identification, prioritization, and contextualization of evaluation questions

Considering the diversity of countries included in the PCE, an objective of the Inception Phase is to identify which evaluation questions are most pertinent to each country. Country stakeholder consultation, consultation with stakeholders at the Global Fund Secretariat, inputs from the TERG Secretariat and lessons learned across countries and consortia have all helped to identify and prioritize country-specific evaluation questions in an effort to align with the interests of all stakeholders.

Data Mapping and Assessment

A critical early activity for the Inception Phase is to catalog all potential data sources for each evaluation component, and summarize the information contained therein as well as identify the gaps in information. This includes data sources for survey/other data on health outputs and outcomes, including HMIS and DHIS as well as financial input data for resource tracking.

Articulation of evaluation methods

The precise details of many of the evaluation methods are dependent on data availability, country context, and priorities as well as to leverage rather than duplicate past and ongoing evaluation efforts. An objective of the Inception Phase is to build upon what is learned through document review, data mapping, stakeholder engagement, and in-country stakeholder workshops to articulate more precisely the methods to be used.

Identification of capacity-building opportunities

A precursor to capacity building is capacity assessment. For that reason, an objective of the Inception Phase is the identification of areas of capacity building for CEPs in order to conduct the activities required by the PCE, and planning for capacity-building activities during the Evaluation Phase. This will lead to the implementation of country-specific capacity strengthening activities during the Evaluation Phase that are aligned with the PCE data collection and analytic needs.

Agreement on dissemination mechanisms

Mechanisms for communicating results to country and global stakeholders in real-time are most effective when agreed upon in advance. An objective of the Inception Phase is to reach consensus among stakeholders (e.g., key country stakeholders, Global Fund country teams), CEPs, GEPs, TERG and TERG Secretariat on dissemination mechanisms, and begin the discussion regarding partner roles for dissemination activities at the global and country levels. This objective specifically includes discussion surrounding dissemination mechanisms, and the number of reports and extent of synthesis across consortia.

Chapter 2 Global Level PCE Activities

2.1 Global Theory of Change (ToC)

ToC Development

Methods: Document review, evaluation workshops, drafting sessions

A Global ToC was developed in collaboration with representatives from all three PCE consortia and presented to the TERG at the last TERG meeting in June 2017. The Global ToC graphically represents the causal pathways linking inputs (Global Fund support) and activities to the expected coverage and outputs, outcomes, and impact. It was designed to be a high level, generic ToC for the Global Fund business model, and is sufficiently generic to allow flexibility for adaptation to each country context. At the June 2017 TERG meeting, TERG members provided helpful feedback that should bring out the assumptions more prominently, put more emphasis on the 'how' and 'why' between the boxes, and better articulate the drivers of change from input to impact. To address these comments, the PCE consortia have been developing materials on thematic areas that thread through the global ToC. The IHME/PATH consortium has taken the lead on developing the thematic areas for 1) Sustainability, Transition, and Co-financing (STC) policy, 2) Challenging Operating Environments (COE) policy, and 3) health information systems (HIS) as one component of building resilient and sustainable systems for health [RSSH]). We have outlined which countries each theme applies to, the theory for why this policy or theme will achieve impact, the actions that will be taken to implement the policy in country, what we can expect to see at the country level that is different, how we can measure that change, and how the theme is reflected in the Global ToC.

The Global ToC will form the basis for the measurement approach and will guide the development of appropriate methods for evaluating the pathways from inputs to impact in each country. During the inception phase, we prioritized and contextualized evaluation questions specific to each country. The evaluation will rely on existing data where possible, which will allow us to prioritize our efforts for new data collection. CEPs will use the Global ToC and thematic-area ToCs to guide the evaluation, and to prospectively track the actual processes against the theorized processes outlined in the ToC (and associated process maps currently under development), and thereby identify assumptions to question or bottlenecks that occur in real time. This provides a framework for collecting evidence, and a strong empirical basis for understanding the contribution of Global Fund investments to changes in systems for health and population health. Of note, the ToC should be considered a "work in progress" that is subject to iterative modification throughout the full evaluation period as additional data is gathered and as new understanding emerges around the boxes and linkages between boxes.

Completed Activities

Completed activities (several of which will continue during the course of the evaluation phase) for the development of ToCs include document review, drafting sessions and cross-consortia meetings, workshops, phone calls, and ongoing communication via email. The GEP collaboration meeting in Geneva April 27-28 included discussion on ToCs, including perspectives on the overall product, and presentations of early progress. The IHME/PATH consortium has commenced document review, which will continue throughout the Inception and Evaluation Phases. ToC drafting sessions at IHME and PATH have occurred to generate an initial ToC. The cross-consortia meeting in Baltimore May 17-18 resulted in an early draft of the

high-level ToC and an accompanying document highlighting cross-consortia areas for collaboration. The TERG meeting June 6-8 in Geneva offered an opportunity to receive feedback from the TERG members on the Global ToC, and work across the PCE consortia to identify the way forward.

Through orientation sessions, IHME/PATH and CEPs have reviewed the Global ToC to ensure all team members are oriented to the key components across the inputs to impact chain. We are in the process of assessing whether and how the country-specific questions align with the Global ToC. Evaluation workshops were held in Kampala, Uganda on July 14th, in Guatemala City, Guatemala on August 9th, and in Kinshasa, DRC on August 31st. Each workshop was accompanied with working sessions before and after to contribute to contextualization of evaluation questions and an initial mapping of the evaluation questions to the Global ToC to determine any gaps that might necessitate adding new terms to the Global ToC. For example, country-specific questions to understand low rates of absorption of Global Fund investments suggest "absorption" is a key term to be added into the ToC. In addition, there was interest in ensuring that "accountability" be more clearly reflected in the Global ToC. At this stage, there was no identified need among CEPs in developing country-specific ToCs.

In the first 6 months of the evaluation, we will first focus on 'unpacking' the grant application and grant-making activity represented in the Global ToC, as this is the focus of the process evaluation for 2017. We leveraged an extensive review of the grant application and grant-making processes shared by Euro Health Group to create a user-friendly visual process map for the full review, program continuation, and tailored review processes. These process maps are intended to represent the desired sequence and timing of events, and were largely developed from Global Fund strategy and operational policy notes and existing documentation of Global Fund practices. The process maps articulate the steps involved in Global Fund's investment process starting with the in-country decision to apply for Global Fund support, through to the concept note/funding request development stage, grant negotiations, planning, and implementation period associated with a specific investment.

Planned Activities

The Global ToC serves as a unifying framework for the evaluation, across the eight countries, which may be further refined over the course of the evaluation as new information and findings emerge. We will collaboratively update the Global ToC based on input from the CEPs and GEPs. We plan to "cross-walk" each country-specific evaluation question through the Global ToC to ensure collective understanding of the question, where it fits in the ToC, underlying assumptions and theorized effects of improvement in that topic area, and as a check for whether additional elements need addition to the ToC. We will then draft a provisional list of output, outcome and impact indicators to accompany the global ToC. This ongoing, iterative process will result in a Global ToC that accurately conceptualizes how the evaluation questions fit within the Global Fund business process and their interrelationships.

In addition to the Global ToC, we will need to plan for further cross-consortia collaboration on the thematic ToCs (i.e. COE, STC, HIS) to refine early drafts.

We intend the process maps to be used as a tool for CEPs to guide their observations and data collection related to this grant application process. We will crosscheck and validate the process maps with Global Fund staff as a first step to ensuring the accuracy of the process maps. CEPs are currently familiarizing with the draft process maps for the funding request. The process

maps will be verified with CEP experience in observing these processes and steps to date, including the actual versus theorized timeline for the funding request.

While the GEPs led on development of the funding request and grant making process maps, during the implementation phase of the evaluation, the CEPs will lead on creation of first drafts of process maps to further build capacity and understanding of ongoing implementation processes.

2.2 Identification, Prioritization, and Contextualization of Evaluation Questions

This section describes activities for development of evaluation questions across countries. Country-specific activities and plans can be found in each country's chapter.

Completed Activities

Activities for development of evaluation questions have centered on gathering inputs from country stakeholders, the Global Fund CT, and the TERG Secretariat. CEPs carried out individual stakeholder consultations in each country to discuss the PCE and gather specific input about country-level priorities. In addition, CEPs have gathered input on priority areas through non-participant observation of key meetings.

Each CEP organized and convened a stakeholder workshop in their country to share information and updates about the PCE and to bring diverse stakeholders together in order to gather further input (and consensus) on evaluation priorities. Members of the TERG Secretariat have been involved in workshop planning and debrief sessions, and have provided valuable input throughout the process.

A multi-step process of identification, prioritization, and contextualization of evaluation questions occurred in each country through collaboration between CEPs and IHME/PATH. In brief, we:

- Country Stakeholder Identification and Prioritization of Key Challenges:
 Country stakeholders led the first stage of prioritization. During the country stakeholder workshop, working within pre-determined groups, the stakeholders identified a list of key challenges and bottlenecks. Stakeholders then consulted and discussed these issues within their group, and eventually together, they reached consensus around the top three to five issues and presented back to the wider plenary.
- Generated a provisional question list: Following each country stakeholder
 workshop, the issues prioritized by the stakeholders were the basis for developing a
 provisional evaluation question list. IHME/PATH and the CEP worked together to
 organize the country-specific evaluation priority areas and develop provisional
 overarching evaluation questions and sub-themes.
- **Mapped questions to Global Fund strategic objectives**: We mapped the evaluation questions to the RFP strategic objectives to identify gaps. We formulated additional crosscutting global-level questions specific to the strategic objectives or drew the additional questions directly from the RFP.
- **Compared questions across countries**: To ensure consistency and promote cross-country comparisons, in instances where country-specific evaluation priorities overlapped across multiple countries, we adopted consistent language in formulating and framing the question.

- **Prioritized and contextualized evaluation questions**: CEPs undertook an internal process of discussion to prioritize or rank the evaluation questions, using a high, medium and low designation. The prioritization discussion followed the SMART+E Framework, to assess whether the question was:
 - Specific and clearly defined;
 - Measurable given available methods and data sources, and supporting documentation;
 - Actionable context amenable to change;
 - Relevant, with value in generating findings and recommendations;
 - Time-bound and can be answered within the scope of the evaluation period (feasibility); and
 - Energy/enthusiasm from stakeholders is high.

The output from these activities is a provisional table of country-specific evaluation questions, which we compiled into a comparative cross-country table to highlight key information about the questions relating to timing, prioritization, alignment with strategic objectives and thematic areas, and methods, including:

- Which questions can be addressed in the first six months of evaluation (grant application focus)
- How questions map to the four strategic objectives and enablers
- How questions map to the four thematic areas: partnership, country ownership, sustainability, and value for money
- Which questions are country-specific (i.e. emerged from stakeholder consultation) versus "global-level" questions from the RFP or formulated to address a particular strategic objective
- Prioritization of evaluation questions by CEPs using SMART + E framework
- Types of methods proposed to answer each evaluation question

Questions Addressed in the First Six Months

Evaluation questions related to the funding request and grant application/making process are grouped at the top of the table to indicate questions to be addressed within the first 6 months. In total, each country will plan to investigate four to five questions specific to the grant application/making process. Many of these questions are crosscutting in nature, in that they examine key themes such as country ownership, country dialogue, partnerships, and decision-making in the context of the funding request and grant application/making processes.

Strategic Objectives

Evaluation questions are organized according to the four strategic objectives to ensure coverage across each objective, plus strategic enablers. Note, some questions in the funding request and grant application are crosscutting and may relate to the strategic objectives or enablers.

Thematic Areas

Many of the evaluation questions also address one or more of the thematic areas. Symbols indicate where the crosscutting themes of partnership, country ownership, sustainability, and value for money align to the evaluation questions.

Country-Driven vs. Global Questions

The majority of evaluation questions emerged at the country level through the stakeholder workshops and ongoing meeting observation and stakeholder consultations. In addition, there are "global-level" crosscutting questions added to ensure we fully evaluate the strategic objectives, such as impact on human rights and gender-related barriers to services (the globe symbol indicates such questions). These questions were either adapted directly from the RFP framing or proposed by IHME/PATH. Of note, some questions are "crosscutting" in the sense that the issue was raised in more than one country – for these questions, additional crosscountry analyses may be possible.

Question Prioritization

As previously described, an initial prioritization process occurred by country stakeholders to gain consensus around the key challenges and bottlenecks. The CEPs prioritized the evaluation questions as high, medium, and low priority, indicated by green, yellow, and red in the cross-country table. Most questions were rated high or medium priority. As noted in the table, CEPs consider some questions "low" priority – More CEP/GEP discussion is currently underway about whether to discard these questions at this stage. Also of note, as this is a prospective evaluation, we expect there may be changes to question prioritization as we move through the evaluation, and therefore the question prioritization should not be considered fixed. Early findings from the PCE could inform development of new questions and/or reprioritization of existing questions.

Methods

A column indicates the type of methods proposed for each evaluation question. Many questions will rely on a mixed methods approach. Ongoing GEP/CEP discussion will help detail specific methods associated with each evaluation question. Information on data inventory, country capacity and context, timelines, and the original proposal and methodological drafting sessions between the GEP and CEPs will guide these discussions to ensure methods that are a) theoretically suitable to answer the evaluation question and b) feasible within the context of the country. These discussions will also help to identify the types of capacity building methods sessions that may be required.

Planned Activities

A preliminary mapping exercise helped identify where each evaluation question fit into the ToC. Additional work is planned to draft a short narrative to accompany each evaluation question describing a) which aspect(s) of the ToC the question pertains to, and b) what assumptions the ToC makes regarding how that evaluation question is expected to lead to impact, and through which mechanisms. This process will help identify gaps in the ToC and potential adjustments that may be necessary at the country-level (e.g., absorption (financial execution) and accountability may need insertion in the ToC).

Table 1. PCE evaluation questions, methods, and prioritization at global and country-specific questions

OVERA	RCHING EVALUATION QUESTIONS	METHODS	Theme	Global	DRC	GTM	UGA
	ADDRESSED IN THE FIRST 6 MONTHS OF THE EVALUATION PHASE						
	1. What is the nature and role of partnerships between Global Fund and in-country stakeholders participating in the grant application and making processes?	KIIs, partnership analysis	ŤŤŤ		X	X	X
h0	2. What are the barriers and facilitators for a successful grant application / making process, including responsiveness to country priorities, perceived needs, and resource allocation decisions?	Document review, process tracking, observation, KIIs, RCA	****		X	X	
& Makin	3. How effectively does the CCM coordinate stakeholders and partners for grant application/making and program implementation?	Document review, observation, KIIs, partnership analysis	ŶĬŶ		X	X	
lication	4. How has the CCM ensured program continuation during the transition from the current to new principal recipient?	Document review, observation, KIIs, RCA, resource tracking	ŶŮ Ŷ			X	
Funding Request, Grant Application & Making	5. How does the decision-making process determine Global Fund investment priorities, program split, and resource allocation?	Document review, process tracking, observation, KIIs	Š				X
Request,	6. To what extent are expected implementation bottlenecks anticipated and planned for in the grant application and making phase?	Process tracking, observation, KIIs, RCA			X	X	X
unding I	7. How effectively are key and vulnerable populations considered, defined, and addressed in the grant application and making process (across program areas)?	Document review, process tracking, observation, KIIs			X	X	X
<u>F</u>	8. How has the differentiated funding request approach enabled a more efficient and streamlined application and review process compared to previous application processes?	Process tracking, document review, observation, KIIs	Š		X		
	9. What barriers and facilitators have been experienced in negotiating co-financing commitments, as compared to previously?	KIIs, resource tracking	•		X	X	X
	ADDRESSED OVER THE COURSE OF THE FULL EVALUATION	ION PHASE*		ı			

				1			
	10. What are the trends and distribution (geographic, demographic and socio-economic) of HIV, TB and malaria-related health outputs and outcomes?	HMIS, small area estimation			X	X	X
	11. To what extent do Global Fund resources contribute to improvement in health outputs and outcomes for HIV, TB and malaria? How does that contribution vary geographically and demographically, and what are the barriers and facilitators to achieving outputs and outcomes?	Resource tracking, small area estimation, document review, observation, KIIs, RCA	Š		X	X	X
COE	12. To what extent is the Global Fund STC policy applied and contributing to preparing for sustainability and transition?	Document review, observation, process tracking, KIIs	•			X	X
ition,	13. How effective and efficient are Global Fund risk management and oversight structures at enabling program results?	Document review, observations, KIIs			X	X	X
SO1 Impact, Transition, COE	14. To what extent does the process for determining investment priorities and resource allocations result in grants strategically designed to deliver effective implementation?	Document review, observations, KIIs, resource tracking, secondary data analysis					X
)1 Imp	15. How do the current strategies of the MOH (e.g. new model for healthcare, "MIS") affect implementation of national disease programs and Global Fund grants?	Document review, observations, KIIs				X	
SC	16. In COEs, how do partnerships and increased flexibilities in Global Fund processes contribute to greater effectiveness and impact?	KIIs, observation, document review, partnership analysis			X		
	17. How have reforms in country-level implementation models and strategies contributed to improving program efficiency and effectiveness?	KIIs, observation, document review			X		
RSSH	18. How effectively does Global Fund money move from global to national to sub-national levels?	Document review, process tracking, KIIs, partnership analysis, resource tracking			X		X
SO2 Build RSSH	19. How do Global Fund investments contribute to building resilient and sustainable systems for health?	Document review, observation, KIIs, resource tracking	\$		X		X
802	20. How do Global Fund investments improve the efficiency and effectiveness of health information systems (HIS) in the country?	Rapid Assessments of PR, SR, national HIS, KIIs, resource tracking, secondary data analysis	169			X	

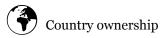
	21. How has the Global Fund supported the government's decentralization of health administration to the provincial level?	Observation, document review, KIIs		X		
SO3 Human Rights & Gender	22. Are Global Fund investments in programs to reduce human rights and gender-related barriers to HIV, TB and malaria services of sufficient amount, quality, and effectiveness?	Resource tracking, document review, observation, KIIs, small area estimation, secondary data analysis	5	X	X	X
SO3] Rights {	23. To what extent have plans, policies and programs (related to three diseases in 2017-2019 allocation period) been designed and implemented in accordance with gender responsive programming, within country contexts receiving GF support?	Document review, observation, KIIs	3	X	X	X
	24. What are the trends and distribution of Global Fund resources (inputs), and how do they compare with need?	Resource tracking		X	X	X
sources	25. To what extent is allocation of Global Fund resources complementary to other resources (PEPFAR, domestic etc.)?	Resource tracking, document review, observation, KIIs	# İİ			X
SO4 Mobilize Resources	26. What are the drivers of consistently low rates of absorption (financial execution) of Global Fund investments?	KIIs, partnership analysis, causal loop diagram, resource tracking	•	X	X	X
04 M	27. What factors influence sustainability considerations (or lack thereof) related to Global Fund investments?	KIIs, RCA	•		X	
SC	28. How are government resources (including co-financing) allocated and utilized to complement Global Fund investments in the three diseases?	KIIs, document review, resource tracking	•	x		
Strategic Enablers	29. What are the facilitators and barriers to the CCM functioning effectively within the standards/scope as defined by the Global Fund business model?	KIIs, RCA, partnership analysis		x	X	X

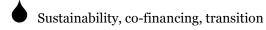
^{*}Questions related to implementation of new Global Fund grants may require further stakeholder consultation when grant implementation begins.

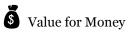
Questions considered across countries to address a strategic objective – proposed by IHME/PATH or drawn from the Global Fund Request for Proposal Prioritization of Evaluation Questions: High Med Low

Thematic Area Symbols Key:









2.3 Harmonization across Global Evaluation Partners (GEPs)

The existence of other GEPs necessitates collaboration across the three PCE consortia. An objective of the Inception Phase is to identify the extent to which harmonization is possible and extent to which it is desirable. The degree of harmonization may vary for each evaluation component. Harmonization between GEPs may include overlap in methodological approaches, dissemination of results, or both.

Completed Activities

Completed and ongoing activities for GEP harmonization have included meetings, workshops, phone calls, email communication, and collaboration on early products. The *EHG* consortium convened an initial meeting in Copenhagen in March; PATH attended this. The TERG Secretariat convened another GEP collaboration meeting April 27-28 in Geneva to discuss opportunities for and challenges to collaboration; IHME attended this. Consortia members arranged several phone calls to further discuss collaboration on an evaluation component-specific basis. As a result, five documents describing collaboration principles were jointly developed. A workshop was convened by the TERG Secretariat in Baltimore May 17-18 to develop a draft high-level ToC and produce a document detailing principles, opportunities and challenges to collaboration on ToCs. Both IHME and PATH attended this. Another document was jointly produced detailing principles, opportunities, and challenges to collaboration on other evaluation components. A side meeting among the three consortia occurred during the TERG meeting of June 6-8 in Geneva. Ongoing communication via email has proceeded regarding harmonization across GEPs and is expected to continue through the Inception Phase and Evaluation Phase.

In August, EHG and PATH held two conference calls to discuss collaboration on the process evaluation component of the grant application and making phase. These discussions continued over email through August and September with the aim of arriving at a set of "core" propositions and related sub-questions for investigation by each CEP during the first 6 months of the evaluation. By agreeing on a set of core propositions to investigate, we plan to ensure there is adequate data available for cross-country synthesis purposes. The agreed upon list of five core propositions includes:

- 1. Changes in the grant application and review process (for the 2017-2019 funding cycle)enabled a more efficient and streamlined application and review process compared to previous application processes
- 2. Changes in the grant application and review process (for the 2017-2019 funding cycle) reduced transaction costs associated with accessing GF funding, and allowed more time to be spent on grant implementation and program quality.
- 3. A transparent, inclusive and country-led process is in place to confirm the country allocation, program split, funding request approach, and PR selection. Country dialogue is ongoing, including through grant making.
- 4. There is a stronger focus on sustainability, transition and co-financing (STC) compared to previous funding cycles and application processes
- 5. There is a stronger focus on key and vulnerable populations, human rights, and gender compared to previous funding cycles and application processes.

Planned Activities

Early cross-consortia work is underway to develop an analytic framework tool for organizing process evaluation data by proposition and country, which will help support cross country synthesis. In addition, more discussion and collaboration on the analytic framework and potentially development of a joint codebook may be required for KII analyses. We anticipate additional collaboration on the thematic-area ToCs in the early phase of the evaluation period.

We plan to continue face-to-face side meetings to accompany each of the TERG meetings throughout the evaluation phase. This will allow for continued discussion on opportunities and challenges to collaboration. We suggest a system for communication and document sharing, such as Basecamp, to be employed by the TERG Secretariat. GEPs could utilize this system for alerting the consortia about new process evaluation findings that warrant investigation in other countries.

2.4 Dissemination Mechanisms at the Global Level

This section describes plans and activities for global-level dissemination of results. Further activities related to country-level dissemination plans can be found in each country's chapter.

Completed Activities

Completed and ongoing activities related to dissemination mechanisms include harmonization across GEPs through various meetings, ongoing communication with members of Global Fund TERG Secretariat, and participation in TERG meetings.

Planned Activities

Planned activities related to dissemination are to incorporate country-level input through the planned activities for CEP buy-in and input and stakeholder engagement. Further progress on dissemination activities at the global level will be continued through the planned activities for harmonization across GEPs, high-level ToC development, and annual and quarterly reporting.

- Annual country reports (February 2018, 2019, 2020);
- Annual synthesis reports (March 2018, 2019, 2020);
- Quarterly updates (14 January, 14 April, 14 July, 14 October);

2.5 Country Evaluation Partner (CEP) orientation and input

The success of the PCE is dependent on engaged and empowered CEPs in each country. The CEPs, and individuals within the CEP teams, are starting at various levels of familiarity with the Global Fund business model and the different evaluation methods.

Completed Activities

Activities such as trainings, presentations of the PCE work plan, and onboarding sessions have been, and will continue to be, particularly useful in assessing which aspects of the evaluation phase will be most suitable for formal capacity building activities.

The IDRC team working in Uganda is familiar with the proposed evaluation methods based on previous collaboration experience with IHME and PATH for the Gavi Full Country Evaluations. Thus, the PCE kick-off with the IDRC team was held on May 4th via Skype. In this meeting, we reviewed the different Inception Phase components of the PCE, including stakeholder mapping, data mapping, and plans for process evaluation.

IHME and PATH led onboarding meetings with CIESAR May 17-20 in Guatemala City, with participation from the core Guatemala team and with PATH DRC July 19-21 in Addis Ababa, Ethiopia, with participation from three of the core DRC team members. These meetings covered the high-level plan for the PCE, planning for Inception Phase activities, and early planning for the Evaluation Phase. In these meeting, the teams reviewed the different components of the PCE, mainly the development of ToCs, process and impact evaluation, evaluation questions, stakeholders mapping, and existing data mapping, to have a clear understanding of the activities that need to be developed during the inception and evaluation phases.

IHME, PATH, and CEPs convene for weekly skype calls to discuss progress, findings, and to plan for next steps and priorities. Further, the consortium utilizes a project management software, Basecamp, as a platform to share tools and documents, communicate, and provide updates on scheduled meetings and observation exercises.

PATH and IHME have also developed a variety of guides and tools shared with each of the CEPs to support in activities during the inception and evaluation phases. An inventory of the PCE guides and tools are listed below and included in Appendix A.

Evaluation design

Tool	What is this tool?	When/how to use this tool?
Stakeholder consultations	Provides talking points to	Guide small group or one-on-
guide	explain the PCE and a topic	one stakeholder
	guide for interviews to elicit	consultations during the
	stakeholder evaluation	inception phase.
	priorities.	
Criteria for developing	List of criteria to guide the	Guide the development,
evaluation questions	development and	refinement, and prioritization
	prioritization of country-	of evaluation questions in
	specific evaluation questions.	stakeholder consultations,
		during the workshop, and
		post-workshop.
Evaluation workshop	Guidance on the PCE team's	Guide the planning and
objectives	objectives leading up to, and	implementation of the
	during the evaluation	stakeholder evaluation
	workshop. Includes guidance	workshop.
	on identifying evaluation	
	priorities.	

Process evaluation

Tool	What is this tool?	When/how to use this tool?
PCE document review &	Complete list of iLearn	Prioritize document
iLearn tracking	modules available from	collection and review during
	Global Fund and global	the inception phase to get up
	documents for review,	to speed on Global Fund
	prioritized by their PCE	policies and country-specific
	relevance. List of country-	processes.
	specific documents CEPs	
	should collect and review.	
Process evaluation	Template to record	Take notes into the template
observation tool	observations in meetings that	during meeting observations.

	the PCE team will attend as observers.	In 2017, the focus will be on observing meetings related to grant application and grant making.
Stakeholder and process mapping template	Template to fill in with contact information for stakeholders, and to track which stakeholders are involved in various process steps from application development to grant implementation.	Fill in relevant contact information during the inception phase. Track the timing and stakeholder involvement in various process steps as they unfold.
PCE meeting tracker	Template to fill in meetings or other events relevant to the PCE.	Fill in relevant meetings to track when they occur, whether someone from the PCE attended, etc.

Data mapping

Tool	What is this tool?	When/how to use this tool?
Data sources inventory	Template to identify existing	During the inception phase,
template	or planned data sources the	fill in any planned or
	PCE can leverage.	completed data collection
		activities related to HIV, TB,
		and/or malaria to inform the
		evaluation design.

Communications

Tool	What is this tool?	When/how to use this tool?
PCE Information Brief	Two page overview of the	Share with stakeholders to
	PCE.	explain the PCE.

Capacity Development

In addition to capacity building through content knowledge attainment, we are also creating increased capacity by orienting CEPs to the PCE. Through this process, we will identify opportunities for capacity development of the CEPs, and will plan CEP-specific capacity-strengthening activities to implement during the Evaluation Phase.

The aim of our capacity-building component will ensure that practical evaluation skills are developed in the country to perform the evaluation effectively, efficiently, and sustainably. During the Inception Phase, we have identified skills required by the CEPs to answer the PCE questions and conducting capacity needs assessments to identify gaps and topics to prioritize in each country. Through in-depth discussions with the CEPs, the IHME/PATH consortium will formally plan a set of country-specific capacity strengthening activities to take place over the course of the Evaluation Phase that are aligned with the PCE data collection and analytic needs. Capacity building during the first six month of the evaluation phase will focus on process evaluation and resource tracking as detailed below:

- PATH will schedule 1-week trips to work with CEPs on qualitative data collection. Topics covered will include analyzing observation data, identifying data gaps, building KII topic guides, interview techniques and practice (piloting tools), qualitative data management and analysis, using the PCE analysis matrix, and partnership survey guidance.
- IHME will provide orientation on resource tracking study methods during the process evaluation workshop

Capacity development throughout the evaluation phase will emphasize practice-based methods focused on integrating learning with producing PCE results. Methods may include hands-on "on-the-job" learning, class-based or web-based activities, e-learning, mentoring, and coaching. Examples include working collaboratively with GEPs to analyze and triangulate qualitative data and develop root cause analyses, and training workshops focused on research design and approach. Capacity building will emphasize multi-directional learning to/from the CEP and across PCE countries. As with the Gavi FCE, opportunities will also be made available for country evaluation team members to undertake formal higher degree training. Finally, the Uganda CEP will have opportunities to lead some capacity building of the other CEPs, given their extended experience from the Gavi FCE.

Although emphasis will initially be placed on building the capacity of the CEPs, efforts could potentially be expanded to include a wider scope of other country stakeholders who are engaged in PCE activities. This could include building capacity for data analysis and data use, particularly as it pertains to translating PCE findings and recommendations into action at the country-level.

Chapter 3 Uganda PCE

3.1 Country information landscape

Health System in Uganda

Health governance in Uganda is spearheaded by the Ministry of Health (MoH) and shared with other ministries, health development partners, district leadership, providers (public and private), and civil society organizations (CSOs). MoH is responsible for ensuring the delivery of the health goals and objectives of government as expressed in the Health Sector Development Plan. Given the inter-relationships needed to implement programs, to coordinate players, and to mobilize financial and other resources, the Ministries of Education and Sports; Finance, Planning and Economic Development; Public Service; Local Government; and Gender, Labour and Social Development are also key players. Parastatals such as National Drug Authority (NDA), National Medical Stores (NMS), Joint Medical Stores (JMS), Health Services Commission (HSC), Uganda AIDS Commission (UAC), National Blood Bank, and national insurance providers are also key actors in the health system.

The Government of Uganda (GoU) is structured with a central government and 116 districts as the local governments. The central structure interacts directly with local governments at the district level. Local governments are autonomous and are responsible for the district level planning, budgeting/resources, appropriate, passing of health related bye-laws, recruitment and management of personnel. The health sector at district level is led by the District Health Team (DHT), which is headed by the District Health Officer. The district health system is further divided into counties, sub-counties, parishes and villages.

Health services are provided by the public (51%) and private sub-sectors (49%).(1) The public and private sectors are organized hierarchically into hospitals (national referral, regional referral, and general) and a tiered system of health centers including community level health centers. Each county is supposed to have a referral facility being either a Health Centre (HC) IV or a general hospital, while each Sub-country has a HCIII, each parish a HCII, and each village a HC1.

As of 2017/18, the Village Health Team (VHT) - Health Centre I will be replaced by the Community Health Extension Workers (CHEWs) strategy where representation will be derived from every parish. The institutionalization of the CHEWs strategy was recommended by MOH in every local government to foster health care delivery based at Health Centre II by providing the necessary community health services at the facility and in the community.

The private not-for-profit organizations (PNFPs) operate for all practical purposes along with Public health sector. Hence, the private for-profit consist more of hospitals/clinics, traditional and complementary medicine practitioners. Nearly 75% of facility-based PNFP organizations exist under the umbrella organizations: the Uganda Catholic Medical Bureau, the Uganda Protestant Medical Bureau, the Uganda Orthodox Medical Bureau and the Uganda Muslim Medical Bureau. The PNFP sector is subsidized by the government and fills gaps to complement the public sector. The Uganda Health System structure is further summarized in Table 2 below.

Table 2. Uganda Health System Structure(2)

Governance coordination	Levels of Health Services	Main Category of Health Worker	Roles and estimated service provision
Top Management Committee & Health Policy Advisory Committee.	MoH & other National Level Health Institutions	High level Administrative Technocrats	Stewardship, supervision, policies and quality control & assurance, resource Mobilization, regulation.
National and Regional Level Hospital Boards	National Referral Hospitals (NRHs)	Super Specialist & Specialist Medical Personnel	Specialized care- whole population including HIV/AIDs, Malaria, TB.
	Regional Referral Hospitals (RRHs)	Medical Specialist; Medical Officers	14 in number and each serving a population of approx. 3 million people.
District Health Teams	General Hospitals (District Health Services)	Medical Officers, Clinical Officers	Oversight of Public, Private and community health programs, delivery of health services, recruitment and management of personnel. Development of by-laws, planning, budgeting and resource mobilization. Serving approximately 500,000 people
	Health Centre IV (HC- IV) level (Health Sub- District)	Medical Officers, Clinical Officers	Planning, management, supervision and quality assurance, provision of technical, logistical and capacity development and referral function for basic general and obstetric surgical care, serves approximately 100,000 people
	Health Centre III (HC- III) level	Clinical Officers, Registered Nurses, Midwives, Lab assistants	Offers maternity & laboratory services, diagnosis & first level of referral cover for sub county, serves about 20,000 people
Health Subdistricts	Health Centre II (HC- II) level	Enrolled Nurse, Midwives	Offers the basic preventive and curative services, maternity, and outreach, technical guidance and

		support to VHTs serves about 5,000 people
Health Centre I (Village Health Team [VHT])	Community Health Workers (VHTs and CBOs)	Mainly preventive care and home based management, 1,000 people, 5 VHT/village

Uganda's health service delivery is financed by a multiplicity of stakeholders including government, private firms, household, Health Development Partners (HDP) and off budget support grants. Service delivery and developments in public health facilities is mainly financed through government grants, loans and grants from HDPs. PNFPs have been supported through grants and seconding personnel. As of 2015/16, GoU's health expenditure as a percentage of total government expenditure was 6.4% while the per capita public health expenditure was USD\$11.

In terms of Human Resources for Health (HRH), health sector staffing is currently at 71% (42,530/60,384) as of 2015/16 financial year with a registered increase by 747 health workers since 2014/15. The number of doctors, midwives, nurses was 0.03/1,000,0.25/1,000 and 0.46/1,000 population as of 2015/16. This is still far below the WHO recommended threshold of 2.3 doctors, nurses and midwives per 1,000 population. Central level staffing is at 74% while that at local government level is at 70%.

The Procurement and Supply Management System (PSM) comprises of public, PNFP and PFP with the MoH Pharmacy Division charged with the mandate of coordinating the pharmaceutical sector. MoH is responsible for overall health regulation with most of the functions delegated to semi-autonomous institutions under which the National Drug Authority (NDA) is mandated to regulate medicines and health supplies. NDA conducts regulation of registration, importation and post-marketing surveillance for all medicines and health supplies. The quantification and procurement planning for health commodities are conducted centrally in MoH by the quantifications and procurement planning unit created in 2011. Uganda has three main central warehouses responsible for the procurement, storage, and distribution of health products to the public, PNFP and PFP sectors through a mix of pull and push allocation systems.

Management Information Systems: At the National Level, monitoring and evaluation is an established function within the Quality Assurance Department with a sector coordination structure under the Supervision, Monitoring Evaluation and Research Technical Working Group. The functionality of this structure in the health sector to provide stewardship has affected key functions such as quality, reporting and utilization of data. The Health Management Information Systems (HMIS) consisting of a mix of computerized and paper-based systems is currently the most developed aspect of MIS for health. The 2nd District Health Information System (DHIS-II) supports the efforts towards harmonization and integration of health information systems based at MoH. DHIS-II allows aggregate statistical data at facility level with countrywide coverage specific to districts, general hospitals, regional and national referral hospitals and some HC IV's.

Landscape of the Epidemics in Uganda *HIV/AIDs*

Uganda's HIV/AIDS epidemic has been generalized for more than three decades with an increase in the HIV prevalence among adults 15-49 years from 6.4% in 2004/05 to 7.3% in 2011, although prevalence has since declined to 6.2 % in 2016.(3,4) HIV prevalence increased in the antiretroviral therapy (ART) era (post-2003) based on data from the 2004/5 and 2011 AIDS indicator surveys, cohort studies and UNAIDS model estimates. By the end of 2016, there were an estimated 1,400,000 (1,300,000-1,500,000) people living with HIV (PLHIV) in Uganda.(5) This trend is attributable to persistent, but declining, HIV transmission and declining HIV-related mortality associated with wider access to ART. Despite the generalized epidemic, HIV prevalence is higher among certain key and vulnerable populations and geographical regions. Across the country, HIV disproportionately affects women with a prevalence of 8.2% among women and 6.1% among men. HIV prevalence varies by region, ranging from 4.1% in the Mid-Eastern region to 10.6% in the Central 1 region. ART coverage in Uganda was an estimated 56% in 2016.

Tuberculosis (TB)

The 2014/15 national TB disease prevalence survey estimated the prevalence and incidence of TB at 253 and 234/100,000 population, respectively. The reported prevalence and incidence were much higher than the WHO estimates of 159 and 161 per 100,000 population, respectively.(6) However, for the last 5 years TB case notifications have been declining largely due to declining notification of extra-pulmonary and clinically diagnosed TB as well as low detection of childhood TB. In 2015/16, out of the 83,455 expected incident cases, only 42,320 were notified, leaving over 41,000 "missed cases" possibly in regions with CNRs below national average and with a low male: female case notification ratios. In 2015/16, 97.3% of TB patients were tested for HIV, 97.8% and 88% of TB/HIV cases were on ART respectively and Intensified TB case finding among PLHIV is now at 92%.(6)

Malaria

Malaria is endemic in 95% of Uganda, affecting approximately 90% of the population (35 million people).(7) The remaining 5% of the country consists of unstable and epidemic-prone transmission areas in the highlands of the South and Mid-West Uganda, along the Eastern border with Kenya and the Northeast border with Sudan. Malaria is one of the leading causes of morbidity and mortality in Uganda, with approximately 16 million cases and over 10,500 deaths reported in 2013. Malaria accounts for 30%-50% of outpatient visits and 15%-20% of hospital admissions. Malaria control has remained a priority action within the national health agenda in Uganda with a notable significant reduction in under-5 mortality from 143 to 90 per 1,000 live births in the period 2001 to 2011.(8) ITN coverage in Uganda was an estimated 73%, while ACT coverage was an estimated 40% in 2015.

Global Fund History in Uganda

Since 2003, the Global Fund has invested \$898,291,483 to reduce the burden of HIV/AIDS, TB, and malaria in Uganda. Currently, seven active grants span all three disease areas and strengthening systems for health, totaling a \$217 million in investment through 2017. The majority of these funds are directed towards HIV, with a focus on reducing new infections, improving the quality of life of PLHIV, and decreasing HIV-associated mortality by 70% by 2025. This is achieved, in part, through an effort to establish effective and sustainable multi-sectoral HIV/AIDS service delivery system that ensures universal access and coverage of quality, efficient and safe services. These programs have received recent ratings of B1-Adequate. The second major area of funding is for malaria, which aims to reduce annual malaria deaths to near zero by 2020, and reduce and malaria parasite prevalence and morbidity attributable to malaria.

Malaria programs have received performance ratings of B2: "inadequate but potential demonstrated". Finally, TB, which receives the smallest portion of Global Fund investment (\$26 million), focuses on reducing prevalence, morbidity, and mortality through a range of activities aimed at improved detection and treatment rates, coordination with HIV care systems, effective programs for drug-resistant TB, and targeting high-risk populations in prisons. Overall, TB programming receives ratings of B1-Adequate over the implementation period.

Uganda applied for the next round of Global Fund support in March 2017. This will provide an important opportunity for the evaluation team to prospectively assess the process in which Global Fund grant applications are designed, developed, reviewed and approved. Table 3, below, summarizes the grants received and approved to date, including the total program budget and grant agreement amounts.

Table 3: Summary of Current Global Fund Grants to Uganda

Component	Title	Recipient	Total Grant Agreement (\$USD)	Grant start		Last Performance rating
Other	Health Systems Strengthening	MoFPED	6,043,614	2012	2015	B1
HIV/AIDs	Comprehensive country proposal for scaling up the national response to HIV/AIDs	MoFPED	26,160,888	2003	2005	B2
Malaria	The Uganda Country Proposal for Scaling up the National Response to Malaria	MoFPED	21,054,781	2004	2006	С
Tuberculosis	Scaling up the National Tuberculosis Program	MoFPED	4,599,506	2004	2006	B2
HIV/AIDs	Expanding Anti- Retroviral Therapy and Care and Support of Orphans and other vulnerable children	MoFPED	43,358,400	2007	2014	N/A
Tuberculosis	Scaling up interventions of Tuberculosis prevention, control, treatment, care and support in Uganda		4,425,741	2008	2010	B1

HIV/AIDs	Scaling up prevention, care, treatment and health systems strengthening for HIV/AIDs. MoFPED 42,817,103 2011		2015	B1		
TB/HIV	Supporting Uganda's Response to HIV/AIDs TASO 6,804,113 2015 2017 B1		B1			
HIV/AIDs	Supporting Uganda's Response to HIV/AIDs MoFPED 212,797,901 2015 2017 A2		A2			
Malaria	Malaria	MoFPED	143,744,529	2015	2017	B2
Malaria	Supporting Uganda's Malaria Reduction Strategy	TASO	44,606,581	2015	2017	B2
Other	Strengthening the health and community systems for quality, equitable and timely service delivery	MoFPED	15,546,594	2015	2017 A2	
Tuberculosis	Tuberculosis	MoFPED	37,158,814	2012	2017	N/A
Other	Towards virtual elimination of MTCT transmission of HIV and universal access to HIV care and treatment in Uganda (HSS component)	TASO	9,691,965	2012	2014	В1
Malaria	Consolidating malaria control in Uganda	MoFPED	28,210,737	2012	2014	B1
Malaria	Consolidating Malaria Control in Uganda	TASO	19,744,005	2012	2014	B2
Malaria	Support for introduction of highly effective artemisinin – based combination therapy malaria treatment		95,826,536	2005	2012	A2
HIV/AIDs	Scaling up prevention, care, treatment and health systems		150,470,141	2009	2015	B1

	strengthening for HIV/AIDs					
Malaria	Scaling up long lasting Insecticidal Net (LLIN) Ownership and use in Uganda	MoFPED	113,512,211	2009	2014	A2

Source: Global Fund Website.

https://www.theglobalfund.org/en/portfolio/country/list/?loc=UGA&k=9e8b8568-adaa-4b26-af09-da5b112c51e7#page-1. Access date: 07/08/2017

Global Fund Implementation.

Global Fund grants are implemented by Principal recipients (PR) from the public sector: the MoFPED (executing entity), with the Ministry of Health as the implementing entity. In the non-public sector, The AIDS Support Organization (TASO), a local NGO, is also a PR and sub-grants other CSOs. Approximately 90% of Global Fund grants to Uganda are spent on the procurement of medicines and health products. The secretariat's pooled procurement mechanism procures all health commodities with the exception of TB drugs, which are procured by the global drug facility.

Overview of Funding Sources

The GoU funds the health sector through a mechanism called budget support under the country Medium Term Expenditure Framework of the MoFPED established to pool resources to support sectors activities. The government contributes to the health care delivery in the form of payment of salaries and wages. Although the share of government funding allocation to the health sector spending remains low compared to the expected 15% target for budget support towards health, in nominal terms, the country's health expenditure has been steadily increasing compared to the year 2011/12 health budget from 7.99% in 2008/9 to 8.7% in 2013/14.

HIV/AIDS

Government contribution: In the period between 2007/08 and 2011/2012, the government's contribution to the national fight against HIV/AIDS tripled from 14 million USD to 53 million USD, this amounted to a total of about 180 million USD over the four-year period. Despite this apparent increase in resource allocation for one disease/epidemic situation, the percentage of the total expenditure contributed by the GoU for HIV/AIDS increased only from 5% to 12%.

Development partners' contribution: Uganda's national HIV/AIDS response is heavily dependent on external support contributing about USD 1.565 billion (89.6%) of the total USD 1.747 billion used for the national response between 2007/08 and 2012/13. Bilateral contributions account for 93% of the AIDS external funding between 2007/08 and 2011/12 while multilateral sources account for about 7%.

United States Government (USG) through PEPFAR contributed (i) 78% of the total national spending (ii) 87% of the spending by international development partners and (iii) 94% of all funding from bilateral donors to the national response to HIV/AIDS epidemic making it the single dominant contributor. Such heavy reliance on one donor to fund the national response would have serious implications, should USG support to GoU be significantly reduced in any way. Other donors include Department for International Development, Danish International

Development Agency, Irish Aid, Italian Cooperation, Swedish International Development Agency, and Global Fund as well as the United Nations Agencies.

Individual, household and community contribution: The National AIDS Spending Assessment (NASA) study 12 indicated that between 2008/09 and 2009/10 funding from public sources contributed approximately 10.5% towards expenditures on HIV/AIDS, while private out-of-pocket sources contributed roughly 21% indicating that Ugandan households contribute substantially towards the national response.

The largest source of funding came from development donors accounting for 68%. This data shows that Ugandan households do contribute substantially towards the national response at the individual, family and community levels, although as many as 24.5% of Ugandans live below the poverty level. Out-of-pocket spending by households on HIV/AIDS and related conditions not only accounts for more than one-fifth of the annual AIDS expenditures in the country but it is also twice the amount contributed by the government.(9)

Malaria

Until 2007/8, the government did not provide funding earmarked for malaria control apart from the funding for general provision of services. As of 2009, the majority of the funding for malaria came from the government, Global Health Initiatives (GHIs), development partners and out of pocket expenses. GHIs include PEPFAR, President's Malaria Initiative, World Bank's Multi-country HIV/AIDs Program (MAP) and Global Fund. So far there has not been a comprehensive spending assessment for malaria akin to the National AIDS Spending Assessment.(10) A 2009 assessment on malaria funding sources showed the main funding sources for malaria control as the US President's Malaria Initiative (PMI), Japan International Cooperation Agency and Department for International Development.(11)

The 2009 funding source assessment showed the total resource envelope for malaria was USD 32 million. The largest source of contribution for malaria control was from GHIs accounting for 88% (USD 27.8 million), followed by bilateral agencies at 11% (USD 3.4 million) and government at 2% (USD 0.5 million). In the period of interest, there was no data collected for multilateral agencies. Other sources of funding included out of pocket expenditures for commodities like insect-treated nets and ACT treatment at health facilities. Household expenditure however has not been documented but of 2002, the estimates for the burden of malaria indicated that households spent an average of US 3.08 per malaria episode.(12)

Tuberculosis

The funding source assessment in 2009 showed that the main funding for TB control in Uganda came from the government and the International Union against TB and Lung Disease (IUTLD). Funding for TB from WHO was highlighted to come in form of direct financial support while TB drugs were supplied via Global Drug Facility. Support from IUTLD however was not financial but rather in form of technical support to review programs under the National TB and Leprosy Program (NTLP). As of 2009, the total resource envelope for TB in Uganda was approximated at USD 4 million with 22% (USD 0.9 million) from GHIs, followed by bilateral agencies at 46% (USD 1.9 million) then multilateral agencies contributed 32% (USD 1.3 million).

Compared with HIV/AIDs, and Malaria, TB received the least funding from GHIs apart from the Global Fund.

3.2 Country-level stakeholder mapping and engagement

Stakeholder engagement during the inception phase was characterized by various engagements and activities through meetings and presentations with various Global Fund stakeholders. Activities included stakeholder consultation with the CCM secretariat, attendance of CCM constituency meetings, pre- and post-workshop meetings and a stakeholder engagement workshop.

Meeting with CCM Secretariat

In Uganda, the process of formal stakeholder consultation began with a consultative meeting between the CEP (IDRC) team and the Secretariat of the Uganda Country Coordinating Mechanism for Global Fund. The objectives of the meeting were:

- 1. Introduce the PCE concept to the CCM secretariat and seek their buy in;
- 2. Learn more about the CCM, including its mandate, structure/composition and roles;
- 3. Discuss ways/strategies to introduce PCE to Global Fund stakeholders in Country;
- 4. Initiate Stakeholder mapping.

The chairperson of the CCM, Prof Vinand Nantulya is very conversant with the PCE because of his membership on the Strategy Committee of the Global Fund board and also the TERG. He briefed the meeting on how PCE was conceptualized and explained the principles of PCE. He pledged to personally introduce the CEP team to the Top management of the MOH, and all PRs. We introduced the Global Fund PCE and sought advice on how to conduct stakeholder mapping and engagement. The team was advised on the key stakeholders to engage, and was informed of the several scheduled upcoming meetings where the different CCM constituencies were to hold elections for their new CCM representatives.

CCM Constituency Meetings

A total of thirteen stakeholder engagement meetings were attended. During these meetings, the evaluation team introduced the aims of PCE, the approach, and added value of the prospective evaluation. The evaluation team also sought views of the stakeholders on the priority areas of interest where the team should draw evaluation questions for the main phase. During the stakeholder meetings, the evaluation team introduced the PCE to the stakeholders, encouraged them to send forth their priority evaluation questions and also informed them of the upcoming PCE stakeholder workshop that was scheduled for 14th July 2017. In general, the evaluation was welcomed and was considered important to the country. Stakeholders particularly appreciated the prospective nature of the evaluation in terms of its ability to provide real time feedback for program improvement and emphasized the need for continued engagement and feedback of key results.

Table 4: Uganda PCE Stakeholder Engagement Meetings Held to Date

Date (2017)	Stakeholder group met	Membership/Composition
13th June	CCM Secretariat	CCM chairperson, CCM secretariat coordinator, CCM Finance and Administration Officer, CCM Monitoring and Evaluation Specialist

15th June	AIDs Development Partners (ADPs)	WHO, UNAIDS, CHAI, PEPFAR
20th June	Health Development Partners (HDP's)	CHAI, Embassy of Sweden, Embassy of Netherlands, WHO, UNFPA, CDC Uganda, CDC US, USAID
22nd June	Faith Based Organization constituency meeting	Organized under the Umbrella of the Inter Religious Council (IRCU). They include, Catholic, Moslem, Protestant, SDA, Pentecostal faith, Orthodox
23rd June	Global Fund CCM grant making meeting	National Malaria Control Program (NMCP)-MOH, UNHCR, AAN-U, IRCU, UNFP, Price Water Coopers, Global Fund TERG, Uganda Stop T.B Program-MoH, TASO, National TB and Leprosy Program.
23rd June	International NGO's	World Vision, Compassion International, Grant Management Solution Project, Child Fund International, Uganda Cares, Care International
28th June	Private Sector constituency meeting	Federation of Uganda Employers, Roofings Group, Tourism sector, Association of micro-finance institutions of Uganda, Uganda Women Entrepreneurs Organization, Uganda Manufacturers Association, Taxi industry, Uganda AIDS Commission, Ministry of Gender, Uganda National Chambers of Commerce, Private Security Association, Arts Self Coordinating Entity, Federation of Performing Artists Uganda, Fish Industry
29th June	Malaria Constituency meeting	Malaria and Childhood Illnesses Secretariat (MACIS), Program for Accessible health Communication and Education (PACE), MCAP,
30th June	Meeting with Ministry of Finance	Fund Coordination Unit (FCU) for Global Fund; Permanent Secretary, Coordinator, Head Planning, M&E, Change management specialist
4th July	National Non- Government Organizations constituency meeting	AIDS Information Centre, Uganda Health Marketing Group (UHMG), Reach Out Mbuya, Uganda National Health Consumers Organization, Network of Young People Living with HIV, Health Gap, Kitovu Mobile, Arise Ntungamo, Mama's Club, AGAR, International Community of Women Living with HIV (ICWEA), The Uganda Network of AIDS Service Organizations (UNASO), Community Health Alliance Uganda, Uprise Initiative, African

		Mayors' initiative for Community action on AIDS at the local, level (AMICAALL)
5th July	People living with and affected by TB	Uganda Stop T.B Partnership, International Community of Women Living with HIV Eastern Africa (ICWEA), Coalition for Health Promotion and Social Development (HEPS) Uganda, Uganda National health Consumers Organization (UNHCO), Central Public Health Laboratory (CPHL), Community Integrated Development Initiatives (CIDI), Uganda Prisons, Representative of people with TB, Medicines Sans Frontiers, Community Empowerment Initiative, Ministry of Defense, Uganda Women's Organization, Plan For All, Integrated Community Based Initiatives (ICOBI), Uganda Medical Bureau N.B: This is a new constituency, not well defined
5th July	People living with and affected by HIV	National Forum for people living with HIV/AIDS Networks in Uganda (NAFOPHANU); membership is drawn from district HIV/AIDS Networks, Uganda Young Positives, Network of Young People Living with HIV/AIDS, POMU, National Coalition of Women Living with HIV/AIDS (NACWOLA)
19th July	Key Affected Populations	Most At Risk Persons networks which include; Men who have Sex with Men (MSM), Uniform services, Transgender, Sex workers, Fishing communities, Lesbian, gay, bisexual, and transgender (LGBTs), Injection drug users

Pre-workshop preparatory meetings

From 12th to 13th July 2017, IDRC, IHME/PATH and the TERG held preparatory meetings for the PCE stakeholder engagement workshop. During these meetings, the team reviewed the evaluation priorities generated during the stakeholder engagement meetings as well as those identified from consultations with key informants during proposal writing. The team attempted to group these priorities under the four strategic objectives of the Global Fund. However, following the realization that some priorities didn't fall under any strategic objective and that there was need to modify the language of the strategic objectives for easier comprehension by the invited stakeholders to the workshop, the team re-grouped the priorities under four broad evaluation themes:

- 1. Grant application / grant making processes
- 2. Implementation and impact (including systems)
- 3. Financing
- 4. Governance and partnerships

Stakeholder Engagement Workshop

A stakeholder engagement workshop was organized by IDRC and took place on Friday 14th July 2017. The objectives of the workshop were:

1. To familiarize country stakeholders with PCE

- 2. To introduce PCE evaluation methods
- 3. To discuss and adapt evaluation priorities from country stakeholders

The workshop was attended by a diverse group of stakeholders involved in the control of malaria, HIV/AIDS and TB in Uganda. Representation was as follows:

- Ministry of Health (Program Managers and officers for HIV/AIDS, TB and malaria control programs, Fund Coordination Unit)
- Ministry of Finance (Officials from the Fund Coordination Unit)
- Health Development Partners (WHO, CDC, Irish Aid)
- CCM (CCM secretariat, outgoing and elected constituency representatives)
- Other members of different CCM constituencies (CSOs, Key and vulnerable populations, academia, PLWHA)
- TERG team (TERG Secretariat, TERG Focal Point)
- IHME /PATH (Global consortium)

The workshop was officially opened by the state minister for health in charge of Primary Health Care, who welcomed the concept of a prospective country evaluation in-country, highlighting the need for timely feedback to improve programming. She encouraged stakeholders to offer unlimited support and cooperation to the evaluation team, and further emphasized the need for the PCE to pass on its skills to country stakeholders so that the country is in position to continue the evaluation for sustainability purposes.

Presentations were made by the head of evaluations at Gavi and the UNEPI program manager for Uganda on global and country experiences with the Gavi Full Country Evaluation respectively. The purpose of these presentations was to share with the stakeholders the benefits and drawbacks of a prospective evaluation to enhance their appreciation and acceptance of the PCE. IDRC/IHME members made a presentation on possible data collection methods and potential evaluation priorities under the four pre-identified broad evaluation themes, highlighting the approach to answering the evaluation priorities. The stakeholders were then advised on how to identify/discuss the proposed evaluation priorities in the upcoming break out session.

Stakeholders divided themselves into four groups following the four pre-identified broad evaluation themes. The stakeholders chose their groups depending on where they felt they fit most. In the different groups, stakeholders chose a chairperson and a rapporteur. Additionally, a member from IDRC/IHME/PATH was a co-facilitator in each group. During the group sessions, stakeholders reviewed the proposed evaluation priorities, generated additional evaluation priorities for the PCE and ranked them.

Following the group sessions, representatives from the four groups presented their identified evaluation questions to the workshop attendees for feedback and discussion.

3.3 Identification, prioritization, and contextualization of evaluation questions Completed Activities

A post-workshop debrief was held July 17 in which preliminary evaluation questions were developed, followed by an iterative process between the GEP and CEP to refine the questions and map them back to the strategic objectives (1.Maximize impact against HIV, TB and malaria;

2. Build Resilient and Sustainable Systems for Health; 3. Promote and Protect Human Rights and Gender Equality; and 4. Mobilize Increased Resources) and ToC. Preliminary questions were grouped into broad themes, each with numerous sub-questions embedded within them. The overarching evaluations questions and associated sub-themes to be explored are detailed in Table 5. Table 5 should *not* be interpreted as the exhaustive list of evaluation questions for Uganda (given the prospective nature of the evaluation), nor will every question on this list be included in the final set of evaluation questions. Note: please refer to Table 1 for the methods associated with each evaluation question.

While the PCE aims to evaluate all of the 18 broad evaluation questions identified for Uganda, we will place particular emphasis on the 8 evaluation questions that are rated highest priority by the CEP. Higher priority questions have strong country stakeholder enthusiasm and global buyin, are likely to be answerable within the evaluation period, and could result in findings that are actionable and relevant to improving program performance and quality. For these questions, the team will attempt to gather evidence across any many sources as possible, such as KIIs in addition to document review, process tracking, observation, and routine secondary data.

Some questions were rated lower priority when stakeholders did not raise the issue frequently and/or due to cultural sensitivity reasons, for example, within Uganda's current political and cultural climate it is increasingly difficult to evaluate questions related to key and vulnerable populations. Other lower priority questions had minimal stakeholder interest in cases where the question did not appear relevant to stakeholder's day-to-day operations or implementation, as was the case for exploring trends in distribution of resources. Similarly, there was low stakeholder interest and buy-in for exploring sustainability and transition issues since Uganda will not be approaching transition status in the near term. However, the relevancy of these questions to assessing the strategic objectives is recognized, and where possible we will still aim to answer these questions at an appropriate time throughout the evaluation. However, lower priority questions may rely more on secondary data sources such as document review, process tracking, observation, and routine data.

In the first six months, the CEP will use process evaluation methods in focusing on five questions related to the funding request and grant application/making process, three of which are rated high priority. Our approach to these questions will build upon work already underway, including non-participant observation at key meetings and document review, utilizing KIIs to explore issues in-depth (sub-themes in Table 5) and to fill in any information gaps emerging from the observation and document review. The PCE will continue to capitalize on the current window of opportunity to observe and evaluate the grant application/making process through the end of the 2017 calendar year, until grants are awarded. Moving into early 2018, we will use process findings to assess the effectiveness of the 2017-2019 funding cycle reforms. Table 5: Evaluation questions, sub-themes, and prioritization for Uganda PCE.

 $\textit{Table 5: Evaluation questions, sub-themes and prioritization for Uganda\ PCE}$

EVAL	UATION QUESTIONS	SUB-THEMES	ToC Areas	Theme	Global	UGA
Funding Request, Grant Application & Making	1. What is the nature and role of partnerships between Global Fund and in-country stakeholders participating in the grant application and making processes?	Partnership structure and strength of ties	Strategic enabling environment	†ŤŤ †		X
	2. How does the decision-making process determine Global Fund investment priorities, program split, and resource allocation?	 Drivers of priority setting Reprioritization / reprogramming Changes in priorities Documenting priorities Alignment between GF and country priorities Achieving compromise Financial gap analysis Stakeholder / community engagement in decision process 	Grant application & making	Š		X
, Grant Ap	3. To what extent are expected implementation bottlenecks anticipated and planned for in the grant application and making phase?	Procurement challenges Contractual delays	Grant application & making			X
Funding Request,	4. What barriers and facilitators have been experienced in negotiating cofinancing commitments, as compared to previously?	 •Use and application of STC policy for cofinancing •Level of co-financing commitments versus actuals •How effective is the STC policy in stimulating cofinancing? •Domestic resource mobilization for ATM 	Inputs (policies); Grant application & making; Institutions	•		X
	5. How effectively are key and vulnerable populations considered, defined, and addressed in the grant application and making process (across program areas)?	 Definition of key and vulnerable populations, and strategies for reaching How much money is devoted to key and vulnerable populations Level of involvement of key and vulnerable constituencies in application 	Inputs (policies); Grant application & making			X

SO1 Impact, Transition, Challenging Operating Environment	6. What are the trends and distribution (geographic, demographic and socio-economic) of HIV, TB and malaria-related health outputs and outcomes?	•Geographic distribution of key health outputs & health outcomes	Outputs; Outcomes		X
	7. To what extent do Global Fund resources contribute to improvement in health outputs and outcomes for HIV, TB and malaria? How does that contribution vary geographically and demographically, and what are the barriers and facilitators to achieving outputs and outcomes?	•Intensity of GF resources coincide with changes in key health outputs •Geographic distribution of key health outputs coincide with geographic distribution of health outcomes •Intensity of GF resources coincide with changes in health outcomes	Outputs; Population Health Outcomes; National program implementation	\$	X
	8. To what extent is the Global Fund STC policy applied and contributing to preparing for sustainability and transition?	•Country initiatives planned or in place for STC (AIDS trust fund; \$1 Initiative) •Domestic resource mobilization for ATM	Inputs (policies); Implementation outputs; Health systems outcomes	•	X
npact, Transition, (9. How effective and efficient are Global Fund risk management and oversight mechanisms at enabling program results?	•GF reporting and monitoring requirements •Country process alignment •Accountability for results •Accountability impediments •Institutionalization of reporting processes •Capacity •Assessing VfM	Not explicit – consider adding to ToC		X
SO1 Impa	10. To what extent does the process for determining investment priorities and resource allocations result in grants strategically designed to deliver effective implementation?	•Drivers of priority setting: Power dynamics; intervention effectiveness; stakeholder interests •Reprioritization / reprogramming •Global Fund and country priority alignment	Grant application & making; Inputs (Institutions & Relationships); Strategic enabling environment	\$	X

SO2 Build RSSH	11. How effectively does Global Fund money move from global to national to sub-national levels?	 •MoF & MoH role in financial flows, fund coordination •PR1/PR2 relationships, functions •Movement of money from non-state PR2 to Gov't •Financial processes 	Inputs (Resources; Institutions & Relationships); Strategic enabling environment		X
802 1	12. How do Global Fund investments contribute to building resilient and sustainable systems for health?	•Incorporating RSSH policy in priority setting •Inclusion of HSS within grants	Inputs (Resources); Outcomes (Health System outcomes)	Š	X
nts & Gender	13. Are Global Fund investments in programs to reduce human rights and gender-related barriers to HIV, TB and malaria services of sufficient amount, quality, and effectiveness?	 How are Global Fund supported programs addressing barriers to services for the most vulnerable, including key populations? What have been the challenges and successes of implementing gender responsive programs? 	Inputs (Resources); Implementation outputs	Š	X
SO3 Human Rights & Gender	14. To what extent have plans, policies and programs (related to three diseases in 2017-2019 allocation period) been designed and implemented in accordance with gender responsive programming, within country contexts receiving GF support?	To what extent has gender been addressed in the design of the grant application?	Grant application & making; Inputs (Policies)	Š	X
obilize ırces	15. What are the trends and distribution of Global Fund resources (inputs), and how do they compare with need?	•Distribution of GF and non-GF resources by health function, geographic area, & financing agent	Inputs (Resources); Population Health Outcomes		X
SO4 Mobilize Resources	16. To what extent is allocation of Global Fund resources complementary to other resources (PEPFAR, domestic etc.)?	•Visibility across funding streams & activities •Consideration of other funding sources in allocation decisions	Inputs (Resources); Implementation outputs; Strategic	††† †	X

SO4 Mobilize Resou	17. What are the drivers of consistently low rates of absorption (financial execution) of Global Fund investments?	 Drivers of variation in absorption by PRs, SRs, disease area Potential bottlenecks to absorption Aspects of the GF business model facilitate or hinder effective and efficient absorption 	enabling environment Not explicit – consider adding to ToC	•	X
Strategic Enablers	18. What are the facilitators and barriers to the CCM functioning effectively within the standards/scope as defined by the Global Fund business model?	•CCM structure, roles, responsibilities, empowerment, autonomy, objectivity, compliance •CCM member tenure, characteristics, capacity, competencies, power •Partnerships	Inputs (Institutions & Relationships); Strategic enabling environment	***	X

Questions considered across countries to address a strategic objective – proposed by IHME/PATH or drawn from the Global Fund Request for Proposal

Prioritization of Evaluation Questions: High Med Low

Thematic Area Symbols Key:





Country ownership



Sustainability, co-financing, transition



S Value for money

Planned Activities

In moving forward with preparation for the evaluation phase, the CEP will begin organizing evidence gathered to date from observation, consultation and document review. Through this process, CEPs will identify gaps in our understanding that need further exploration through KIIs. The CEP/GEP are in the process of developing KII topic guides for the grant application / phase. In addition, the CEP will use their stakeholder mapping tools to identify key informants with knowledge and understanding of the issues we seek to further explore in the KIIs.

3.4 Data Mapping and Assessment

As described above, data mapping is an essential input to the planning and design of evaluation methods. Data obtained from this process will be critical to the impact evaluation. This section describes Uganda-specific data mapping activities and progress.

Completed/Ongoing Activities

Completed and ongoing activities for data mapping include completion of a data inventory and progress toward documenting data availability and gaps. Through individual stakeholder consultations and web searches, a complete list of data sources (to the extent of our knowledge) has been gathered. This list is detailed in Table 6. Ongoing activities include a) systematically examining meta-data associated with each data source for accuracy and completeness and b) content mapping. Content mapping entails a systematic screening of the documentation and codebook for each data source in an effort to identify all variables that pertain to the three diseases. These may include indicators of incidence/prevalence, treatment coverage, preventive interventions, risk factors or others. Indicators represented by each data source are being documented and itemized to facilitate a complete understanding of the data landscape.

Table 6. Data inventory for Uganda

		Data		
Data Title	Institution	Collection	Data Type	Availability
	International			
	Center for AIDS			
	Care and			
Uganda Population HIV Impact	Treatment	08/2016-		Tabulations
Assessment	Programs (ICAP)	Present	Survey	Only
		08/2014-		Tabulations
Uganda National Viral Load Dashboard	Ministry of Health	Present	Surveillance	Only
	Demographic and			
Uganda Demographic and Health Survey	Health Surveys	06/2016 -		Tabulations
2016	Program (DHS)	11/2016	Survey	Only
	Demographic and			
Uganda Malaria Indicator Survey 2014-	Health Surveys	12/2014 -		
2015	Program (DHS)	01/2015	Survey	Microdata
Uganda Service Delivery Indicators	African	06/2013 -		
Survey 2013	Development Bank	08/2013	Survey	Microdata
Uganda National Household Survey 2012-		06/2012 -		
2013	Bureau of Statistics	06/2013	Survey	Microdata
Uganda - Kampala Mapping and Size		_		
Estimation of Key Populations in Kampala		01/2012 -		Tabulations
Capital City Authority 2012	Ministry of Health	12/2012	Survey	only

I	Institute for Health			I
Uganda Access, Bottlenecks, Costs, and	Metrics and	04/2012 -		
Equity Project 2012	Evaluation (IHME)	10/2012	Survey	Microdata
Uganda Routine Immunization Coverage		06/2012 -		Not
Survey 2012	Ministry of Health	06/2012	Survey	available
	Demographic and			
Uganda Demographic and Health Survey	Health Surveys	06/2011 -		
2011	Program (DHS)	12/2011	Survey	Microdata
2011	Demographic and		Janvey	merodata
	Health Surveys	02/2011 -		
Uganda AIDS Indicator Survey 2011	Program (DHS)	09/2011	Survey	Microdata
Uganda Lot Quality Assurance Sampling	1108.4 (21.0)	11/2010 -	Janvey	Tabulations
Survey 2010		11/2010	Survey	only
Uganda National Household Survey 2009-		05/2009 -	Sarvey	Tabulations
2010	Bureau of Statistics	04/2010	Survey	only
2010	Demographic and	04/2010	Sarvey	Only
Uganda Malaria Indicator Survey 2009-	Health Surveys	11/2009 -		
2010	Program (DHS)	01/2010	Survey	Microdata
Uganda Plasmodium Falciparum Parasite	r rogram (Dris)	01/2010	Julvey	Wiiciodata
Rate Data, Personal Communication with				
A. Talisuna, Uganda Ministry of Health /		01/2009 -		Not
Medicines for Malaria Venture, 2009		12/2009	Curvov	available
	World Health	12/2009	Survey	avallable
Uganda - Masaka and Wakiso WHO Study	Organization	04/2009 -		
on Global AGEing and Adult Health -	(WHO)	10/2009 -	Curvov	Microdata
Well-Being of Older People Study 2009	(٧٧١٥)		Survey	Tabulations
Uganda Lot Quality Assurance Sampling		11/2008 -	Curvov	
Survey 2008	African	12/2008	Survey	only
Uganda National Service Delivery Survey 2008		01/2008 - 12/2008	Curvov	Microdata
	Development Bank		Survey	Microdata
Uganda Service Provision Assessment	N 4::	07/2007 -	C	NA: aug alata
2007	Ministry of Health	10/2007	Survey	Microdata
Uganda - Luwero and Nakaseke School	Community Children	00/2007		Tale lactions
Health and Nutrition Final Evaluation	Save the Children	08/2007 -	C	Tabulations
Survey 2007	Federation	08/2007	Survey	only
Uganda Lot Quality Assurance Sampling		10/2006 -	6	Tabulations
Survey 2006	5 11 1	12/2006	Survey	only
Librarda Barrara de la compansión de la	Demographic and	04/2006		
Uganda Demographic and Health Survey	Health Surveys	04/2006 -	C	N 41
2006	Program (DHS)	10/2006	Survey	Microdata
Uganda - Luwero and Nakaseke School		44/000=		- 1 1
Health and Nutrition Baseline Survey	Save the Children	11/2005 -	•	Tabulations
2005	Federation	11/2005	Survey	only
		09/2005 -		Not
Uganda EPI Plus Coverage Survey 2005	Ministry of Health	10/2005	Survey	available
Uganda Lot Quality Assurance Sampling		08/2005 -		Tabulations
Survey 2005		09/2005	Survey	only

Health Surveys 08/2004	l	Demographic and			Ī
Uganda AIDS Indicator Survey 2004-2005 Program (DHS) 01/2005 Survey only Uganda Lot Quality Assurance Sampling Survey 2004 08/2004 Survey only Tabulations only Survey 2004 08/2004 Survey only Survey only Surdan and Uganda Demography of Forced Migration Survey 1999-2000 Borders 03/2004 Survey Microdata Uganda Delivery of Improved Services for Health, Facility Evaluation Survey 2002 Bureau of Statistics 03/2004 Survey Microdata Uganda Demographic and Health Survey 2002 MEASURE 03/2002 Survey Microdata Uganda Demographic and Health Survey 2002 MEASURE 03/2001 Survey Microdata Uganda Demographic and Health Survey 1998-1999 Ministry of Health 10/2000 Survey Microdata Uganda Delivery of Improved Services for Health, acility and Household Evaluation MEASURE 08/1999 Survey Microdata Uganda Delivery of Improved Services for Health, 1996 MEASURE 08/1999 Tabulations Uganda Delivery of Improved Services for Health, 1996 MEASURE 08/1999 Not		• .	08/2004 -		Tabulations
Uganda Lot Quality Assurance Sampling Survey 200406/2004 08/2004Tabulations onlySurvey 2004 Sudan and Uganda Demography of Forced Migration Survey 1999-2000Doctors Without Borders11/1999 03/2004SurveyMicrodataUganda National Service Delivery Survey 2004Bureau of Statistics Evaluation03/2004 04/2002SurveyMicrodataUganda Delivery of Improved Services or Health, Facility Evaluation Survey 2002MEASURE Evaluation03/2002 Very onlySurveyMicrodataUganda Demographic and Health Survey 2000-2001Demographic and Health Surveys Program (DHS)03/2001 Very onlySurveyMicrodataUganda Quantitative Service Delivery Survey in Health 2000Ministry of Health Ministry of Health12/2000 Very onlySurveyMicrodataUganda Delivery of Improved Services for Health, Facility and Household Evaluation Surveys 1999World Health Very only12/1999 Very onlySurveyMot MEASURE Very onlyUganda Delivery of Improved Services for Health, Facility and Household Evaluation Surveys 1997MEASURE Very only09/1997 Very onlySurveyTabulationsUganda Delivery of Improved Services for Health, Facility and Household Evaluation Surveys 1997MEASURE Very only09/1997 Very onlySurveyNot very onlyUganda Demographic and Health Survey 1995Demographic and Health Surveys Program (DHS)03/1995 VeryNot varialableUganda Plasmodium Falciparum Parasite Rate Data, African Pest and Environment Management Fo	Uganda AIDS Indicator Survey 2004-2005	•	<u>-</u>	Survey	only
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Uganda Demographic and Health Survey 1988-1989	Rate Data, Kamugisha 1992		12/1992	Survey	available
1988-1989Program (DHS)02/1989SurveyMicrodataWorld Health01/1958 -NotUganda Tuberculosis Survey 1958Organization12/1958SurveyavailableUganda Health Management InformationUnknownAdministratiMicrodata		Demographic and			
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Uganda Tuberculosis Survey 1958Organization12/1958SurveyavailableUganda Health Management InformationUnknownAdministratiMicrodata	1988-1989	Program (DHS)	02/1989	Survey	Microdata
Uganda Health Management Information Unknown Administrati Microdata		World Health	01/1958 -		Not
	Uganda Tuberculosis Survey 1958	Organization	12/1958	Survey	available
System Ministry of Health - 07/2012 ve available	Uganda Health Management Information		Unknown	Administrati	Microdata
	System	Ministry of Health	- 07/2012	ve	available

		01/2010 -		Tabulations
Awach Demographic Surveillance System	Gulu University	Present	Surveillance	Only
Iganga/Mayuge Health and Demographic		01/2004 -		
Surveillance System	INDEPTH	12/2010	Surveillance	Unknown
Rakai Health and Demographic		01/1988 -		
Surveillance System	INDEPTH	12/2010	Surveillance	Unknown
PRISM Comprehensive Malaria	Makerere	07/2010 -		
Surveillance	University	Present	Surveillance	Unknown
	Makerere	Unknown		Microdata
Uganda Malaria Surveillance Project	University	- Present	Surveillance	available
		Unknown		
Childhood TB Infection study		- Present	Survey	Unknown
		Unknown	_	Microdata
Uganda TB Surveillance Project		- Present	Surveillance	available

Planned Activities

Planned activities for data mapping include completion of content mapping, analysis of data gaps and requests for data access. Content mapping will be summarized for the three diseases to describe the proportion of known data sources that contain information about burden of disease, the proportion that contain information about treatment coverage, and the proportion which contain information about prevention coverage. Data gaps will continue to be explored by indicator and geography and over time. Data gaps will be summarized according to specific indicators that have little data as well as levels of detail (geographic and other strata) that are rarely represented in the data. A data mapping synthesis, in the form of a short report, set of visualizations or both will be produced to summarize the data landscape. Data access requests will be sent to all relevant parties by the CEP, with support from the GEP.

3.5 Formation of Advisory Panel

Given the similarity in the nature of evaluation for both the PCE and Gavi Full Country Evaluation. IDRC proposed to have the same advisory panel for both evaluations. During the inception phase period, the evaluation team assembled a team of high-level country partners and opinion leaders to constitute the advisory panel to provide support and advice to the Global Fund and Gavi evaluations. Members of the advisory board were selected based on their independent nature and vast knowledge and expertise in the areas of HIV/AIDs, Malaria, TB immunization, Health Systems, qualitative and quantitative research, evaluations, and policy. This advisory board will meet twice a year and will be involved in the planned dissemination mechanisms and meetings at country level.

Specific Terms of References were drafted and shared with the advisory board, and are under review for approval by the board members as attested to by the chairperson.

The roles of the advisory board will be to:

 Facilitate information sharing to and coordination among key stakeholders in Uganda for Global Fund from the government, community, donor agencies and other key stakeholders and experts

- 2. Act as a source of advice on decisions with which the evaluation team seeks consultation
- 3. Ensure that the activities of the investigators have potential to contribute to informing the strengthening of the HIV, TB, and malaria programs in Uganda
- 4. Provide links and coordination with Global Fund efforts in Uganda and other planned and ongoing HIV, TB, malaria, HSS and other related interventions and evaluations in Africa

3.6 Plan for in-country dissemination

Based on wide consultation with stakeholders, the team will employ a broad range of dissemination mechanisms to ensure we direct learning from the PCE toward program processes in a timely manner. Based on the relevance and value of the findings, a number of dissemination mechanisms will be employed, including, but not limited to: (i) presentations (ii) reports, briefs and publications: annual reports, manuscripts, policy briefs and field visit reports (iii) annual dissemination meetings and (iv) conferences/workshops.

The first approach of dissemination will be through presentations of key relevant findings on a quarterly basis. Since the evaluation team will participate in several meetings at program level, this will be used as an avenue to update key stakeholders on important findings emerging from the evaluation allowing for a more detailed description of findings in a timely manner. The target audiences will be the program technical working groups, PRs and the CCM board.

The second approach to disseminating results will be in the form of reports, briefs and peer reviewed journal articles. Annual reports will summarize the work undertaken by the evaluation team and key findings for the corresponding period. Policy briefs on the other hand will be produced on an as need basis following the key themes and findings emerging from the evaluation. Where field visits will be made, a field report summarizing findings that are critical in informing the program will also be shared with the necessary stakeholders. This approach also involves publishing of results through peer-reviewed journal articles, which will be dependent on the emerging key themes and areas. These varied types of reports will allow us to reach audiences ranging from program personnel to policy makers to researchers.

The third approach for dissemination will be through dissemination meetings held on an annual basis with all Global Fund stakeholders including national and sub-national partners, academia, policy makers and political leaders. The annual dissemination meeting will be organized in a manner that will allow for interpretation and discussion of results thus facilitating a joint understanding of PCE findings and implications of the work. This will also facilitate joint development of recommendations to further galvanize country ownership of the PCE findings.

The fourth approach for dissemination will be international and national conferences or workshops held by different consortia. The aim of attending the conferences will be for the country evaluation team to disseminate PCE findings to national and international forums. This is envisioned to happen at least twice a year. In addition, this avenue of dissemination will also serve as an opportunity for building capacity in terms of exposure, knowledge, and presentation skills.

The evaluation team will remain flexible to adopt any other dissemination mechanisms and material formats as guided by the advisory board, the TERG and TERG Secretariat and relevant stakeholders so as to further galvanize country ownership. The table below summarizes the potential audiences, dissemination mechanisms for the PCE.

Table 7. Dissemination plan for PCE findings

Potential audiences	Dissemination mechanisms	Frequency of feedback	Outputs/indicators
MOH Programmes, including Malaria, HIV/TB Technical Working Groups(TWG)	Presentations, Field visit reports, Informal mechanisms (telephone calls)	Quarterly TWG meeting, Quarterly work plan review meetings, Any time as new findings emerge	Number of presentations made, Reports
Principal recipients	Presentation, Field visit reports	Quarterly	Number of presentations made, Reports
CCM board	Presentations	Bi annual	Number of presentations made, Reports
MOH Top management	Presentations, policy briefs	Annual	Number of presentations made, Reports
District Health Management Team	Briefs	Annual	Number of presentations made, Reports
International and national stakeholders	Presentations and Abstracts	Bi annual	Number of presentations made

Chapter 4 Guatemala PCE

4.1 Country information landscape

Guatemala is located at the northern tip of the Central America isthmus. It is the most populous country in Central America, with an estimated population of 17, 154, 000 million persons for 2017.(13) Demographics of Guatemala are diverse, with 23 major ethnic groups representing 40 percent of the population. Spanish is spoken in urban centers, but there are 23 officially recognized languages.(14)

Guatemala is classified as a "low middle income country". It has been one of the strongest economic performers in Latin America in recent years, with a GDP growth rate of 4.1 percent in 2015, which dropped to 2.9 percent in 2016 and is expected to grow by 3.2 percent in 2017.(15)

Nevertheless, Guatemala has one of the highest inequality rates in Latin America, with some of the worst poverty, malnutrition and maternal-child mortality rates in the region, especially in rural areas. Official figures report that poverty rose to 59.3 percent in 2014, after a reduction to 51 percent in 2006. Of all people living in poverty in the country, 52 percent are indigenous. (15)

The poverty context and failure to integrate youth in education or in the labor force have led to a rising security problem and gang delinquency. This situation is shared with the other two countries of the Northern Triangle, Honduras and El Salvador, and is a main reason for migration to the US. Advances in security have been achieved in recent years, with a drastic decrease in homicide rate from a peak of 48 x 100,000 inhabitants in 2009 to 28.3 x 100,000 at the end of 2016. Unfortunately, the country's geographic location is used by transnational organized crime as a corridor to the north.

Currently, Guatemala's wealth is highly dependent on remittances sent by undocumented migrants living in the US. It has surpassed income generated by traditional exports such as coffee, sugar, banana, tourism, and non-traditional products.

Health System in Guatemala

Guatemala has a public health system composed of the Ministry of Public Health (and Social Assistance), the Guatemalan Institute of Social Security (IGSS) and the private sector. It is estimated that 11.5 percent of the population will only pay private health providers and will not use public facilities or IGSS services.

Social security health services cover only those persons and their families who are formally employed. It is estimated that only 15 to 18 percent of the population are "affiliated" to IGSS. Self-employed persons or those who work in the informal economy fall outside social security coverage.

The rest of the population (approximately 71 to 73 percent) seeks health care provided by the network of the Ministry of Health (MoH). The network is comprised of more than 4,050 health facilities: 72 percent are first level basic health units located at community (or municipal level), 27 percent are second level health centers located at municipal level, and 1 percent are hospitals distributed throughout the country. Hospitals vary in the complexity of care they can provide; the two main third-level reference hospitals are located in Guatemala City.(16)

² IGSS is financed through a tax paid by Employer, the Employee and a government contribution (by Decree)

Despite a seemingly vast health network, Guatemala historically has had low health care coverage, particularly for persons living in rural areas. In 1997, the Guatemalan government and the MoH launched an innovative program to extend health care to 46 percent of the population considered to have no real access to primary care.(17) After more than 15 years of its creation, the outreach model is undergoing a transformation to the *Modelo Incluyente de Salud* (Inclusive Health Model -MIS), the current health care model under design and implementation by the MoH.

The MoH has declared twenty-one health priorities, among them HIV, TB and malaria. All health facilities are to implement actions to address these priorities, following guidelines and strategies designed by National Programs. Disconnect between the MIS and the national programs is currently affecting implementation and planning of strategies to fight the three epidemics and other diseases.

Despite a well-defined regulatory framework, experienced and dedicated health staff, and improvement in several critical indicators, the public health system in Guatemala has failed to guarantee quality of care and improve the health situation of the population. Health expenditure continues to be one of the lowest in Latin America (1.3% of GDP)(18).

Landscape of the Epidemics in Guatemala

HIV/AIDS

The HIV epidemic in Guatemala, and in Central America, is concentrated among key and vulnerable populations, with a low prevalence of less than 1% among the general population. The prevalence in the general adult population age 15 to 49 was 0.5% in Guatemala. An estimated 46,000 (31,000-65,000) persons were living with HIV in 2016Statistics published by UNAIDS in 2017, report that approximately 55 percent of diagnosed persons were on ARV in year 2016, but only 68 percent had reached viral suppression. Every year, Guatemala registers 2,900 new cases, and 1,700 deaths due to HIV. (19)

The higher HIV prevalence rates are reported among key and vulnerable populations: men who have sex with men (MSM), transgender women, and male and female sex workers in some locations. Transgender women are the most affected population with a 24% prevalence rate, followed by MSM with 8.9% and CSW with a decreasing rate between 1.1 to 3.7%. Persons with TB have a high prevalence of 10%. The Garifuna ethnic group does not show the higher prevalence rate they have in Honduras. The main transmission is sexual (93%), with less than 5 percent being mother to child transmission. The burden of the disease lies in the young population, from 20 to 49 years, peaking in the age group 30 to 39 years old. The male/female relation is 1.6:1, a drastic change since the beginning of the epidemic in 1986 when the rate was 3.5:1, a sign of the "feminization" of the epidemic.(20)

According to current data, there are a number of major gaps in achieving HIV epidemic control in Guatemala and the Latin American region. They occur at key steps in the HIV cascade of care, including: a) HIV case finding (only 60 to 65 percent of estimated cases are diagnosed); b) linkage of newly diagnosed and previously diagnosed cases to care and treatment (only 58% ART coverage), and c) poor adherence to ART with corresponding low viral suppression (only 46% viral suppression). (21)

Malaria

The malaria epidemic has shown a consistent decline in the last decade. Currently, the epidemic is focalized to a few specific zones in the southern Pacific Coast and in the northern department

of Alta Verapaz, which comprise more than 65% of cases in the country. Transmission of malaria caused by Plasmodium falciparum, a more severe disease, has practically fallen to zero.

The Global Fund grants have financed prevention and control actions geared toward preelimination of malaria. One of the main strategies has been widespread distribution of long lasting insecticide treated nets, which have been replaced after three years. The government, with support of the Global Fund, has implemented vector control with community involvement, close surveillance of cases and outbreaks, and improved the peripheral laboratory network for precise and prompt diagnosis.

Tuberculosis

TB continues to represent a major cause of illness, death, and great economic costs in the Americas. Guatemala is among the Latin American countries with the highest burden of multidrug-resistant TB (drug resistance), and elevated prevalence of HIV among those where there is a large difference between estimated and detected cases.(22) The total number of cases shows a downward trend from a peak of 3,861 cases reported in 2005 to 3,224 cases in 2014. National average in prevalence rate was 7 x 100,000 in 2015, with 7 out of 22 departments that reported higher prevalence, up to 14.7 to 28.3 in the southern coast region.(23)

Age distribution shows that for 2015, 80 percent of cases were found in persons between 15 to 64 years and 7 percent of cases were detected in children below 10 years of age. Pulmonary TB is the main disease in Guatemala, but 8 percent of cases reported from January to May 2015 were extra pulmonary. The country is carrying out disease prevention and control activities with the assistance of the Global Fund and PAHO / WHO technical cooperation.

Global Fund History in Guatemala

The first Global Fund grant to Guatemala was for HIV (GTM-304-G01-H), implemented by PR World Vision from December 2004 to September 2010. The amount of the Grant was for US\$41,095,025. The interventions were directed to intensifying care for vulnerable populations in prioritized areas. Performance of the Grant was satisfactory throughout the years, closing with an A score, exceeding expectations, and above 96% financial execution.

The second grant obtained by Guatemala was for malaria (GUA-405-Go2-M) for US\$12, 753,600. It was also implemented by World Vision as PR, from Sept. 2005 to Aug. 2010. The interventions aimed at reducing malaria in five priority areas, by a multi-sectorial approach. Performance of the Grant was also highly satisfactory, with scores that went from B1 in the first year to A2 in the last years of implementation, achieving an overall accomplishment above 100%, and 97.8% accomplishment of top ten indicators. The overall budget execution reached a 93% which resulted in the project's meeting intended targets.

The third grant, this time for Tuberculosis (GTM-607-G03-T), was implemented by PR World Vision only during Phase I (for \$ 3,469, 308), from June 2007 to January 2010. At the time of initiation of Phase II, World Vision had given notice of their decision not to continue as PR, so it was assumed and implemented by the MoH as the new PR, after January 2010. Phase I had an overall satisfactory implementation, with a B1/B2 score in the first year. After two semesters, performance improved significantly with regards and during semester four the programmatic performance was excellent with an average performance of 110% (A1 rating) and ten of the 12 indicators exceeding their target.

In 2010, World Vision decided to withdraw as PR due to a series of changes in the financial structure of the MoH, which were considered as barriers for achieving the goals.

Current Global Fund Grants

After World Vision, two PRs were selected and are implementing four Grants: the MoH is the PR for one of the two grants for HIV and the TB and Malaria grants. The Humanistic Institute for Development Cooperation, HIVOS, is the PR for the second HIV Grant and is also the "Local Procurement Agent" for TB and malaria, refer to summary in the Table 8 below.(24)

Table 8. Summary of Current Global Fund Grants to Guatemala

Component	Title	Recipient	_	Grant start		Last performance rating
ТВ	Strengthen DOTS Strategy within the Framework of the New Strategy: Stop TB	MSPAS	6,522,671	2016	2019	N/A
HIV/AIDS	Intensification of Activities in Prevention and Integrated Care among Vulnerable Groups and in Priority Areas in Guatemala	HIVOS	46,476,545	2010	2017	A1
HIV/AIDS	Containing the spread of HIV in Guatemala: Intensification of preventive and comprehensive care services for vulnerable groups and priority zones	MSPAS	35,665,369	2011	2017	B2
Malaria	Multisector Initiative to Implement Malaria Prevention, Control and Pre-elimination Strategies in Guatemala		29,209,634		2016	B1

The HIV Grant is coming to an end at the end of 2017. The CCM and the National Program is working on the new Funding Request, due August 31. Several problems have been encountered in the drafting of the FR, partly due to difficulties in defining programmatic gaps and subsequent costing. The Global Fund Portfolio Manager and M&E/PH officer are currently providing technical assistance to the country team, together technical partner, PASCA to complete the Funding Request. The TB grant and the malaria grants are up for full review next year.

Table 9. Summary of Application for Funding Request 2017-2018

Funding Request submission details				2017-2019 Eligibility factors & allocation			
Component	Application Approach	Review Window	Submission deadline	Country income category	Disease Burden	Eligibility	2017-2019 Allocation (\$US)
HIV/AIDS	Full Review	3	28-Aug-17	Upper-LMI	High	Yes	19,773,326
Tuberculosis	Full Review	4	31-Jan-18	Upper-LMI	Moderate	Yes	5,849,483
Malaria	Full Review	4	31-Jan-18	Upper-LMI	Moderate	Yes	6,362,560

Important changes are taking place in the country in regards to Global Fund Grants. The MoH announced a few months ago that they would not continue to be a PR for the upcoming HIV grant. Furthermore, the CCM decided not to continue with the other current PR, HIVOS, for the next grant. Even though HIVOS was invited to participate in the new Call for PR, it was not reselected. The new PR recently selected is the Nutrition Institute for Central America and Panama, INCAP. The Global Fund will ratify the new PR after a review in Geneva as was informed by the Portfolio Manager during a recent visit to Guatemala³. HIVOS has expressed inconformity with the selection process arguing that it took a long time and the existence of conflicts of interests. In any case, the transition period from the MoH and HIVOS to INCAP will take approximately six months, and three more months to re-start operations. To avoid an interruption of programmatic activities, a six-month extension to HIVOS is being analyzed.

Overview of Sources of Funding for HIV Care

Public Sources

The Guatemala central government contributed 35 percent and the IGSS 29 percent of total health expenditures in 2015. In comparison to 2014, there was an increase in USD 2.1 million attributed to procurement of ARVs and HIV tests. According to data of the last five years, the main source of funding for the national response to HIV is the government. Expenditures have not grown steadily but have been fluctuating, which could be explained mainly by the availability of funds coming from the government at specific moments in time.

External Sources

External Sources represents the second source of financing with 31% of total expenditures, with a decrease of US \$ 1.2 million in relation to the previous year (2014). The largest resources come from Multilateral Organizations including 19 percent of total expenditures covered by the Global Fund, followed by the United States Government with 11 percent and 1 percent by other international entities. The Global Fund is the most important external financier; however, funding has declined progressively over the years and in subsequent grants, as the government has absorbed expenditures such as procurement of most ARVs, salaries of staff and HIV tests aiming at full sustainability of the HIV response by national sources.

³ Observation Notes by CIESAR PCE Team during different meetings held between the CCM, HIVOS and Global Fund Portfolio team for Guatemala, July 2017. Available in PCE Basecamp

Private sources

Five percent of the total expenditure in HIV comes from private sources, with a growing trend that has been constant during recent years. However, it is important to note that by 2015, 50 percent of the expenditure was out-of-pocket (household funds), mostly for testing, care and purchase of condoms. It is necessary to take into account under-estimation of data and incomplete knowledge on the private sector behavior, which translates into an underestimation of the private contribution to the financing of the response to the epidemic.

In case of TB and malaria, a large proportion of expenditure comes from the public sector, with the exception of agro-industries that cooperate in-kind and with labor. Large sugar cane plantations and mills are main private sector contributors. The Global Fund is the main external source for HIV financing, as is PAHO for technical assistance and procurement, with emphasis on malaria and TB.

4.2 Country-level stakeholder mapping and engagement

All activities for stakeholder mapping have been completed. However, this exercise will periodically be revisited to capture any future changes. In its current state, the map starts with the CCM directive body, followed by the Assembly, Principal Recipients and Government members, Sub-recipients and MoH Implementers, Technical Partners and HIV Referral Clinics. In Table 10 below, more detail of the organization of the Stakeholders Mapping is presented.

The steps for putting together the "map" are described below:

- Starting point was a draft that CIESAR had compiled as a preliminary activity, even before the Inception Phase started officially. The list was roughly organized by sectors. Based on this list, we approached the Technical Secretary of the CCM as the first contact to verify data on the draft list.
- 2. During first visit to the CCM, a complete revision of CCM Staff, Board and Assembly members was carried out on-site with Technical Secretary, Dory Lucas. Later, it was double-checked and edited by CIESAR. Once CCM mapping was 90% clean, we proceeded to other stakeholders that came up in consultations with IHME-PATH, the CIESAR team and input from Dory Lucas and other persons.
- 3. A series of visits were scheduled and held with representatives from the three National Programs, the PR HIVOS, the CCM again, representatives of Cooperation Agencies, the Local Fund Agent (LFA) and the Legal Network, among others. Those meetings included discussions on key points of the programs, bottlenecks and the political panorama. When it was possible, communications and information exchange also took place by e-mail.
- 4. Information gaps were investigated to ensure all variables in the map were accurate and complete.
- 5. Minor modifications were made after the PCE Workshop.

Table 10. Guatemala Stakeholder Mapping Structure

CCM: Board & Staff: constituted by President, Alternate President, and two chairpersons and Staff (Technical Secretary and 2 Staff)

and Staff (Technical Secretary and 2 Staff)							
	General Assembly (w/voice and vote):						
Civil Society		Gove	rnment			Academi	c Sector
20 representative	S	Minis	ter of He	alth and Sub	stitute	Universid	lad de San Carlos -
(1 incumbent/1 s	ubstitute)	(2) (V	ice Minist	ter)		USAC (Na	ntional)
Key Populations		HIV/A	IDS Natio	nal Program	า	Universid	lad del Valle -
CSW, HSH, MSM						UVG (Priv	/ate)
PLHIV		- TB N	lational P	rogram		Private S	ector
Affected Population	ons:	- Mala	aria			2 represe	entatives from
TB & Malaria		Sub-p	rogram			Agroindu	stry
Women, Youth/Cl	nildren	(Vecto	ors Progra	am)			
	F	Principa	l Recipie	ent HIVOS T	Геат		
	HI	VOS Sub	-receptoi	rs: 16 organi	zations		
	Tech	nical Pa	rtners f	rom Coop.	Agencies		
UNAIDS	РАНО		USAID F	DEDEAD	USAID P	ASCA	CDC PEPFAR
UNAIDS	PAHO		USAID	FLFTAN	& Sub-re	eceptors	& Sub-receptors
		M	oH Impl	ementers			
14 Healt	h Area Offices fo					Units for F	IIV/AIDS
	Nat	ional R	eference	HIV/AIDS	Clinics:		
Infectious Disease	s Clinic Rooseve	lt Hospi	tal	Family Clinic Luis Angel Garcia - ASI			- ASI
			Oth	ers			
Guatemalan Social Security Institute (IGSS)			Local Fund Agent (ALF): Jacobs (5)				
Other Ministries (Other Ministries (Education, Finances)						
Representative of (SEGEPLAN)	the Secretariat	for Planı	ning	Legal Netw	ork - HIV		

Table 11: Guatemala PCE Stakeholder Engagement Meetings Held to Date

E	Date (2017)	Stakeholder group met	Membership/Composition
1	May 8	CCM and the Global Fund	Technical Secretary & representatives of the Assembly, Global Fund PM former and current & technical partners & LFA
2	May 8	HIV National Program and the Global Fund	HIV National Program Coordinator & HIV technical team; CCM Technical Secretary & representatives of the Assembly, Global Fund former & current PM and M&E Officer; technical partners & LFA

	Date (2017)	Stakeholder group met	Membership/Composition
3	May 9	TB National Program and the Global Fund	General Coordinator of all National Programs; TB National Program Coordinator and TB technical team; Global Fund former & current PM and M&E Officer; technical partners & LFA
4	May 9	Malaria National Program and the Global Fund	General Coordinator of all National Programs; Malaria National Program Coordinator and malaria technical team; Global Fund former & current PM and M&E Officer; technical partners & LFA
5	May 10	Field Visit to Health Center to visit TB Program	Global Fund former & current PM and M&E Officer & LFA
6	May 11	Field Visit to Local Procurement Agent´s Warehouse (RAMSA)	Global Fund delegation: current PM, M&E Officer and Program Officer; PR HIVOS &LFA
7	May 11	Field Visit to HIV Clinic, Roosevelt Hospital	Global Fund current PM and delegation; HIV Clinic Coordinator and clinic staff &LFA
8	June 6	KII visit to Malaria Program	Malaria Coordinator and Epidemiologist
9	June 7	KII with Technical Secretary to follow up on Stakeholder Mapping and pre workshop engagement	CCM Technical Secretary
10	June 9	KII visit to PR HIVOS	PR HIVOS Director and M&E Coordinator
11	June 21	HIV Work Commissions - Funding Request	Representatives of various KP sectors of the HIV Commissions (Care and Treatment/Prevention/ Human Rights and Advocacy)) & Technical Partners
12	June 22	HIV Work Commissions - Funding Request	Representatives of various KP sectors of the HIV Commissions (Care and Treatment/Prevention/ Human Rights and Advocacy) & Technical Partners
13	June 25	CCM and Representative of MoH-MIS expert	CCM Board and Assembly; MoH MIS expert, TB National Program Coordinator;

	Date (2017)	Stakeholder group met	Membership/Composition
			HIV Grant Coordinator and technical partners
14	June 29	CCM Assembly to Evaluate PR Selection Criteria	Vice minister of Health; CCM Board and Assembly; Technical Partners; PEPFAR liaison
15	July 14	KII with HIV National Program Pre-Workshop Engagement	HIV Grant Coordinator and Administrative Officer
16	July 14	KII with TB National Program Pre-Workshop Engagement	TB National Program and Grant Coordinator and M&E person
17	July 21	KII with Malaria National Program Pre-Workshop Engagement	Malaria National Program Coordinator and Epidemiologist
18	July 24	CCM Meeting with Global Fund-Progress on Funding Request	CCM Technical Secretary, representatives of the Board & members of HIV three Work Commissions, Global Fund current PM and M&E Officer; technical partners & LFA
19	July 24	Global Fund and National Lab	Lab staff: Global Fund current PM and M&E Officer; technical partners & LFA, and PASCA consultant.
20	July 25	CCM Meeting with Global Fund-Progress on Funding Request	CCM Technical Secretary, representatives of the Board & members of HIV 3 Work Commissions, Global Fund current PM and M&E Officer; technical partners (including PASCA consultants) & LFA
21	July 26	Global Fund PM and TB Program	General Coordinator of all National Programs; TB National Program Coordinator and TB technical team; Global Fund current PM; technical partners (PAHO) & LFA
22	July 26	Global Fund PM and HIV Program	General Coordinator of all National Programs; HIV National Program Coordinator and Grant Coordinator and TB technical team; Global Fund current PM; technical partners (PAHO) & LFA

	Date (2017)	Stakeholder group met	Membership/Composition
23	July 27	Global Fund PM and Malaria Program - progress and plans for upcoming Funding Request	General Coordinator of all National Programs; Malaria National Program Coordinator and malaria technical team; Global Fund current PM; technical partners (PAHO) & LFA
24	July 28	Global Fund's visit Close-Up Session	Global Fund PM and delegation; CCM Board and Assembly, International Technical Partners (UNAIDS, PAHO, USAID, PEPAR, PASCA, etc.); PR and LFA representatives
25	Aug 28	Overview of ARV logistics and Legal advocacy to improve access	Senior Advisor to Red Legal

4.3 Identification, prioritization, and contextualization of evaluation questions Completed/Ongoing Activities

Completed and ongoing activities related to identification, prioritization and contextualization of evaluation questions have so far mainly included individual stakeholder consultation. Feedback from stakeholders during individual consultations has been discussed and expanded upon during weekly phone calls between CIESAR, IHME and PATH. CIESAR's consultant for Qualitative Analysis has used a software specific to screen all observation notes, and assign codes to main thematic areas. The thematic areas identified are those that come up more frequently in the discussions between stakeholders. The next step is to relate the thematic areas and bottlenecks identified to Evaluation Questions.

A half-day long workshop took place in Guatemala City on August 9th. Stakeholders from all relevant constituencies convened for further description and introduction of the PCE, as well as to host a discussion session between stakeholders to gather input for evaluation questions, priorities and themes. A pre-workshop planning session took place during August 7th and 8th to discuss and expand upon lessons learned so far during stakeholder consultations and plan the final methodology and agenda for the workshop.

A two-day drafting session took place immediately after the Guatemala evaluation workshop. The primary objectives of the drafting session were to critically examine findings and priority proposals from the four groups, formulate a preliminary table of evaluation questions based on those findings; all of these tasks have been accomplished.

The method to process all the information from the working groups initiated with an in-depth analysis by the CIESAR group and consultations with IHME/PATH. Further, information was cleaned and grouped by Strategic Objective (SO1-SO4), to produce a list of provisional evaluation questions, for a total of 16. Prioritization using traffic light codes were assigned to each evaluation question in the list, using SMART-E criteria. In subsequent iterations of the evaluation question table, taking into account question framing across all three countries, the

questions we re-organized and three additional question was added. This resulted in 19 questions across the following groups: GA/GM:7; SO1:5; SO2:1; SO3:2; SO4:3; Enablers: 1. The provisional list in Table 12 includes 19 questions, 32% (6) were coded green (high priority), 63% (12) were coded yellow (intermediate priority), and only 5% (1) were coded red (low priority)

Seven evaluation questions will be investigated in the first six months, mainly those related to the grant application/making process – two of which are rated high priority. Our approach to investigating these questions will build upon work already underway, including non-participant observation at key meetings and document review, utilizing KIIs to explore issues in-depth (subthemes in Table 12) and to fill in any information gaps emerging from the observation and document review. Given the timing of grant application cycle in Guatemala, the CEP will prospectively track the full funding request cycle for both malaria and TB on into 2018 through the timing of grant awarded. As the HIV grant application is already underway, early findings from Guatemala will largely be based observation of the HIV funding request and data gathered to date through the inception phase, and continued observation and KIIs as the application progresses to full award. Given the timing of the malaria and TB funding requests in Guatemala in early 2018, the CEP will continue to evaluate the six grant application/making questions beyond the initial six months of the evaluation phase.

Table 12: Evaluation questions, sub-themes and prioritization for Guatemala~PCE

EVAI	LUATION QUESTIONS	SUB-THEMES	ToC Areas	Theme	Global	GTM
	1. What is the nature and role of partnerships between Global Fund and in-country stakeholders participating in the grant application and making processes?	Partnership structure and strength of ties	Strategic enabling environment	†∱ ∱†		X
Funding Requests, Grant Application & Making	2. What are the barriers and facilitators for a successful grant application / making process, including responsiveness to country priorities, perceived needs, and resource allocation decisions?	•Time gap: preparing funding requisition without knowing about new PR selection •Co-financing uncertainty •Role of partnerships & influence in application cycle •Programmatic gaps and information systems •Inclusive, transparent country dialogue, including funding request approach •Incorporate lessons from previous application cycles •Flexibility to decide resource allocation to key populations vs. other populations (prisoners, pregnant women) •Flexibility to define and decide interventions •Country ownership: Extent process steered toward GF priorities, rather than country priorities •Linking NSPs to GF activities •Challenges related to change in PR •MOH leadership transition during FG/GM phase; ongoing challenges with government engagement	Grant application & making; Strategic enabling environment; Inputs (Resources); Inputs (Institutions & Relationships)			X
	3. What barriers and facilitators have been experienced in negotiating co-financing commitments, as compared to previously?	 How effective is the STC policy in stimulating co-financing? Use and application of STC policy for co-financing Level of co-financing commitments versus actuals 	Inputs (Policies, (Resources, Institutions & Relationships); Grant application & making	•		X

	4. To what extent are expected implementation bottlenecks anticipated and planned for in the grant application and making phase?	Procurement challenges Contractual delays	Grant application & making		X
	5. How effectively does the CCM coordinate stakeholders and partners for grant application/making and program implementation (across program areas)?	•Influence of CCM on MOH/Government priorities	Grant application & making; Strategic enabling environment	††† †	X
	6. How has the CCM ensured program continuation during the transition from the current to new principal recipient?	PR selection processWhy MOH passed off PR role for HIVProgram continuation during PR transition	Strategic enabling environment	†††	X
	7. How effectively are key and vulnerable populations considered, defined, and addressed in the grant application and making process?	 Definition of key and vulnerable populations and strategies for reaching How much money is devoted to key and vulnerable populations Level of involvement of key and vulnerable constituencies in application 	Grant application & making; Inputs (Policies)		X
Transition, Challenging ing Environment	8. What are the trends and distribution (geographic, demographic and socioeconomic) of HIV, TB and malaria-related health outputs and outcomes?	•Geographic distribution of key health outputs & health outcomes	Outputs; Outcomes		X
SO1 Impact, Transition, Chall Operating Environment	9. To what extent do Global Fund resources contribute to improvement in health outputs and outcomes for HIV, TB and malaria? How does that contribution vary geographically and demographically, and what are the barriers and facilitators to achieving outputs and outcomes?	 Intensity of GF resources coincide with changes in key health outputs Geographic distribution of key health outputs coincide with geographic distribution of health outcomes Intensity of GF resources coincide with changes in health outcomes 	Outputs; Population Health Outcomes; National program implementation	\$	X

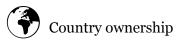
л, сое	10. To what extent is the Global Fund STC policy applied and contributing to preparing for sustainability and transition?	•Country initiatives planned or in place for STC •Domestic resource mobilization for ATM	Inputs (policies); Implementation outputs; Health systems outcomes	3	X
SO1 Impact, Transition,	11. How effective and efficient are Global Fund risk management and oversight mechanisms at enabling program results?	•Indifference to monitoring •No consequences or actions tied to results of strategic monitoring (by LFA)	Not explicit – consider adding to ToC		X
	12. How do the current strategies of the MOH (e.g. new model for healthcare, "MIS") affect implementation of national disease programs and Global Fund grants?	 Role of GF in influencing government priorities and investments Extent of power/influence of GF over country priority setting MOH leadership transition during FG/GM phase; ongoing challenges with government engagement 	Inputs (Policies); Implementation outputs; Health systems outcomes		X
SO2 Build RSSH	13. How do Global Fund investments improve the efficiency and effectiveness of health information systems (HIS) in the country?	 Info system as barrier to grant application and implementation Connections to RSSH Quality of the information systems Age/sex disaggregation 	Inputs (Resources); Implementation outputs		X
ts & Gender	14. Are Global Fund investments in programs to reduce human rights and gender-related barriers to HIV, TB and malaria services of sufficient amount, quality, and effectiveness?	 How are Global Fund supported programs addressing barriers to services for the most vulnerable, including key populations? What have been the challenges and successes of implementing gender responsive programs? 	Inputs (Resources); Implementation outputs	3	X
SO3 Human Rights &	15. To what extent have plans, policies and programs (related to three diseases in 2017-2019 allocation period) been designed and implemented in accordance with gender responsive programming, within country contexts receiving GF support?	To what extent has gender been addressed in the design of the grant application?	Grant application & making; Inputs (Policies)	169	X

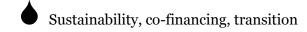
Ş.	16. What are the trends and distribution of Global Fund resources (inputs), and how do they compare with need?	•Distribution of GF and non-GF resources by health function, geographic area, & financing agent	Inputs (Resources); Population Health Outcomes		X
SO4 Mobilize Resources	17. What are the drivers of consistently low rates of absorption (financial execution) of Global Fund investments?	 Drivers of variation in absorption by PRs, SRs, disease (lower for TB & malaria) Financial paralysis Legal issues, procurement law GF rules and regulations Aspects of Guatemala's regulatory framework that facilitate or hinder absorption Response times of MOH/management relative to the speed of GF requests 	Not explicit – Consider adding to ToC	•	X
Š	18. What factors influence sustainability considerations (or lack thereof) related to Global Fund investments?	Links to prioritization and agenda setting within country Ongoing challenges with government engagement	Inputs (Institutions & Relationships); Strategic enabling environment	•	X
Strategic Enablers	19. What are the facilitators and barriers to the CCM functioning effectively within the standards/scope as defined by the Global Fund business model?	 Leadership issues Partnerships (strength, functionality) CCM composition Conflict of interests Communication channels Strained relationships 	Strategic enabling environment	††† †	X

Questions considered across countries to address a strategic objective – proposed by IHME/PATH or drawn from the Global Fund Request for Proposal

Prioritization of Evaluation Questions: **High Med Low** Thematic Area Symbols Key:









Planned Activities

In moving forward with preparation for the evaluation phase, the CEP will begin organizing evidence gathered to date from observation, consultation and document review. Through this process, CEPs will identify gaps in our understanding that need further exploration through KIIs. The CEP/GEP are in the process of developing KII topic guides for the grant application / phase. In addition, the CEP will use their stakeholder mapping tools to identify key informants with knowledge and understanding of the issues we seek to further explore in the KIIs.

4.4 Data Mapping and Assessment

Completed/Ongoing Activities

Completed and ongoing activities for data mapping include completion of a data inventory and progress toward documenting data availability and gaps. Through individual stakeholder consultations and web searches, a complete list of data sources (to the extent of our knowledge) has been gathered. This list is detailed in Table 13. At this point ongoing activities primarily entail content mapping, i.e. systematic screening of the documentation and codebook for each data source in an effort to identify all variables that pertain to the three diseases. These may include indicators of incidence/prevalence, treatment coverage, preventive interventions, risk factors or others. Indicators represented by each data source are being documented and itemized to facilitate a complete understanding of the data landscape.

Table 13. Data inventory for Guatemala

Data Title	Institution	Data	Data Type	Availabilit
		Collection		y of
				OI Database
Reproductive Health Survey (RHS)	Ministry of Public Health and Social Assistance, Universidad del Valle/CDC	2008-2009	Survey	Microdata access
Demographic and Health Survey (DHS)	Ministry of Public Health and Social Assistance, National Statistics Institute (INE), SEGEPLAN, INCAP	2014-2015	Survey	Microdata access: by Request
Guatemala Vital Statistics	National Statistics Institute (INE)	01/2006- 12/2014	Deaths and live births registries	Tabulations only
General Health Information System (SIGSA)	Ministry of Public Health and Social Assistance	2012-2016	Administrati ve	Tabulations only
HIV morbidity	Ministry of Public Health and Social Assistance	2012-2016	Surveillance	Tabulations only

Data Title	Institution	Data	Data Type	Availabilit
		Collection		y of Database
Sustainability Index and Dashboard Summary (SID): Central America	PEPFAR	2016	Other	Unknown
Scale-Up, retention and HIV/STI prevalence trends among female sex workers attending VICITS clinics in Guatemala	PEPFAR	2007-2015	Other	Unknown
Reproductive Health and Healthcare among Sex Workers in Escuintla, Guatemala	Fundación SIDA i Societat, Barcelona, Spain	2008	Other	Unknown
Guatemala National Report on the Progress in the Fight Against HIV and AIDS 2015 (GHDx)	Joint United Nations Program on HIV/AIDS (UNAIDS) & Ministry of Public Health and Social Assistance	2012-2013 2014 publication	Report	Tabulations only
Evaluation of the implementation of HIV and other STI prevention program in key populations in Guatemala	HIVOS (HIV Principal Recipient)	2015-2016	Other	Tabulations only
Intensification of prevention actions and comprehensive HIV / AIDS care in vulnerable groups and priority areas of Guatemala	HIVOS (HIV Principal Recipient)	2010-2017	Other	Tabulations only
Characterization of risk for populations in conditions of vulnerability to HIV. Men who have sex with men (11 sites in Guatemala).	HIVOS (HIV Principal Recipient)	2015-2016	Other	Tabulations only
Operating Manual for Mobile Units	HIVOS (HIV Principal Recipient)	2015	Other	Unknown
Characterization and estimation of population size in Trans women in Guatemala	HIVOS (HIV Principal Recipient)	2015	Survey	Tabulations only
Manuals for Combined Prevention for MSM	HIVOS (HIV Principal Recipient)	2015	3 modules	Unknown

Data Title	Institution	Data	Data Type	Availabilit
		Collection		of
				Database
Impact Assessment and Measurement Study: Campaign to reduce stigma and discrimination towards gay, transgender, sexually active women and people living with HIV	HIVOS (HIV Principal Recipient)	2013	Other	Unknown
Central American Survey of sexual behavior and prevalence of HIV and STIs in vulnerable and key populations (ECVC)	HIVOS (HIV Principal Recipient)	2012-2013	Surveillance	Microdata access: by Request
Stigma and discrimination towards people with HIV, men who have sex (MSM) and sex workers (CSW)	HIVOS (HIV Principal Recipient)	2012-2013	Other	Tabulations only
Ethnographic study of risk characterization for vulnerable populations: CSW	HIVOS (HIV Principal Recipient)	2012	Other	Unknown
Evaluation of HIV prevention actions in populations at higher risk	ONUSIDA	2012	Other	Tabulations only
Discrimination based on sexual orientation and gender identity. An approach to intersectionality with other forms of discrimination in Guatemala.	HIVOS (HIV Principal Recipient)	2012	Other	Unknown
Regulation of Prevention, diagnosis, treatment and control of sexually transmitted infections (STIs).	HIVOS	2012	Other	Unknown
Manual High Heels Movement, sex workers and activists.	HIVOS	2006	Other	Unknown
Regional Operational Plan for Fiscal Year 2016. Central American Region	PEPFAR	2016	Other	Unknown

Data Title	Institution	Data	Data Type	Availabilit
		Collection		y of
National Strategic Plan (PEN) for STIs, HIV / AIDS	PEPFAR	2011-2015	Admin.	Database Unknown
HIV Conceptual Note	MCP-G	2016	Admin.	Unknown
Intensification of prevention and comprehensive HIV / AIDS care and vulnerable groups and priority areas of Guatemala, baseline	MCP-G	2010	Other	Unknown
Intensification of prevention and comprehensive HIV / AIDS care and vulnerable groups and priority areas of Guatemala, final line	MCP-G	2010	Other	Unknown
Strategic monitoring for Hospital San Vicente (TB)	MCP-G	2015	Admin.	Unknown
Strategic monitoring of the MCP-GT to know, understand, identify risks and propose possible solutions in the execution of the three grants.	MCP-G	2015	Admin.	Unknown
Consolidation of strategies against malaria in Guatemala and its challenges to elimination	MCP-G	2011	Admin.	Unknown
Strategic monitoring operational manual HIV / TB / MALARIA	MCP-G	2011	Admin.	Unknown
Epidemiological Surveillance of HIV	Ministry of Public Health and Social Assistance	2016	Surveillance	Tabulations only
Guatemala National TB Program Surveys	National Center of Epidemiology (CNE)/Ministry of Public Health and Social Assistance	2010 to date	Periodic publications	Yes, National Surveillance Database CNE

Planned Activities

Planned activities for data mapping include continuous content mapping, analysis of data gaps and requests for data access. Content mapping will be summarized for the three diseases to describe the proportion of known data sources that contain information about burden of disease, the proportion that contain information about treatment coverage, and the proportion that contain information about prevention coverage. Data gaps will continue to be explored by indicator and geography and over time. Data gaps will be summarized according to specific indicators that have little data as well as levels of detail (geographic and other strata) that are rarely represented in the data. A data mapping synthesis, in the form of a short report, set of visualizations or both will be produced to summarize the data landscape. Data access requests will be sent to all relevant parties by the CEP, with support from the GEP.

4.5 Formation of Advisory Panel

CIESAR has considered two main options for the formation of the Advisory Panel: 1) to put together a multi-institutional group, by selection of individuals based on their expertise and profile, as well as recognition in the field; or, 2) as in the case of Uganda, select an existing institution, "which is chosen based on its independent nature and vast knowledge and expertise in the field of HIV, TB, malaria and HSS issues, as well as monitoring and evaluation⁴"

CIESAR drafted a list of possible experts for the three diseases, but has been inclined to select an existing institution, rather than put together a diverse group. The pros and cons for this decision were weighed, finding the following advantages in the latter option:

- The technical and directive teams are used to working together and respond to a superior level, all of which facilitates coordination.
- The professionals in the institution will likely be in the institution's payroll so there is no need to cover fees or other expenses since there is no monetary compensation contemplated for those undertaking additional responsibilities as Advisors.
- Convenience of counting with in-house office space to meet and work, versus having to meet
 in external venues, in after work schedules, which could be the case if the AP is made up of
 individuals.

CIESAR is presently negotiating with two institutions: 1) the local branch of CDC for the Central American Region (Centers for Disease Control - CAR), and 2) the national association, ASI (Asociación de Salud Integral).

CDC-CAR has been present in Central America since 2003; it grew out of a field station created in El Salvador in the 1960s. This evolution required a shift from functioning in a single country with a focus on entomology and parasitology to a regional office that works in eight countries and aims to scale up the capacity to detect, prevent, and control diseases and respond to public health threats. It has worked to help strengthen surveillance and prevention strategies to respond to the HIV/AIDS epidemic in Central America as part of the President's Emergency Plan for AIDS Relief (PEPFAR). CDC CAR works with the region's Commission of Ministries of Health (COMISCA) to build in-country capacity for surveillance systems and broader national health information systems essential to for an effective HIV prevention, care, and treatment programs. One model program, VICITS (the name comes from a Spanish-derived acronym), is a

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⁴ Excerpt from TdR for Gavi Evaluation in Uganda

comprehensive HIV and sexually transmitted infections (STI) prevention program linked to the analysis of surveillance data.

CDC CAR has a highly expert team in HIV, TB-HIV co-infection, laboratory, medications (ARV and others), and a state-of-the-art M&E/Information system. CDC CAR's current framework is designed to achieve the 90-90-90 goals in the region. CDC-CAR is based in Guatemala, housed in the prestigious private Universidad del Valle and operates under a cooperation agreement with the university's Center for Health Studies (CES for its Spanish acronym). CES focuses in several health areas such as HIV, TB-HIV co-infection, vector transmitted and parasitic diseases, and emergent diseases, among others.

ASI is a non-profit organization who has worked in HIV and infectious diseases in Guatemala since 1989. Currently, the NGO works in HIV prevention, diagnosis & care; capacity building/health education, and research in various health topics, in addition to HIV.

The Center for Diagnosis in ASI counts with a professional team of lab specialists and technicians and state-of-the-art facilities to assure quality standards for diagnosis and surveillance of HIV, STI, TB and other mycobacteria, and specific respiratory and central nervous system infections.

Additionally, ASI sponsors the HIV and STI family clinic, Luis Angel García (CFLAG for its Spanish acronym), which operates inside one of the two national reference hospitals in Guatemala, the General Hospital San Juan de Dios. The clinic has been open for 29 years, being the first clinic and model for comprehensive HIV care in the country. CFLAG currently provides care to more than 3,000 adult persons and 180 children, in two central clinics and 14 HIV diagnosis and treatment units throughout the country.

ASI also conducts research in collaborative work with many prestigious institutions such as the Albert Einstein College of Medicine, the Centers for Disease Control and Prevention, the Spanish Health Institute Carlos III, and Duke University.

At present, CDC CAR has expressed interest to CIESAR to participate as Advisory Group for the PCE. CIESAR is analyzing the benefit of including another existing institution in the Advisory Panel, for example, an academic institution, which could be the UVG since there is already a relationship with the CDC. Additionally, ASI has been contacted and preliminary talks are underway, in initial stage. CIESAR wants to consider these three institutions, but not necessarily select the three of them in case UVG and ASI would express interest, but rather work with one group or a "consortium" which could be CDC CAR/UVG.

The Advisory Panel will meet between 3 to 4 times in one year, and extraordinarily in case of need. The meetings must likely will take place in Guatemala City, but not exclusively. In occasions, it might be convenient to meet in departmental facilities.

4.6 Plan for in-country dissemination

At present, we are planning two complementary strategies for in-country dissemination. The first will focus on disseminated results of the PCE stakeholder workshop. The second is a long-term strategy to keep stakeholders involved and informed throughout the PCE.

An Executive Summary will be prepared by CIESAR and the Consortium partners, and circulated to all participants, in the form of a brochure (delivered in person or to offices or via the CCM Technical Secretary), and/or a brief sent by e-mail. We anticipate that this will help

create increased buy-in, as it will allow participants the opportunity to see how we have incorporated their feedback and interpretation of pressing challenges and key priorities. If necessary, and if schedules allow, we will also present the workshop findings to the CCM in person.

Moving forward into the evaluation phase, we envision a menu of potential mechanisms for both (re)engaging stakeholders and disseminating findings in real time. The following is a list of possibilities we are currently exploring:

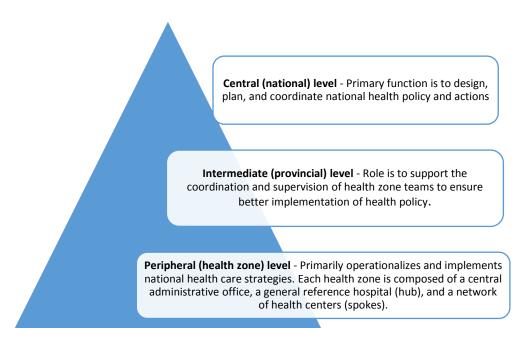
- Periodic e-mails to Stakeholders, forming a "PCE group" to facilitate delivery of key messages and information on advances, outcomes, methods, schedules, etc.
- Targeted e-mails concerning specific issues and programming of activities, which involve only certain stakeholders.
- Targeted briefing meetings with PR, LFA, CCM Secretary and Board, National Programs, particularly when PCE is addressing specific issues
- Periodic updates during CCM routine meetings with Board and Assembly representatives
- KII which can serve as part of the PCE as to keep briefing Stakeholders on advances and outcomes
- Online posting of Advance Reports and Final Report
- Social Networking in Facebook and other online nets
- Midterm and Final Workshop to socialize major results
- Other mechanisms to be designed along the way, according to circumstances, for example, briefings with groups of stakeholders when they have their own meetings.

Chapter 5 Democratic Republic of the Congo (DRC) PCE

5.1 Country information landscape

Health System in the DRC

With an area of 2.3 million square kilometers, the Democratic Republic of Congo (DRC) is the largest country in sub-Saharan Africa. Of the estimated 75 million inhabitants, about 40% reside in urban areas and two-thirds live below the national poverty level. The health system is composed of three levels: central or national, intermediate or provincial, and peripheral or operational.



The Central (National) Level

The central level consists of the Cabinet of the Minister, the General Secretariat with the Central Directorates (13), Specialized Programs (52), General Inspectorate of Health, hospitals and other national structures. Its responsibilities include regulation and provision of tertiary care, and definition of policies, strategies, standards, and guidelines. The central level also provides advisory support, compliance monitoring, monitoring of provincial implementation, as well as mobilization and redistribution of resources. In 2009, the Ministry of Health created the Support and Management Unit (Cellule d'Appui et de Gestion, CAG) within the General Secretariat, responsible for coordinating and managing public and donor financing for the health sector.

The central level is undergoing administrative reform with plans to decrease the number of Directorates from thirteen to seven. In addition to these reforms, the Government created transversal Directorates with standard competences in all administrations. Under this new arrangement, the Ministry of Public Health will have two new Directorates, the Directorate of Financial Affairs (DAF) and the Directorate of Archives and New Technologies of Information and Communication (DANTIC).

A political decentralization agenda was approved in 2006 but did not start to take shape until a law on the new administrative divisions was approved in 2015. The process includes the redesign of administrative boundaries, enlarging the number of provinces from 11 to 26 so they would be more manageable in size. The transfer of health authority from the central government to provincial health ministries, directorates, and inspectorates started in 2008 with pilot provinces, but was not complete until 2016. Additional decentralization processes have been stalled by lack of resources in combination with the current political impasse linked to the delayed 2016 elections.

The Intermediate (Provincial) Level

The decentralization process has given provincial governing structures exclusive responsibility for the organization and management of primary health care. Among the activities included at this level are management and administration of provincial health services; inspection and control of health care and pharmaceutical institutions; and technical supervision and monitoring of guidelines, strategies, and policies in the form of instruction and technical guidance to facilitate the implementation of activities at the health zone level. Of note, in expanding from 11 to 26 provinces, some provinces are better positioned because they retained their original administrative bureaucracy while the new provinces face challenges such as installing a new provincial health administration with new leaders who are not as familiar with key health policies and planning.

The Operational (Peripheral) Level: the Health Zone

Provinces are divided into health zones, which are primarily responsible for implementing the primary health care strategy. There are 516 health zones, each covering a population of 100,000 to 150,000 inhabitants and served by a General Reference Hospital offering a minimum package of health activities. The health zone is managed by a health zone management team, which is led by a Zone Chief Medical Officer. Health zones are subdivided into health areas, which through a health center cover about 5,000 to 10,000 inhabitants, for the supply of the minimum activity package of services. In health areas, where geographical accessibility to the health center is a major obstacle, pilot experiments are underway on the development of community care sites.

Overview of the Epidemics in DRC

HIV

DRC accounts for 1.5% of the global burden of HIV, ranking it 16th in the world. Although the overall prevalence of HIV in the DRC is lower than in many sub-Saharan African countries, the estimated prevalence in some urban areas is considerably higher. Women and key populations (sex workers, men who have sex with men, and injection drug users) are most affected by HIV.(25) As of 2016, there were an estimated 370, 000 (210,000-450,000) people living with HIV in DRC. Among those, around 160,000 were on treatment. (26).(The Global Fund began scaling up coverage for HIV in 2015, with a plan of expanding from 239 (46%) health zones to 354 (69%) of the 516 health zones by 2017.(25)

Malaria

Malaria is endemic in DRC and up to 97% of the population live in areas where transmission is stable (equatorial and tropical variants).(25) Accounting for 10% of the global burden of estimated malaria deaths, the DRC ranks second in the world behind Nigeria (26%).(27) Malaria accounts for nearly one out of five deaths of children under age 5 in DRC, and for an estimated 40% of outpatient visits by that age group. With the adoption of a new financing model in 2014,

the Global Fund is increasing its activities in the DRC and has extended coverage from 219 (42%) to 313 (61%) of the 516 health zones. ITN coverage in DRC was an estimated 60%, while ACT coverage was an estimated 16% in 2015.

Tuberculosis

Accounting for 2.2% of the global burden of TB, the DRC ranks 11th in the world. The burden of TB infection and HIV/TB co-infection is unevenly distributed across the country. The Global Fund supports the National Tuberculosis Control Program, which covers all health zones in the country and aims to reduce HIV/TB co-infections. From 2000 to 2014, the mortality rate due to TB was reduced by 14% and HIV/TB co-infections steadily declined from 60 to 45 cases per 100,000 inhabitants. However, the HIV prevalence rate for TB patients is estimated at 16%, with an incidence of 25 per 100,000 population, placing the DRC among the countries with the highest co-infection rates in the world. More generally, the prevalence of TB has remained high since 1990, fluctuating between 500 and 600 cases per 100,000 inhabitants. Similarly, the incidence remained stable over the same period, with approximately 325 cases per 100,000 inhabitants. There are an estimated 2,800 cases of multidrug-resistant TB.

Global Fund History in DRC

Since 2003, the Global Fund has signed 22 grants worth US\$1.5 billion, with US\$1 billion disbursed by the time of the most recent 2016 audit. Global Fund classifies DRC as a "Challenging Operating Environment" largely due to a long history of conflict and a political context that creates challenges for implementation.(25) The Global Fund has active grants with the MOPH funding the national malaria, HIV, and TB programs as well as grants with four civil society recipients (two local non-governmental organizations (NGOs) and two international NGOs (INGOS)). Together, the government along with civil society organizations are implementing a grant portfolio of US\$846.3 million, as summarized in Table 14, below.

Table 14. Summary of Current Global Fund Grants to DRC

Component	Title	Recipient (PR)	Signed (\$US)	Grant start	_	Last performance rating
HIV/AIDS	Integration of the HIV- AIDS prevention, care and treatment services packet in 239 priority health zones in the Democratic Republic of Congo	Cordaid (INGO)	145,027,244	2012	2017	B2 - Inadequate but potential demonstrated
HIV/AIDS	Integration of the HIV- AIDS prevention, care and treatment services packet in 239 priority health zones in the Democratic Republic of Congo	Sanru	145,339,651	2012	2017	B1- Adequate
Malaria	Contribution to universal access of DR Congo populations to effective	МОРН	40,195,669	2015	2017	B1 - Adequate

	interventions to fight malaria					
Malaria	Contribution to universal access of DR Congo populations to effective interventions to fight malaria	PSI (INGO)	150,167,535	2015	2016	A2 – Meets expectations
Malaria		Sanru (Local NGO)	312,818,371	2012	2017	A2 – Meets expectations
тв	Tuberculosis and HIV in	Caritas Congo (Local NGO)	38,964,682	2015	2017	N/A
ТВ	Speeding up of Universal Access to Prevention, Treatment and Support Services	МОРН	13,831,917	2015	2017	N/A

The Catholic Organization for Relief and Development Aid, Congo (Cordaid), an INGO based in Holland, has been present in the DRC since the 1970s. They purchase antiretroviral drugs through the Global Fund's distribution system.

The Church of Christ in the Congo/Rural Health (SANRU) is a local NGO formed in Kinshasa in 1981. SANRU is involved in malaria and HIV activities, including the purchase of local antimalarial drugs through international suppliers and the purchase of antiretroviral drugs through the Global Fund bundling mechanism.

Caritas Congo is a local NGO based in Kinshasa since 1960. Caritas Congo undertakes activities at the community level to support the national program against TB and purchases medicines through a mechanism of the World Pharmaceutical Service.

Population Services International (PSI) is an INGO based in Washington, DC, that has been present in the DRC since 1987. PSI is involved in the purchase and distribution of insecticide-treated nets to protect populations from malaria.

For budgeted activities, about half (53%) of Global Fund funding is used to purchase health products. At the central level, the Global Fund relies on its four non-governmental partners (principal recipients) to purchase, store, and transport drugs to the regional level. From the central level to health zones, these PRs use a group of 19 local NGOs structured into a Federation of Regional Warehouses. Some of these regional warehouses, including the largest in Kinshasa and Goma, have contractual arrangements with the Global Fund's principal recipients. Medical personnel from health facilities also collect medicines from the offices of the health zones.

DRC's total funding allocation for 2017-2020 is over US\$526 million, making it the Global Fund's third largest portfolio. During this funding cycle, the Global Fund will be piloting a "provincial approach" as part of its strategy for differentiated engagement at the country-level to increase impact against the three diseases. As part of this strategy, the Secretariat identified five provinces (Kinshasa, Kongo Central, Kwilu, Ituri, and Maniema) that are candidates for implementing the provincial approach. The Ministry of Public Health recently approved the final list of provinces and the terms of reference for the engagement with provincial health authorities. While provincial-level engagement has already begun with Kinshasa, the other four provinces included in the approach are in the process of being notified. Provinces were identified based on criteria including disease burden, population size, and indicators of care and treatment coverage. By engaging directly with provincial authorities, the Secretariat aims to define goals and objectives for Global Fund support that are tailored to each province based on the specific needs and priorities of provincial stakeholders. Enhanced engagement in provincial level planning, implementation and monitoring aims to support capacity building of the DPS and improve results.

Table 15. Summary of Application for Funding Request 2017-2018

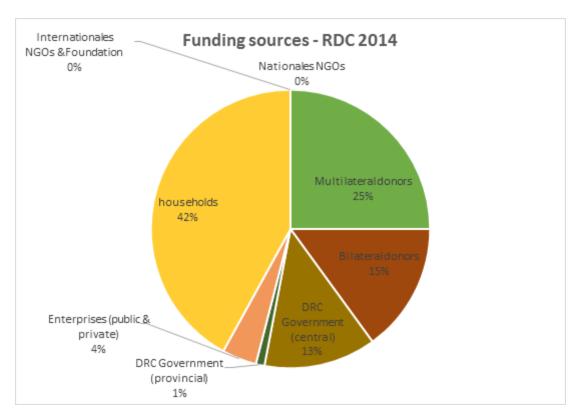
Funding	Funding Request submission details				2017-2019 Eligibility factors & allocation				
Component	Application Approach	Review Window	Submission deadline	Country income category	Disease Burden	Eligibility	2017-2019 Allocation (\$US)		
HIV/AIDS	Tailored – Material change	1	20-March-17	LI	High	Yes	122,678,456		
ТВ	Tailored – Material change	1	20-March-17	LI	Severe	Yes	56,656,946		
Malaria	Program continuation	1	20-March-17	LI	Extreme	Yes	347,651,023		

Overview of Funding Sources

In the past three decades, the political and economic collapse of the country has resulted in public financial crisis. Despite the government of DRC increasing the national health budget from 3.4% in 2011 to 8.6% in 2015, low rates of disbursement of appropriated funds remains a challenge.(28) At 42%, households are the largest contributors to total health expenditure, followed by multilateral (25%) and bilateral (15%) donor support (Figure 2). Since implementation of the Bamako initiative, Congolese have become accustomed to paying user fees for public health services. Although financially burdensome for poor households, the user fees collected help to finance health provider salaries and other related health expenditures.

External donor funding is channeled through NGOs providing a global package of direct support to health zones. At central and intermediate levels, donor support also supports vertical health programs.

Figure 2 Health expenditure by financing source, 2014



Source: (29)

5.2 Global and country-level stakeholder mapping and engagement

Stakeholder engagement during the Inception Phase targeted both the Global Fund Secretariat, including members of the DRC Country Team, as well as Global Fund stakeholders in Kinshasa, Tshopo and Kwilu. The PCE was formally introduced on June 1st during a workshop with key government stakeholders, including directors of the national TB, HIV, and malaria programs. Since then, the team has communicated with the Global Fund Country Team (CT) regarding Secretariat evaluation priorities and has been conducting one-on-one consultations with key stakeholders to map the stakeholder landscape at the national and provincial levels, and to gather input on evaluation priorities and country-specific evaluation questions. Through the stakeholder mapping process, the team held numerous exchanges and discussions with the CCM, key GF recipients, officials from the Ministry of Public Health and other ministries, donors, and technical partners and private sector actors as well as civil society. Details on the stakeholder meetings conducted to-date and the stakeholder mapping data are summarized in Tables 16 and 17 below.

During consultations, the Global Fund Country Team expressed three key evaluation priorities including (1) the community-based SASA! pilot program and other related interventions aimed at reducing the vulnerability of adolescents and young women to HIV and gender-based violence (GBV); (2) the new provincial approach aimed at focusing greater resources and enhanced Global Fund engagement at the provincial level for greater disease impact; and (3) the performance-based funding (PBF) approach. Although these particular CT evaluation priorities did not feature strongly in country-level stakeholder consultations and in the stakeholder

workshop, the PCE team in Kinshasa and Seattle acknowledge the value in examining each topic area and the DRC country team's concern that no broad studies/reviews in DRC are needed. We also note the inherent tension in evaluating specific programs while carrying out the PCE, intended to more broadly assess the impact of the Global Fund's business model.

Table 16. DRC PCE Stakeholder Engagement Meetings Held to Date

Date (2017)	Stakeholder group met	Membership/Composition
March 24	GF Country Team	Fund Portfolio Manager (FPM), Nicolas Farcy, and Public Health M&E (PHME), Joanna Barcyk.
June 24	CCM Secretariat	CCM chairperson, CCM Permanent Secretary, CCM 3rd Vice president.
July 11	CORDAID: HIV Project manager	INGO based in Holland, has been present in the DRC since the 1970s and recipient of Global Fund HIV grants.
July 3, 6, 12 & 13	CCM Secretariat	CCM Permanent Secretary; CCM monitoring & evaluation.
July 12	PNLT Director National TB Program	Responsible for defining and leading national TB strategy and recipient of Global Fund TB grant.
July 13	Director, Primary Health Care Direction	Provides support to provincial offices in the coordination and delivery of services, while ensuring coordination with Global Fund supported activities. Ensures quality service provision through direct supervision and program support.
July 13	SANRU: HIV Program Manager, Chief M&E, Technical Specialist Lead (Facilities) Paludisme Global Fund	NGO that is a partnership program of the Interchurch Medical Assistance (IMA) and the Protestant Church of Congo (ECC) and recipient of Global Fund HIV and malaria grants.
July 25	SANRU: Technical Director & Principal Coordinator of GF projects	NGO that is a partnership program of the Interchurch Medical Assistance (IMA) and the Protestant Church of Congo (ECC) and recipient of Global Fund HIV and malaria grants.
July 26	CAG: Coordinator	A service of the General Secretariat of Public Health and its mission is to ensure the

		coordination and management of public and donors funding in support to the health sector.
July 26	PNLP Director National Malaria Program	Responsible for defining and leading national malaria strategy and recipient of Global Fund malaria grant.
July 30	SANRU : Malaria Deputy Program Manager	NGO that is a partnership program of the Interchurch Medical Assistance (IMA) and the Protestant Church of Congo (ECC) and recipient of Global Fund HIV and malaria grants.
July 30	DPS/Kinshasa : Chef de Division	Provides technical support to HZs with functions of coordination, training, supervision, monitoring, evaluation, inspection and control. Translates the standards laid down by the central level into operational directives and ensures their application.
August 7	DPS/Tshopo : Chef de Division	Provides technical support to HZs with functions of coordination, training, supervision, monitoring, evaluation, inspection and control. Translates the standards laid down by the central level into operational directives and ensures their application.
August 8	PNLS/Tshopo Médecin Coordonnateur Provincial	Provides technical support to HZs with function of Coordination, training, supervision, monitoring and evaluation of HIV activities at all HZ covered (13/23 HZ)
August 8	PNLP/Tshopo Médecin Chef de Service Malaria	Coordinates managerial aspects and coordination of malaria control interventions. Ensures implementation of the most effective interventions to reduce the burden of disease. Monitoring and evaluation of malaria control interventions.
August 8	SANRU/Tshopo Coordonnateur Intérimaire	Support to HZs for operations, supply and deployment of inputs. BCZS (Health Zone Office) which supplies Health Areas (AS) included health facilities. Coordinating office in Tshopo ensures implementation of malaria activities in 17 HZ with 2 antennas: - Sanru Isangi antenna (7 ZS where Sanru is SR) - Sanru Tshopo antenna (10 ZS where Sanru and APEC are SRs) In the 10 HZ, Sanru monitors malaria activities and routine activities. APEC ensures the distribution of inputs.

August 8	CORDAID/Tshopo Program Manager & M&E	CORDAID is the GF's PR with a branch office in the Tshopo province, which coordinates GF support at the provincial level with SR Caritas (Targeting the general population and key populations)
August 9	PNLT/Tshopo Médecin Coordonnateur Intérimaine	PNLT/Tshopo coordinating office ensures the implementation of TB activities in the 23 HZ including, prevention, screening, management, multidrug-resistant TB surveillance.
August 9	HIS/ Tshopo Provincial HMIS & DHIS2 Analyst and Acting as Provincial HMIS, Research, Disease Surveillance and Communication Chief	Coordination of production and analysis of health information at the level of all 23 Tshopo Health Zones.
August 9	CARITAS/ Tshopo M&E Focal Point Data Manager Financial	Caritas/Tshopo is SR of Cordaid and has responsibility for: - Monitoring all HIV activities in the province of Tshopo (13/23 HZ) - Monitoring programmatic data - Drug supply at the site level - Community activities via OAC (advocacy) - Coordination of activities at the HZ level (data validation, ECZS (HZ Management Team) supervision
August 10	APEC/ Tshopo M&E Manager	An SR of SANRU with the roles of - financial support to HZ and health facilities - monitoring meetings - transport of inputs from HZ to health facilities - data pre-analysis meetings between the health facilities and the community - storage of inputs at HZ and health facility level
August 22	DPS/ Kwilu Doctor Head of Technical Support Office, Acting as Head of Division of DPS	Provides technical support to HZs with functions of coordination, training, supervision, monitoring, evaluation, inspection and control. Translates the standards laid down by the central level into operational directives and ensures their application.
August 22	PNLP/ Kwilu	Coordinates managerial aspects and coordination of malaria control interventions in Kwilu Province. Ensures implementation of the

	Provincial supervisor (Acting as Provincial PNLP Coordinator)	most effective interventions to reduce the burden of disease in Kwilu Province. Monitoring and evaluation of malaria control interventions.
August 23	HIS/ Kwilu Head of Health Information office, epidemiological surveillance, communication and research	Coordination of production and analysis of health information at all provincial level
August 24	PNLS/ Kwilu Médecin Coordonnateur Provincial	Provides technical support to HZs with function of coordination, training, supervision, monitoring and evaluation HIV activities at all HZ covered (20/24 HZ)
August 24	FDSS/ Kwilu Focal Point	An SR of SANRU in charge of HIV and malaria, with specific responsibilities: - Supply chain (medicines, tests, mosquito nets and other inputs) in HZ and health facilities Accompanying HZ in the implementation of activities (monitoring and analysis of data)

Table 17. DRC PCE Stakeholder Mapping Structure

CCM: Board & Staff: Constituted by one President and two Vice Presidents, and representatives of the different sectors and Staff (Permanent Secretary, monitoring and evaluation expert, administrative assistant).

A Technical Committee subdivided into: The Proposal Development Committee (POC)					
and The Strategic Monitoring Committee (SC)					
Gene	ral Assembly				
Public sector	Non-governmental sector				
President, Prime Minister, National	local NGOs and INGOs working in the field of				
Assembly, Ministry of Public Health,	health, women's organizations, HIV target				
Ministry of Economy, Ministry of Budget,	populations, TB target populations, malaria				
Foreign Affairs and International	target populations, key populations, youth				
Cooperation, Social Affairs, Gender,	organizations, media, confessional medical work				
Women and Family and Defense and	and AIDS-related businesses				
Homeland Security					
The main civil soc	iety recipients by disease:				
HIV/AIDS	HIV/AIDS: Cordaid & SANRU				
Tuberculo	osis: Caritas Congo				
Malaria	a: SANRU & PSI				

The primary public recipients:

The Ministry of Public Health, the lead recipient, has deferred activities of training, M&E, and strengthening of the management and health system to the health funding Support and Management Unit (*Cellule d'Appui et de Gestion*, CAG). The CAG consists of a coordinator, supported by three disease-specific project managers.

	Directions and Specialized Programs of the Ministry of Public Health							
Office	General	Directora	Primary	Directora	Directorat	FEDECA	HIV, TB	UNF
of the	Secretari	te of	Health	te via the	e of	Μ,	and	PA
Ministe	at of the	Disease	Care	SNIS	Pharmacy	PNAM,	Malaria	
r of	Ministry	Control	Develop-	Division	and	CAMESK	Program	
Public	of Public		ment		Medicines	IN;	s	
Health	Health							
			echnical an	d financia	l nortnore	<u> </u>		
			ecimicai an	u iiiiaiici	ai partifiers)		
WHO	USAID/	CDC	UNICEF	World	UNAIDS	France	Europea	
	PEPFAR			Bank		Embassy	n Union	
	/ PMI							

Local Fund Agent (LFA)

Pricewaterhouse Coopers (PwC) is contracted by the Global Fund to monitor PR performance, activity implementation, and financial flows with an eye toward preventing misuse of funds.

Other: Fiscal agents

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) is contracted by the Global Fund to manage financial disbursements from the Global Fund to government PRs (only), NGO PRs receive disbursements directly from Global Fund

Provincial level

Division Provincial de la Santé (DPS): is under the provincial ministry and ensures that services are provided. Includes the Technical Assistance Office (Bureau d'appui technique) with 5 units: Bureau d'encadrement de zones de sante, approvisionnement et logistique médical de programme, amélioration de qualité de soins, enseignement de sciences de sante, gestion de données; HIV, TB, and malaria programs, HMIS.

Inspection Provincial de la Santé (IPS): is under the central MOPH and monitors that the standards set by the central MSP are followed at the health zone and facility level

	•	SANRU Sub-recipients:	Cordaid sub-recipients:
Province:	Kinshasa	 Fonds de Développement des Services de Santé Eglise du Christ au Congo Programme Militaire de Lutte Contre le Paludisme, PMLP FARDC Horizon Santé 	- Armée du Salut - Bdom Kinshasa - Caritas Congo - Memisa Belgique - ECC - PASCO - PSSP - DCR Cameskin
	Kwilu	- Memisa - Fonds de Développement des Services de Santé	
	Tshopo	Association pour la Protection de l'Enfance au Congo APEC	Caritas/Tshopo

Pre-workshop preparatory meetings

On 30 August 2017, PATH/DRC, PATH/Seattle, and the TERG held preparatory meetings for the PCE stakeholder engagement workshop. During these meetings, the team reviewed the evaluation priorities generated during the stakeholder engagement meetings as well as those identified from consultations with key informants. The team compared the evaluation priorities with key themes raised during other country stakeholder workshops and noted general overlap between both. Where necessary, the team reformulated and/or enhanced the broad evaluation themes to align with DRC stakeholder priorities. The four broad evaluation themes included:

- 1. Grant application / grant making processes
- 2. Implementation and impact (including systems)
- 3. Financing and sustainability (including co-financing and absorption)
- 4. Governance, partnerships, and provincial approach (including challenging operating environments)

Stakeholder Engagement Workshop

A stakeholder engagement workshop was organized by PATH/DRC and took place on Thursday 31 August 2017. The objectives of the workshop were:

- 1. To familiarize country stakeholders with PCE
- 2. To introduce PCE evaluation methods
- 3. To discuss and adapt evaluation priorities from country stakeholders

The workshop was attended by a diverse group of stakeholders (n=49) involved in the control of malaria, HIV/AIDS and TB in the DRC. Representation was as follows:

- Ministry of Public Health (Program Managers and officers for HIV/AIDS, TB and malaria control programs, Fund Coordination Unit)
- Ministry of Finance (Officials from the Fund Coordination Unit)
- Health Development Partners (WHO, CDC, Irish Aid)
- CCM (CCM secretariat, outgoing and elected constituency representatives)
- Other members of different CCM constituencies (CSOs, Key populations, academia, PLWHA)
- TERG team (TERG secretariat)
- IHME /PATH (Global consortium)

The workshop was officially opened by the Secretary General, Dr. Mukengeshayi Kupa, from the Ministry of Public Health, who welcomed the concept of a prospective country evaluation and highlighted the need for stakeholders to engage in the activity, given the importance of Global Fund investments in the country. He emphasized the benefits of country-ownership of the evaluation and using the PCE as a learning platform for achieving greater sustainability and longer-term impact against HIV, TB, and malaria.

Presentations were made by PATH/DRC team members and the TERG secretariat to explain the rationale and objectives of the PCE. Additionally, presentations were made by PATH/DRC team members regarding possible data collection methods and potential evaluation priorities under the four pre-identified broad evaluation themes. The stakeholders were then advised on how to identify/discuss the proposed evaluation priorities during the break out session.

Stakeholders were pre-divided into groups that were developed before the workshop to ensure an equal and diverse representation of stakeholders across all five groups. In each group, stakeholders chose a chairperson and a rapporteur. Additionally, a member from PATH/DRC/Seattle/TERG joined each group to serve as a co-facilitator. During the group sessions, stakeholders reviewed the proposed evaluation priorities, generated additional

evaluation priorities for the PCE and selected the top 2-3 priorities. Following the group sessions, representatives from the four groups presented their identified evaluation priorities and questions to the workshop attendees for feedback and discussion.

5.3 Identification, prioritization, and contextualization of evaluation questions Completed/Ongoing Activities

A post-workshop debrief was held September 1st 2017 (with participation from the TERG) and September 4th 2017 in which preliminary evaluation questions were developed and mapped to the strategic objectives (1.Maximize impact against HIV, TB and malaria; 2. Build Resilient and Sustainable Systems for Health; 3. Promote and Protect Human Rights and Gender Equality; and 4. Mobilize Increased Resources). The ToC was used to guide the development of broad evaluation questions, each with numerous embedded sub-questions. The overarching evaluation questions and associated sub-questions to be explored are detailed in Table 18. As in the other PCE countries, Table 18 should *not* be interpreted as the exhaustive list of evaluation questions for DRC given the prospective nature of the evaluation and potential for refinement and/or addition of new questions to respond to emerging themes over the course of the evaluation.

After defining the broad evaluation questions, the team assessed the relative priority of each evaluation question, using a high, medium, or low priority designation. The prioritization discussion followed the SMART+E Framework to assess whether the question was:

- Specific and clearly defined;
- Measurable given available methods and data sources, and supporting documentation;
- Actionable context amenable to change;
- Relevant, with value in generating findings and recommendations;
- Time-bound and can be answered within the scope of the evaluation period; and
- Energy/enthusiasm from stakeholders is high.

While the PCE aims to evaluate as many of the DRC evaluation questions as possible, particular emphasis will be placed on the 11 evaluation questions deemed to be high priority. For these questions, the team will attempt to gather evidence across as many sources as possible, triangulating findings from KIIs, document review, process tracking, and observation. Lower priority questions will also be assessed but will rely more on secondary sources. To the extent possible, and especially when adequate secondary data is unavailable, lower priority questions will be assessed through KIIs.

Evaluation questions related to the funding request and grant application/making process are grouped at the top of the table to indicate questions to be addressed within the first six months. Building upon the work already underway, including non-participant observation at key meetings, the PCE will continue to capitalize on the current window of opportunity to observe and evaluate the grant application/making process through the end of the 2017 calendar year, until grants are awarded. Although the PCE will continue to examine the degree to which the grant application/making process has resulted in well-designed programs and effective implementation arrangements, the early 2018 process findings will provide critical insight to the Global Fund Board on the effectiveness of the 2017-2019 funding cycle reforms.

Staggering the timing and focus of evaluation questions according to Global Fund processes will enhance the feasibility of collecting data on a range of thematic areas without over-burdening country stakeholders. For example, at earlier stages of the implementation phase, data collection

will focus more on grant administrative processes such as how easily funds are accessed by PRs and SRs. At later stages of the implementation phase, as output and outcome results become available, data collection will focus more on barriers and facilitators of program performance.

 $\it Table~18: Evaluation~questions, methods~and~prioritization~for~DRC~PCE$

EVAL	UATION QUESTIONS	SUB-THEMES	ToC Areas	Theme	Global	DRC
& Making	1. What is the nature and role of partnerships between Global Fund and in-country stakeholders participating in the grant application and making processes?	 What has been the role and contribution of international development partners in the grant application and making processes? What has been the quality and impact of technical assistance? What are the key PR/SR capacity issues identified during grant application/making, and what technical partner support (TA) been budgeted to strengthen program implementation? How has the nature and role of partnerships evolved compared to previous funding cycles? 	Strategic enabling environment	††† †		X
Funding Request, Grant Application & Making	2. What are the barriers and facilitators for a successful grant application/making process, including responsiveness to country priorities, perceived needs, and resource allocation decisions?	 Are funding application tools and templates well understood and simple to use? Is the country dialogue conducted in a way that supports country strategies and systems? To what extent is the process transparent, inclusive (including community involvement) and country-led? 	Grant application & making; Strategic enabling environment; Inputs (Resources); Inputs (Institutions & Relationships)			X
g Request	3. How effectively does the CCM coordinate stakeholders and partners for grant application/making and program implementation?	Influence of CCM on MOH/Gov't priorities	Grant application & making; Strategic enabling environment	†Î Î		X
Fundin	4. To what extent are expected implementation bottlenecks anticipated and planned for in the grant application and making phase?	Procurement challenges Contractual delays	Grant application & making			X
	5. How effectively are key and vulnerable populations considered, defined, and addressed in the grant application and making process (across program areas)?	 Definition of key and vulnerable populations and strategies for reaching How much money is devoted to key and vulnerable populations Level of involvement of key and vulnerable constituencies in application 	Grant application & making			X

	6. How has the differentiated funding request approach enabled a more efficient and streamlined application and review process compared to previous application processes?	Has it reduced the time taken to get to grant approval compared to previous funding cycles?	Grant application & making; Strategic enabling environment	Š	X
	7. What barriers and facilitators have been experienced in negotiating cofinancing commitments, as compared to previously?	 How and why were the MoF engaged in STC discussions and has this made a difference compared to previous approaches? What challenges and opportunities have been experienced with understanding and adhering to the STC policy requirements compared to previously? How effective has the STC policy been in stimulating co-financing? 	Inputs (Policies, (Resources, Institutions & Relationships); Grant application & making	•	X
ng Operating	8. What are the trends and distribution (geographic, demographic and socioeconomic) of HIV, TB and malariarelated health outputs and outcomes?	 What are the epidemiological trends related to prevalence, morbidity, and mortality for the three diseases? What are the trends among health service output indicators for the three diseases, such as number of people tested? 	Outputs; Outcomes		X
SO1 Impact, Transition, Challenging Operating Environment	9. To what extent do Global Fund resources contribute to improvement in health outputs and outcomes for HIV, TB and malaria? How does that contribution vary geographically and demographically, and what are the barriers and facilitators to achieving outputs and outcomes?	What are the barriers and facilitators to achieving outputs and outcomes?	Outputs; Population Health Outcomes; National program implemetnation	š	X
SO1 Impact, Tra	10. How effective and efficient are Global Fund risk management and oversight mechanisms at enabling program results?	 To what extent do administrative and financial management procedures impede implementation? Are administrative procedures well adapted to country contexts, challenging operating environments (COEs) in particular? Is there adequate balance between managing risk and enabling program impact? 	Not explicit – consider adding to ToC		X

ion, COE	11. In COEs, how do partnerships and increased flexibilities in Global Fund processes contribute to greater effectiveness and impact?	 Are there increased flexibilities in the application of Global Fund procedures? To what extent are the increased flexibilities tailored to the country context to enable efficient transfer of resources with fewer transaction costs? How have increased flexibilities contributed to greater effectiveness and impact? 		iùi Š	X
SO1 Impact, Transition,	12. How have reforms in country-level implementation models and strategies contributed to improving program efficiency and effectiveness?	 How has the reorganization of geographic coverage zones among implementers and donors affected program performance? How has the implementation of an integrated HIV and TB service delivery model affected program performance? What have been the challenges and successes of implementing the provincial approach? To what extent has PBF contributed to improved access and utilization of maternal and child health services? What have been the challenges and successes of the model for scaling up PBF? What are the key coordination challenges and opportunities facing Global Fund stakeholders including, PRs, the MOPH, technical partners, etc.? 	Inputs (Policies); Outputs; Population Health Outcomes; National program implementation; Strategic enabling environment		X
Build RSSH	13. How effectively does Global Fund money move from global to national to sub-national levels?	How does the provincial approach contribute to more efficient and effective transfer and utilization of resources to the provincial level?	Inputs (Resources; Institutions & Relationships); Strategic enabling environment		X
SO2 Bu	14. How do Global Fund investments contribute to building resilient and sustainable systems for health?	 How do Global Fund investments strengthen the information system(s) to improve efficiency and effectiveness of implementation? How do Global Fund investments strengthen incountry procurement and supply chain systems? 	Inputs (Resources); Outcomes (Health System outcomes)	š	X

SO2 Build RSHH	15. How has the Global Fund supported	 How do Global Fund investments contribute to strengthening national M&E systems and mechanisms for continuous quality improvement? How do Global Fund investments contribute to strengthening financial management and oversight capacity for greater accountability? How do Global Fund investments contribute to addressing the human resources for health challenges? How does the provincial approach contribute to 	Inputs (Policies;		
os	the government's decentralization of health administration to the provincial level?	more efficient and effective transfer and utilization of resources to the provincial level? • What have been the challenges and successes in implementing the provincial approach?	Institutions Relationships)		X
Rights &	16. Are Global Fund investments in programs to reduce human rights and gender-related barriers to HIV, TB and malaria services of sufficient amount, quality, and effectiveness?	 How are Global Fund supported programs addressing barriers to services for the most vulnerable, including key populations? What have been the challenges and successes of implementing gender responsive programs? 	Inputs (Resources); Implementation outputs	Š	X
SO3 Human Rights & Gender	17. To what extent have plans, policies and programs (related to three diseases in 2017-2019 allocation period) been designed and implemented in accordance with gender responsive programming, within country contexts receiving GF support?	• To what extent has gender been addressed in the design of the grant application?	Grant application & making; Inputs (Policies)	3	X
SO4 Mobilize Resources	18. What are the trends and distribution of Global Fund resources (inputs), and how do they compare with need?	 What are the trends and distribution of resources by program activity area and by province? Does the allocation of funds by disease program and program activity area remain the same over time? How well do the geographic trends and distribution of funds correspond with the needs in terms of disease burden and population affected? 	Inputs (Resources); Population Health Outcomes		X

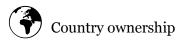
Resources	19. What are the drivers of consistently low rates of absorption (financial execution) of Global Fund investments?	• What aspects of the Global Fund business model facilitate or hinder effective and efficient absorption?	Not explicit – Consider adding to ToC	•	X
SO4 Mobilize Res	20. How are government resources (including co-financing) allocated and utilized to complement Global Fund investments in the three diseases?	 What is the government co-finance commitment and to what extent has the government met its obligations? How are co-financing resources allocated? To what extent do Global Fund investments promote increased transparency in how government resources for health are allocated and spent? What are the co-financing trends over time? 	Implementation outputs; Strategic enabling environment	•	X
Strategic Enablers	21. What are the facilitators and barriers to the CCM functioning effectively within the standards/scope as defined by the Global Fund business model?	 Are roles and responsibilities clearly defined between Global Fund actors (e.g., CCM, LFA, CT, PRs/SRs), and effectively performed? To what extent does the CCM effectively facilitate coordination among stakeholders/partners? 	Strategic enabling environment	+11+	X

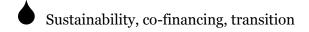
Questions considered across countries to address a strategic objective – proposed by IHME/PATH or drawn from the Global Fund Request for Proposal

Prioritization of Evaluation Questions: **High Med Low**

Thematic Area Symbols Key:









5.4 Evaluating gender responsiveness of Global Fund investments

In line with Global Fund's SO 3 "promote and protect human rights and gender equality", the PCE will examine how investments in reducing gender-related barriers to HIV, TB and malaria are sufficient, of quality and effective. The process evaluation component of the PCE will observe how gender considerations are addressed at different stages of the Global Fund investment life cycle. For example, during the funding request and grant-making phase, the PCE will explore how plans, policies and programs have been designed in accordance with gender responsive programming (EQ 17). Examples of process-related sub-questions include:

- Was there adequate and meaningful participation of gender and human rights experts in the funding request development and grant-making processes?
- Have investment allocations within the funding request adequately factored in activities addressing gender-related barriers to health services?
- To what extent have new tools, such as the gender assessment tool for national HIV and TB responses, developed by the STOP TB Partnership and UNAIDS, been utilized and have they contributed to enhanced, evidence-based, gender responsive funding requests?

In addition, the prospective nature of the PCE provides flexibility to tailor questions for additional probing on issues that arise during the embedded observation of the process. For example, the fact that gender-related evaluation priorities did not feature strongly during country stakeholder consultations, is an important observation in and of itself that will be further explored in KIIs with stakeholders.

The PCE will evaluate impact through a gender specific lens as well. To the extent possible given the data, output, outcome and burden of disease indicators will be estimated stratified by sex. This will aid understanding the gender gaps and equity as described in the Impact Evaluation and Value for Money Sections below. Several additional indicators of gender equality will be measured as well, such as sexual violence and women's agency, with a particular focus on how they have changed over time and how they vary at the small area level. See the section below on HIV and TB covariates.

As the PCE is primarily focused on analyzing how and why the Global Fund's business model is or is not successfully achieving its strategic objectives, the evaluation of program-specific interventions such as the SASA! program are too narrow in scope for the PCE. However, the PCE platform can be leveraged to perform a separate evaluation of the gender pilot programs, including SASA! The IHME/PATH consortium has submitted a concept note with a separate budget and tailored methodological approach to more specifically measure the impact of the gender pilot programs in DRC.

5.5 Selection of provinces for subnational approach

Completed Activities

During the week of August 7th and August 21st, the CEP organized provincial visits to PATH/DRC offices in Tshopo and Kwilu to conduct stakeholder consultations with provincial health authorities and to complete the provincial stakeholder mapping. These were in addition to consultations conducted with provincial authorities in Kinshasa, where the provincial approach has already begun. During these visits, the CEP solicited input on key challenges constraining the impact of Global Fund support, which may be unique at the provincial level and input on provincial authorities' evaluation priorities. In addition, a representative from the Kinshasa, Kwilu, and Tshopo DPS participated in the stakeholder workshop in Kinshasa on August 31st.

During the post-workshop meetings in Kinshasa, the team discussed further how to incorporate a sub-national approach in the PCE, and specifically which provinces to select for in-depth examination. Among the five provinces ultimately selected for the provincial approach (Kinshasa, Kongo Central, Kwilu, Ituri, and Maniema) and confirmed by the MOPH, the team has considered the following factors:

- Safe and accessible access
- PATH office
- Disease burden
- Implementation of all three disease programs
- Population demographic and socio-demographic characteristics
- Health systems challenges / provincial administration (new vs. old)

Details on the specific considerations for each of the five provincial approach provinces and the potential control provinces are provided in Table 19. We propose Kinshasa and Kwilu for indepth examination of the provincial approach. The presence of PCE staff in Kinshasa and the potential to base a PCE staff at the PATH office in Kwilu makes it possible for the PCE to closely examine Global Fund activities through process tracking, non-participant observation of provincial level meetings and activities, KIIs with provincial stakeholders, document review, and secondary data analysis. We also propose examining provincial-level processes in greater detail in one or two non-provincial approach provinces. Tshopo, a province that receives significant Global Fund support and was nearly chosen as a site for the provincial approach also has a PATH office, making it a natural first option for comparison. Other potential provinces are listed below. Additional consideration will be given to provinces that are also implementing PBF to leverage local access. Given limited budget, a small number of potential comparison provinces, and numerous possible covariates by which provinces could be stratified, we view this as an important exercise in understanding benefits and challenges of implementing the provincial approach, and how those changes may influence Global Fund impact.

Table 19. Summary of considerations for province selection (proposed provinces in **bold**)

Provincial approach / control	Province	Considerations
	Kinshasa	Obvious choice for proximity / access reasons. It will also be the first province to utilize the provincial approach.
Provincial approach	Kongo Central	High malaria prevalence, low HIV prevalence. Greater economic wealth due to proximity to the coast. Close proximity to Kinshasa province (can access by plane). No PATH office.
	Kwilu	PATH office and administrative structure to support a full-time PCE staff. Close proximity to Kinshasa. Secure and reliable access. Relatively high malaria burden. It has retained the same health administration during the decentralization process. PBF province.

	Ituri	No PATH office. Access can be difficult due to distance from Kinshasa. High HIV burden. PATH has extensive experience working in Ituri, is knowledgeable of its complexities, and can build on established relationships.
	Maniema	No PATH office, but there is secure and reliable access. Province has significant health sector challenges with relatively high malaria prevalence, 2 nd highest HIV burden. Global Fund is planning to intensify malaria activities and it is a priority province for the HIV program. PBF is being implemented in Sud-Maniema.
Control province	Tshopo	PATH office. Safe access. It was almost selected by the Global Fund for the provincial approach and receives greater financial support compared to other control provinces. All three disease programs are supported by Global Fund. Eastern part of country presents opportunity to work in an area with different population characteristics than Kinshasa/Western region of country. It has retained the same health administration during the decentralization process.
candidates	Nord Ubangi	All three disease programs supported by Global Fund. It appears that Global Fund may be the sole or largest donor acting in the area creating a unique environment. Relatively high HIV prevalence and malaria burden. The province has significant health system challenges and relatively poor socio-economic indicators compared to other provinces. It is one of the new provinces that has a new health administration.
	Haut Uele	All three disease programs supported by Global Fund. Access is not considered safe and reliable.
	Bas Uele	All three disease programs supported by Global Fund. Safe and reliable access is questionable.
	Kwango	All three disease programs supported by Global Fund. PBF province.
	Mai Ndombe	All three disease programs supported by Global Fund. PBF province.
	Equateur	All three disease programs supported by Global Fund.
	Tshuapa	All three disease programs supported by Global Fund. Access is not considered safe and reliable.
	Mongala	All three disease programs supported by Global Fund. Access is not considered safe and reliable.
	Sud Ubangi	All three disease programs supported by Global Fund.
	Nord Kivu	All three disease programs supported by Global Fund. Access is not considered safe and reliable.

The small sample size, constrained by budget and time, will limit our ability to make generalized conclusions regarding the provincial approach. Given the fragmented nature of DRC's health

system and targeted nature of Global Fund's provincial approach, the primary focus of the PCE will be to ensure internal validity of results. Some results may pertain to the entire country however, depending on data availability. Additionally, not unlike the cross-country PCE synthesis, themes are likely to emerge, and provincial "case studies" will help stakeholders and the Global Fund understand how the provincial approach is planned and implemented. Furthermore, there may be national-level process evaluation findings that do not relate to a specific province, as well as resource tracking, output, outcome and burden of disease measurements based on nation-wide secondary data sources. To the extent that it is useful, we will report results from those data sources as national-level evaluation findings.

5.6 Data Mapping and Assessment

Completed/Ongoing Activities

Completed and ongoing activities for data mapping include completion of a data inventory and progress toward documenting data availability and gaps. Through individual stakeholder consultations and web searches, a complete list of data sources (to the extent of our knowledge) has been gathered. This list is detailed in Table 20. Content mapping, i.e. systematic screening of the documentation and codebook for each data source in an effort to identify all variables that pertain to the three diseases, has been completed for each data source as well. Indicators (such as incidence/prevalence, treatment coverage, preventive interventions, risk factors or others) represented by each data source have been documented and itemized to facilitate a complete understanding of the data landscape. A data mapping synthesis, in the form of a set of visualizations has been produced to summarize the data landscape and assist the analysis of data gaps.

Table 20. Data inventory for DRC

Data Title	Institution	Data Collectio n	Data Type	Availabilit y
Democratic Republic of the Congo National Tuberculosis Control Program	Ministry of Public Health	01/1996 - Present	Surveillanc e	Tabulation s Only
WHO Tuberculosis Case Notifications	WHO	06/2005 - Present	Surveillanc e	Tabulation s Only
Democratic Republic of the Congo Malaria Indicator Survey 2017	ICF International	01/2017 - 12/2017	Survey	Not Available Yet
Democratic Republic of the Congo Demographic and Health Survey 2013-2014	ICF International	11/2013 - 02/2014	Survey	Microdata
Democratic Republic of the Congo Estimating the Size of Key Populations in Six Provinces 2013	UNAIDS	01/2013 - 12/2013	Survey	Tabulation s Only

Democratic Republic of the Congo Multiple Indicator Cluster Survey 2010	UNICEF	02/2010 - 04/2010	Survey	Microdata
Democratic Republic of the Congo Demographic and Health Survey 2007	ICF International	01/2007 - 08/2007	Survey	Microdata
Democratic Republic of the Congo International Rescue Committee Mortality Survey 2006-2007	International Rescue Committee	01/2006 - 04/2007	Survey	Unknown
Democratic Republic of the Congo Behavioral Surveillance Survey 2004- 2005	Family Health International	01/2005 - 12/2006	Survey	Tabulation s Only
Democratic Republic of the Congo Behavioral Surveillance Survey 2004- 2005	Family Health International	12/2004 - 03/2005	Survey	Tabulation s Only
Democratic Republic of the Congo Mortality Surveys 2000-2004	International Rescue Committee	01/2000 - 12/2004	Survey	Unknown
Democratic Republic of the Congo Multiple Indicator Cluster Survey 2001	UNICEF	04/2001 - 10/2001	Survey	Microdata
National Health Information System	Ministry of Public Health	2007- 2017	Administra tive	Tabulation s Only
National HIV/AIDS Control Program	Ministry of Public Health	2007- 2017	Administra tive	Tabulation s Only
Integrated HIV/AIDS Project (ProVIC)	PATH DRC	2012- 2017	Survey	Microdata
ENGAGE-TB	Fondation Femme Plus	2012- 2017	Surveillanc e	Unknown
National Malaria Control Program (PNLP)	Ministry of Health	2007- 2017	Administra tive	Tabulation s Only
DRC Outlet Survey	ACTwatch	2009, 2013, 2015	Survey	Tabulation s Only
DRC Household Survey	ACTwatch	2010	Survey	Tabulation s Only

Planned Activities

Continuing consultation with stakeholders and probing for further data sources will be conducted on an ongoing basis. Content mapping will continue to be summarized for the three diseases to describe the proportion of known data sources which contain information about burden of disease, the proportion that contain information about treatment coverage and the proportion which contain information about prevention coverage. Data gaps will continue to be explored by indicator and geography and over time. Data gaps will be summarized according to specific indicators that have little data as well as levels of detail (geographic and other strata) that are rarely represented in the data. Based on completed data inventory work so far, we expect that data gaps will limit our precision in measuring indicators (see Output, Outcome and Burden of Disease section below), but not hinder our ability to measure them altogether. One exception may be the data gap related to effective coverage of HIV and TB treatment (see Proposed supplemental HIV primary data collection activities section below). The paucity of data on treatment success in DRC may in fact impede our ability to measure that indicator unless supplemented with new data. Data access requests will be sent to all relevant parties by the CEP, with support from the GEP.

5.7 Formation of Advisory Panel

During the inception period, the evaluation team identified the DRC School of Public Health (SPH) as an important partner institution for the PCE. In particular, the MOPH and CCM have advocated strongly for the SPH's involvement in the PCE to reinforce country ownership and acceptance of the evaluation. As such, the CEP has decided to form an agreement with the SPH to engage the SPH in developing and executing the PCE advisory board. The SPH will therefore be responsible for forming an advisory board consisting of 6-8 members who will be selected based on their knowledge and expertise in the field of malaria, HIV, TB and HSS issues, as well as monitoring and evaluation. This will likely include predominantly members of the SPH, but will also seek to draw members from high-level staff within the Ministry of public health, donor agencies, private sector and other organizations with related expertise.

The SPH will be responsible for convening the advisory panel at a minimum for annual meetings. The specific Terms of Reference will be drafted and shared with the advisory panel.

The roles of the advisory panel will be to:

- Facilitate information sharing to and coordination among key stakeholders in the DRC for Global Fund from the government, community, donor agencies and other key stakeholders and experts.
- Act as a source of advice on decisions with which the evaluation team seeks consultation.
- Ensure that the activities of the investigators have potential to contribute to informing the strengthening of the HIV, TB, and malaria programs in DRC.
- Provide links and coordination with Global Fund efforts in DRC and other planned and ongoing HIV, TB, malaria, HSS and other related interventions and evaluations in Africa.

5.8 Plan for in-country dissemination

Planned Activities

Based on wide consultation with stakeholders, the team will employ a broad range of dissemination mechanisms to ensure that learning from the PCE is directed toward improving program processes in a timely manner. Based on the relevance and value of the findings, a number of dissemination mechanisms will be employed, including, but not limited to: (i) presentations (ii) reports, briefs and publications: annual reports, manuscripts, policy briefs and field visit reports (iii) annual dissemination meetings and recommendations workshops and (iv) conferences/workshops.

Brief presentations and updates on key relevant findings will be delivered to stakeholders on a quarterly basis during existing coordination meetings. Since the evaluation team will participate in several meetings at program level, this will be used as an avenue to update key stakeholders on important findings emerging from the evaluation allowing for a more detailed description of findings in a timely manner. The target audiences will be the program technical working groups, PRs and the CCM board.

Annual reports will summarize the work undertaken by the evaluation team and key findings for the corresponding period. Prior to the finalization of annual reports, the CEP will plan and coordinate an annual dissemination meeting and recommendation workshop with key stakeholders. The meeting will be organized in a manner that will allow for interpretation and discussion of results, thus facilitating a joint understanding of PCE findings and implications of the work. This will also facilitate joint development of recommendations to further galvanize country ownership of the PCE findings.

Policy briefs on the other hand will be produced on an as need basis following the key themes and findings emerging from the evaluation. Where field visits will be made, a field report summarizing findings that are critical in informing the program will also be shared with the necessary stakeholders. This also involves publishing of results through peer-reviewed journal articles, which will be dependent on the emerging key themes and areas. These varied types of reports will allow us to reach audiences ranging from program personnel to policy makers to researchers.

The fourth approach for dissemination will be international and national conferences or workshops held by different consortia. The aim of attending the conferences will be for the country evaluation team to disseminate PCE findings to national and international forums. In addition, this avenue of dissemination will also serve as an opportunity for building capacity in terms of exposure, knowledge, and presentation skills.

The evaluation team will remain flexible to adopt any other dissemination mechanisms and material formats as guided by the advisory board, the TERG and TERG Secretariat and relevant stakeholders to further galvanize country ownership. Table 21 below summarizes the potential audiences and dissemination mechanisms for the PCE.

Table 21. Dissemination plan for PCE findings

Potential audiences	Dissemination mechanisms	Frequency of feedback

MOPH Programmes, including Malaria, HIV/TB Technical Working Groups (TWG)	Presentations and field visit reports	Quarterly TWG meeting / Quarterly work plan review meetings
MOPH general program review (including PRs)	Presentations	Annual (end of year)
HIV/TB and malaria country conferences	Presentations	Annual (June/July for HIV; April for Malaria)
CCM board / comité de suivi stratégique	Presentations	Bi-annual
Multi-donor health sector coordination (GIBS)	Presentations	Bi-annual
Provincial stakeholders (DPS and PRs/SRs)	Presentations, briefs	Quarterly
International and national stakeholders	Presentations and abstracts	Bi annual

Chapter 6 Evaluation Phase Proposal

6.1 Process Evaluation and Partnership Study

Process Evaluation Components

The process evaluation will draw upon a suite of methods and tools for primary data collection, analysis and interpretation that are best aligned to each evaluation question, including key informant interviews, systems thinking approaches (theories of change, root cause analysis, causal loop diagrams), process tracking (process maps, document review, non-participant observation), case studies, data visualization, and continuous quality improvement.

Key Informant Interviews

CEPs will undertake semi-structured key-informant interviews (KIIs) to elicit stakeholder perspectives on key components of the global and country-specific evaluation questions, particularly in instances where other types of data are insufficient for answering the evaluation question. For example, KIIs are particularly useful for exploring "how" and "why" questions and can contribute to in-depth understanding of complex phenomena, relationships, and processes. Furthermore, KIIs will support data triangulation and interpretation of results generated through other methods. We will develop structured, but flexible, KII topic guides specific to the final set of evaluation questions. Our aim is to minimize respondent burden, by limiting the number of questions and combining with other data collection efforts where appropriate (e.g. partnership study) to reduce the number of data requests/meetings with each stakeholder.

Systems Thinking

Theories of Change: During the inception phase, the research consortia collectively developed a high-level Theory of Change (ToC) of how Global Fund business processes contribute to achieving the desired outcomes and impact within countries. The ToC will help guide and harmonize the overall evaluation approach across the eight PCE countries, and will be a continuous reference as we validate the inputs-to-impact chain.

Root Cause Analysis: We will use root cause analysis (RCA) to further explore, analyze and understand the root causes underlying observed challenges or successes identified through a variety of triangulated data sources. RCA moves beyond identifying what challenges or successes have occurred to help determine why a particular challenge or success has occurred. The identification of the root causes will rely on differing data collection tools and methods depending on the question at hand. For example, if we identify that the number of patients who received antiretroviral treatment in a given district fell by over 10% in the preceding month, the PCE team may employ fact-checking interviews (FCIs), KIIs, additional secondary data analysis, document review, and/or site visits to understand the reasons behind the observed challenge. Evaluators will use the findings from the RCA to propose immediate actions/solutions.

Causal Loop Diagrams: Through mapping out variables, the relationships between variables, and feedback loops, causal loop diagrams aim to represent the dynamic changes in systems. These diagrams draw on both qualitative and quantitative data to represent mental models of system structures, and the patterns that cause the system structure. CEPs can construct causal loop diagrams and/or build them collaboratively through participatory group modeling sessions with key stakeholders. This type of systems thinking tool may be particularly useful during the PCE for examining complex concepts, processes, and challenges. For example, causal loop

diagrams could help in examining the challenge of persistently low global fund absorption rates, or in identifying factors affecting sustainability and transition efforts.

Process Tracking

The aim of process tracking is to monitor and describe processes within the Global Fund business model (e.g. the process of developing a concept note). Document review, non-participant observation, and KIIs provide input into developing process maps. Together, the ToC and process maps will help guide the prospective process evaluation: by comparing the observed process to the theorized process described in the ToC and process maps, we can better understand the fidelity and quality of process implementation. Process tracking tools can capture multiple types of data and indicators, and we plan to leverage our existing set of tools from the Gavi experience, with modifications as needed. We propose innovations in terms of how we collect, synthesize, and visualize process tracking data to enable action.

Case Studies

Case studies are ideal for exploring "how" and "why" questions, using in-depth exploration of context to distinguish it from other traditional evaluative approaches. Case studies rely on triangulation of evidence from multiple sources of data. In the PCE, we may undertake case studies at sub-national levels to understand particular processes in more depth. For example, in DRC, we could design a case study to elucidate whether, how, and why the provincial approach is functioning as designed.

Data Visualization

Dashboards for data synthesis and visualization will be used to keep track of trends and progress across the evaluation framework. Dashboards will include simple benchmarking graphics to visualize current progress and trends. Dashboards will automatically pull in HMIS or other quantitative data from national data systems when it is available (e.g. monthly for most HMIS/DHIS-2 systems). Evaluators will manually enter additional relevant data and indicators as they collect them. There are two ways CEPs may use the quantitative data synthesis: First, to triangulate with qualitative process data to understand the "how" and "why" of disease program output and outcome indicator performance; and second, to prompt further in-depth investigation. For example, if we identify a consistent spike in the malaria case fatality rate over a given period of time or in a given district, the PCE team may employ fact-checking interviews, KIIs, additional secondary data analysis, document review, and/or site visits to understand the reasons behind the observed change. In addition, they may seek to understand the process of actions taken by stakeholders to address the issue.

The architecture of the dashboard may vary by country, depending on local needs and preference, and is contingent upon receiving regular and timely access to routine HMIS data s. PATH will leverage its experience in developing web-based data visualization dashboards in Zambia for the MACEPA project, with support from the Tableau Foundation. The MACEPA dashboards on the Tableau server have helped train and empower health workers and managers in data use for malaria control and elimination. The PCE will place initial emphasis on developing the dashboards and training the CEPs on their use. Evaluation teams will incorporate dashboard summaries along with findings presented during regular PCE dissemination meetings with stakeholders. Eventually, the goal will be to involve external users in dashboard data analysis and visualization, depending on interest from country stakeholders.

Continuous Quality Improvement

The PCE teams will use tools from continuous quality improvement to translate the PCE findings into program changes. Each country chapter describes specific engagement and dissemination mechanisms to ensure CEPs communicate identified issues in a timely manner to support immediate action by responsible stakeholders – these mechanisms support the "learning platform" nature of the PCE.

Partnership Study Description

The partnership study will draw on various methods and tools, including: KIIs, document review, evaluation workshops, actor mapping, network analysis and data visualization. The partnership study will build on our expertise and experience in the Gavi FCE in mapping, analyzing, and making recommendations to strengthen partnerships at national and subnational levels. We will use PATH's "Partnership Framework" which provides an approach to measuring the relationships between partnership context and enabling environment; partnership structure, partner performance and partnership practices; and ultimately the added value of the partnership (effectiveness, efficiency, country ownership). Specific partnerships will be mapped, including the precise geographical location (e.g. district) where possible, according to global and country-specific evaluation questions (e.g. related to resource flows, civil society involvement in and gender equality approaches to application or implementation processes, coordination across disease areas). Measuring indicators in the partnership framework requires multiple types of data from multiple sources. We will leverage proposed process evaluation tools, including semi-structured checklists. A partnership module of questions will be embedded within the KII topic guide to ensure we use opportunities for KIIs to also collect the necessary network information. The overall goal is to reduce respondent burden but ensure high-quality and meaningful data to inform recommendations. We may consider conducting the partnership module over the phone for stakeholders unable to be reached in-person. CEPs will lead network analysis using PATH's open-access network analysis software (statnetWeb PATH): https://ebev.shinvapps.io/statnetWeb-PATH/

6.2 Resource Tracking Study

A resource tracking study will serve as a pivotal component in understanding the contribution of Global Fund and the mechanisms connecting Global Fund inputs to impact. This component will leverage our expertise in resource tracking, geospatial analysis, and stakeholder network analysis, as evidenced through work such as the Gavi FCE,(30) IHME's Financing Global Health,(31) and disease expenditure research collecting, standardizing, and analyzing NHA studies.(32)

Briefly, we will track Global Fund grant budgets, expenditures and disbursements within each country, by health function and over time, and compare it with total health expenditure for the three diseases. We aim to answer the following questions:

What and where are the financing agents, providers and functions of Global Fund resources? We will use the SHA 2011 framework to track Global Fund assistance along three axes: financing agents (channels), service provision (including providers and factors of provision) and health functions (health focus areas, beneficiaries, and healthcare consumption). This will rely on SHA 2011 guidelines, and will be based primarily on analysis of Global Fund budget, disbursement and expenditure data acquired from the FPM, LFA, PRs and SRs. To the extent possible in each country, we will geo-reference documented resources to assess providers

and functions at the local level. Wherever possible, Global Fund resources will be expressed as a fraction of total health expenditure (see below) to measure the intensity of Global Fund-supported activities specifically.

The advantage of mapping resources as precisely as possible is that they can be linked to georeferenced outputs and outcomes, which allows for more precise understanding of the distribution of Global Fund resources and the relationship between inputs, outputs, and outcomes. For example, this component will measure the distribution of Global Fund resources for the procurement and delivery of ART coverage, and assess the relationship between these measures and changes in ART coverage and reductions in HIV burden. In addition, tracking the relationships between disbursement and expenditure along specific SHA 2011 dimensions at all geographic levels will offer insight into absorption capacity. The relative "burn rate" between different service provisions and health functions will complement process evaluation on this topic and allow for triangulation of answers to related evaluation questions.

What and where are the financing schemes, agents, providers and functions of total health expenditure? In addition to tracking Global Fund assistance, we will track health spending from all sources in order to understand total health expenditure and the envelope of resources available for health. This comprehensive tracking will provide valuable insight for how Global Fund assistance coincides with other resources. Partnership analysis (described below) will assist to identify, track, and locate non-Global Fund resources through the network of financing sources and channels. Like the Global Fund resource tracking, every effort possible will be made to map resources to at least the first administrative level and ideally to a more precise geo-referenced location. Data sources will be National Health Accounts (NHA), National AIDS Spending Assessments (NASA), stakeholder interviews, formal requests from important development partners such as PEPFAR and PMI (see Table 22). Total health expenditure will be stratified, to the extent possible, by broad sources of funding, such as government, development assistance and out-of-pocket. Expenditure data may, if necessary, be supplemented with joint health accounts questionnaires and public expenditure tracking surveys.

Table 22. Data sources for resource tracking

Source	Country	Years Accessed (to date)
	DRC	2008, 2009, 2013-2014
UNAIDS National AIDS	Guatemala	2005-2005, 2009-2010, 2013, 2014,
Spending Assessment	Guatelliaia	2015
	Uganda	2008-2009
	DRC	2008-2009, 2013
National Health Accounts	Guatemala	1995-2013
	Uganda	2008-2012
	DRC	2012, 2014, 2015-2017
Global Fund Budgets	Guatemala	2010-2013, 2014-2016, 2016-2019
	Uganda	2012-2014, 2015-2018
Global Fund Expenditures	DRC,	
and Disbursements	Guatemala, &	In progress
and Disbursements	Uganda	
PEPFAR and PMI Financial	DRC,	
Reports and Audited	Guatemala, &	In progress
Financial Statements	Uganda	

	DDC	
OECD-DAC and CRS	DRC,	_
Databases	Guatemala, &	In progress
Dutubuses	Uganda	
UNAIDS Global AIDS	DRC,	
	Guatemala, &	In progress
Monitoring Indicator Data	Uganda	1 0
UNICEF Financial Reports	DRC,	
and Audited Financial	Guatemala, &	In progress
Statements	Uganda	
UNFPA Financial Reports	DRC,	
and Audited Financial	Guatemala, &	In progress
Statements	Uganda	
PAHO Financial Reports and	DRC,	
Audited Financial	Guatemala, &	In progress
Statements	Uganda	
WHO Financial Reports and	DRC,	
Audited Financial	Guatemala, &	In progress
Statements	Uganda	
AfDB Online Project	DRC,	
Database and Compendium	Guatemala, &	In progress
of Statistics	Uganda	
BMGF Online Grant	DRC,	
Database and IRS 990 Tax	Guatemala, &	In progress
Forms	Uganda	

What are the temporal patterns in Global Fund, non-Global Fund and domestic resources?

Adding a temporal resource tracking component will allow an assessment of changes in Global Fund, non-Global Fund, and domestic resources over the course of the evaluation study as well as changes in the past. A number of advantages will result from tracking the temporal patterns of health spending on the three diseases. These findings will be linked to process evaluation findings and output/outcome measurements to better understand the role that Global Fund resources have had in influencing health outcomes. They will also be used to understand the relationships between changes in Global Fund resources and changes in domestic resources (cofinancing). Our team will draw on our expertise in measuring the fungibility of development assistance to quantify co-financing and/or displacement(33).

All relevant data will be integrated to inform estimates of health system outputs, coverage outcomes and indicators related to burden of disease for HIV, Malaria and TB. Estimates will be triangulated using multiple sources of data to limit bias within sources and leverage the strengths between sources. All indicators will be estimated as a time series extending as far back, and with as much temporal and geographic granularity as the available data allow.

Resource tracking analyses

Several interrelated analyses will be conducted using the resource tracking data described above.

1. Descriptive analyses of prioritization and investment intensity

A descriptive analysis will report on the amount and intensity (as a fraction of other health expenditure as described above) of Global Fund investments as a standalone evaluation activity. This analysis will be conducted by cost categories/health functions as described above.

2. Absorption and reprogramming analyses

Comparisons will be made between budget, disbursement and expenditure reports of Global Fund grants, stratified by the details described above. The time lag between disbursement and expenditure of funds that have been allocated for a certain purpose may be analyzed to assess absorption by cost category. The difference between the health function-specific amount that was originally budgeted, the amount that was disbursed and that which was actually spent will be analyzed to assess reprogramming.

3. Co-financing and cross-partner analyses

Comparisons between Global Fund budgets and government health expenditure will be explored by health function. This will be largely conducted as a time series analysis, assessing the trend in government health expenditure for a particular function as it compares to what was budgeted in Global Fund grants (both current and previous). Similar comparisons between Global Fund investments and investments from other development partners. These will be used to show the extent to which co-financing has occurred and the extent of coordination between development partners with similar health focus areas.

4. Allocation analysis

Comparisons between expenditure from Global Fund grants and outputs, outcomes and burden of disease (see below section) will be explored by cost category and its associated health output. These analyses will primarily be geospatial in nature, exploring whether the geographic areas/cost categories with the greatest need are met with corresponding investment intensity. For more details, see the Value for Money section below.

5. Impact analyses

Correlations between investment intensity and changes in outputs, outcomes and burden of disease will be explored by cost category as well, adjusted for levels and trends of related covariates. Using private health expenditure as a share of total health expenditure (described above), as similar analysis will be used to assess changes in financial risk protection. These will use both geospatial and time-series analyses, described further in the Impact Evaluation section below.

6.3 Output, Outcome, and Burden of Disease Measurement

HIV

Outputs

Key health systems outputs related to each disease will be tracked at the lowest available administrative level. For HIV, these outputs will include numerous aspects of prevention (e.g. condom distribution) and treatment (e.g. number on ART).

Table 23 shows output data sources by country. Administrative data will be supplemented with supply chain, survey and surveillance data in each country to measure outputs. In DRC, parallel administrative information systems will be merged to ensure the most complete count. Missing

data methods such as multiple imputation will be used to address incomplete records. Individual-level records from ART patient registries will be utilized to relax assumptions about migration for treatment. Administrative biases are known to exist due to data quality issues. By constructing stock-and-flow curves using supply chain data, we will develop an innovative data correction methodology that is flexible enough to accurately measure outputs under circumstances of either under-reporting or over-reporting, similar to Flaxman (2010).(34) Output estimates from administrative and supply-chain data will be validated against survey and surveillance data where possible.

Table 23. Data sources for HIV outputs

Indicator(s)	Country	Sources
	DRC, Guatemala and	HMIS Summary Tables (DRC: SNIS, Guatemala:
	Uganda	SIGSA)
	DRC	PNLS Summary Tables
	DRC, Guatemala and	HMIS ART Registry (DRC: SNIS, Guatemala:
	Uganda	SIGSA)
	DRC	PNLS ART Registry
Patients on ART	DRC	ProVIC survey
	DRC and Guatemala	Primary Data Collection
	Uganda	National Viral Load Dashboard
	Uganda	Ahoua 2009(35), Chang 2009(36)
	Uganda	PHIA 2016
	Uganda	AIS 2011, 2004-2005
	Uganda	HDSS Awach, Iganga, Rakai
	DRC, Uganda and	National Distribution Systems (DRC: TBD,
Drugs distributed	Guatemala	Uganda: National Medical Stores, Guatemala:
	Guatemaia	TBD)
Condoms	DRC, Uganda and	National Distribution Programs (DRC: SNIS,
distributed	Guatemala	Uganda: TBD, Guatemala: TBD)

Output indicators will be measured disaggregated by sex (when applicable) and CD4 count at initiation (for treatment), conditional on data availability.

Outcomes

Indicators related to outcomes will be broadly sub-divided into "crude" coverage (i.e. utilization rates) and effective coverage (i.e. treatment success).(37) For HIV, coverage indicators will include proportion of eligible patients on ART, diagnosis (e.g. case detection rate) and unsafe sex rates. Effective program coverage will include viral load suppression and ART retention rates.

Crude coverage estimates will simply be based on the ratio health system output counts and burden of disease estimates (see below). For example, patients on ART will be estimated using the methods described above, HIV prevalence will be estimated using separate methods, and the ratio of the two will be used to define ART coverage. Unsafe sex rates and testing coverage will be estimated directly from data sources displayed in Table 24. Direct estimates will be extracted at the local level and small area estimation models, together with covariates (see covariates section below), will be used to estimate a risk surface for the entire country. Case detection rates will be estimated by comparing final estimates of prevalence (see burden of disease section below) with observed counts from administrative data, corrected for data quality issues.

Table 24. Data sources for HIV outcomes

Indicator(s)	Country	Sources
Case detection	DRC, Guatemala and	HMIS Summary Tables (DRC: SNIS, Guatemala:
rate	Uganda	SIGSA)
Unsafe sex rate	DRC and Uganda	DHS (DRC: 2007, 2013-2014, Uganda: 1995,
		2000-2001, 2006, 2011, 2016)
	DRC	DRC Behavioral Surveillance Survey (2004-2005,
		2005-2006)
	DRC	MICS (2001, 2010)
	Uganda	AIS 2011, 2004-2005
HIV testing	Guatemala	ENSMI (2008-2009, 2014-2015)
coverage	Guatemala	Reproductive Health and Healthcare among Sex
		Workers in Escuintla, Guatemala (2008)
	Guatemala	Estudio TRaC (2012)
	Guatemala	VICITS Guatemala (2007-2015)

Effective coverage estimates will be defined as quality of the intervention, combined with utilization rates among individuals in need (37) and will utilize a variety of data sources. ART retention rates will be based on patient records from administrative data sources, used in combination with survey data and indirect methods based on incidence and mortality. Current MoH treatment strategies in Uganda include viral load (VL) measurement, and these will be used to estimate the proportion of ART patients who achieve successful viral suppression (see Table 25). However, viral load data in DRC and Guatemala is lacking. Given significant variation rates of virologic failure across a number of prior studies, we believe that this an area ripe for primary data collection. Below, we propose performing VL testing in both DRC and Guatemala to better understand rates of effective coverage in areas and populations supported by Global Fund activities. Predictive models and covariates may be used to measure the association between survey-based viral load suppression rates and retention rates from administrative data in order to inform out of sample predictions in areas where survey data are not available.

Table 25. Data sources for HIV effective coverage outcomes

Indicator(s)	Country	Sources
Viral load (by ART status)	Uganda	PHIA 2016
	Uganda	AIS 2011, 2004-2005
ART retention	DRC and Guatemala	Primary Data Collection
	Uganda	National Viral Load Dashboard
ART retention	DRC, Guatemala and	HMIS ART Registry (DRC: SNIS, Guatemala:
	Uganda	SIGSA)
	DRC	PNLS ART Registry
ART retention	DRC, Guatemala and	HMIS Summary Tables (DRC: SNIS, Guatemala:
(indirect	Uganda	SIGSA)
measurement)	DRC	PNLS Summary Tables

Similar to output measurements, outcomes will be disaggregated by sex and CD4 count at treatment initiation, conditional on data availability.

Covariates

A broad array of relevant covariates (correlates, determinants and risk factors of outputs, outcomes and burden of disease) will be developed. Covariates will primarily be used to aid the estimation of other indicators, but may also be of standalone descriptive interest as well as useful for describing the distribution of other indicators beyond just their geographic distribution. For HIV, socio-demographic covariates will include education, household wealth, lag-distributed income, population density, urbanicity and PBF activity (both existence and dates of PBF programming). Behavioral risk factors will include breastfeeding, sexual violence, women's agency and safe medical male circumcision. Health system covariates will include health care access, i.e. travel time based on road networks and settlements together with treatment-seeking (when possible) behavior contingent on data availability.

Data for the socio-demographic covariates and behavioral risk factors will primarily come from surveys and surveillance systems listed in Table 26. Using household wealth as an example, all surveys and surveillance systems that collect data about asset ownership and household type will be extracted in a systematic format and geo-located with the highest precision available in the data. Cross walking techniques developed as part of the Global Burden of Disease (GBD) Study will be applied to ensure consistency between data sources.(38) State-of-the-art small area estimation models will be applied to estimate a surface for the covariate, measuring how it varies at the local level.

Table 26. Data sources for HIV and TB covariates

Indicator(s)	Country	Sources	
Education	DRC and Uganda	DHS (DRC: 2007, 2013-2014, Uganda: 1995,	
	Dice and eganda	2000-2001, 2006, 2011, 2016)	
Household wealth	DRC	DRC Behavioral Surveillance Survey (2004-2005, 2005-2006)	
	DRC	MICS (2001, 2010)	
Breastfeeding	Uganda	AIS 2011, 2004-2005	
	Uganda	HDSS Awach, Iganga, Rakai	
Sexual violence	Guatemala	ENSMI (2008-2009, 2014-2015)	
747 ,	Guatemala	Reproductive Health and Healthcare among Sex	
Women's agency		Workers in Escuintla, Guatemala (2008)	
36.1	Guatemala	Estudio TRaC (2012)	
Male circumcision	Guatemala	VICITS Guatemala (2007-2015)	
Population	DRC, Uganda and	WorldPop(39)	
density	Guatemala		
Health care	DRC, Uganda and	Uchida 2009(40)	
access	Guatemala		
Urbanicity	DRC, Uganda and	Population density estimates	
	Guatemala		
PBF activity	DRC	Program reports	

Data for the health system access covariate will come from a hybrid of the survey-based methodology described above and publicly-available satellite and meteorological data using methodology defined by the Malaria Atlas Project (MAP).(41)

Burden of Disease

Key burden of disease metrics will be measured at the lowest possible sub-national level given the data. For HIV, these indicators will include prevalence, co-morbidity with TB (see TB Burden of Disease section below), mortality rate, case fatality, and mortality fraction (in Guatemala only).

To estimate prevalence, administrative data and antenatal care (ANC) surveillance data (sourced from UNAIDS Spectrum/EPP database(42)) will be supplemented with survey and active case detection data listed in Table 27. Survey-based prevalence will be combined with administrative/ANC counts of new and continuing patients. Prediction models will be used to estimate prevalence outside of survey and surveillance areas in order to correct administrative biases, using covariates to enhance predictive validity.

Table 27	Data sources	for	HIV	hurden	of disease
1 uvie 2/.	Dutu sources	IUI	$\Pi I V I$	vui aen	or aisease

Indicator(s)	Country	Sources	
	DRC, Guatemala and	HMIS Summary Tables (DRC: SNIS, Guatemala:	
	Uganda	SIGSA)	
	DRC	PNLS Summary Tables	
	DRC, Guatemala and Uganda	Spectrum/EPP ANC Surveillance Data	
Prevalence	Uganda	PHIA 2016	
	Uganda	AIS 2011, 2004-2005	
	Uganda	HDSS Awach, Iganga, Rakai	
	DRC	Primary Data Collection	
	DRC	ProVIC	
Mortality	Guatemala	Vital registration	

An epidemiological compartmental model will be used to estimate rates of transmission and mortality at the small-area level based on prevalence and treatment estimates described above. Differential equation models will be used to measure the rates of infection and mortality, following methodologies of Spectrum/EPP(43). Model estimates will be produced in a way that is consistent with established national-level prevalence estimates. (44) A diverging approach will be taken for Guatemala, since vital registration data in that country offers much more accurate metrics of mortality. Established techniques to account for known biases in death certificates will be applied.(45) A separate epidemiologic model may then be developed for Guatemala based on the methods developed by Dowdy 2014(46), which take advantage of stronger mortality data to estimate prevalence instead of the reverse. HIV mortality fractions (the proportion of all deaths attributable to HIV) will also be possible in Guatemala only, owing to the presence of vital registration. Where possible, indicators will be disaggregated by age and sex.

Proposed supplemental HIV primary data collection activities

Guatemala

In the case of Guatemala, we expect the General Health Information System (SIGSA) will provide a substantial amount of information useful for the impact evaluation, especially when supplemented with survey and surveillance data.

However, we have identified important data gaps. The most critical among the data gaps impel more detailed information about the cascade of care for HIV/AIDS. Although a recent study

conducted by HIVOS has some information on the coverage of interventions, we consider it necessary to capture primary information that allows us to asses lapses along the entire cascade of care, including diagnosis, ART coverage, and viral load as a measure of effective coverage.

At present, little is known about barriers to care and drivers of successful VL suppression in Guatemala. The most-cited published study on the topic comes from a single clinic in Guatemala City, and found that 24% of patients experienced virologic failure, but offers little explanation for determinants of virologic failure or linkage to care.(47) On the other hand, what is well established in Guatemala (see country information landscape section above) is the highly focalized nature of the HIV epidemic in key populations, and relatively rare occurrence in the general population.

Therefore, we propose a primary data collection exercise that focuses on better understanding all the pillars in the cascade of care (not restricting only to viral load) among individuals in four key populations: transgender women, MSM, TB patients and CSW (although CSW is now considered lower priority by other agencies). Partnering with local organizations, we aim to collect information from key populations in five priority departments: Guatemala, Escuintla, Suchitepéquez, Quetzaltenango, and Izabal. CIESAR has high credibility with the MoH throughout the country, which will be useful to establish contacts and work with key populations in alliance with local health facilities and NGOs dedicated to HIV. Additionally, CIESAR has a 20-year experience working in sexual and reproductive health, which has given the team exposure to diverse high-risk population groups, particularly in capacity building in Guatemala, Central America and the Caribbean.

Individuals at risk, both diagnosed and undiagnosed, will be enrolled on a voluntary basis through partnering organization. We plan to collect information about the participants' exposure to HIV diagnostic and treatment interventions, as well as information on potential barriers to care and socio-demographic information. Participants with unknown HIV status will undergo voluntary diagnostic testing (accompanied by pre- and post-test counseling), while those who report being HIV-positive and currently on ART will undergo viral load testing. Viral load testing will be performed using dry blood spot (DBS) technology, an approach with which our consortium has considerable experience.(48)

The study will be powered to measure VL suppression prevalence since earlier pillars of the HIV cascade of care will be measurable at that sample size or less. We estimate that in order to achieve VL suppression estimates at the department level with at least 95% confidence we will need to obtain a viable sample from a minimum of 280 patients. (49,50) In order to ensure that we meet the necessary sample size, we plan to sample approximately 300-350 patients in each of the five selected departments to account for inadequate, insufficient and lost samples.

In addition to obtaining blood specimens to measure viral load, we will also administer a short questionnaire to better understand barriers to linkage to care and determinants of virologic failure. Specifically, we will look at both supply and demand factors, including wait times, transportation, employment, stigma, medication availability and numerous other potential factors that could influence compliance with ART. This will be instrumental in understanding if current Global Fund programing is meeting the needs of clients on ART, and how the business model more broadly support patients on ART.

The study previously described is our preferred option. However, in the case that we are not able to identify an established partner(s) across a sufficient number of departments to support in

identification of key populations, an alternative option would be to implement facility-based VL testing akin to that described below for DRC. CEISAR has significant experience performing facility-based studies, and we would not require an external partner.

DRC

As of 2015, there were an estimated 426,000 people living with HIV in DRC. Among those, around 189,000 were on treatment. (38) As part of a UNAIDS initiated regional catch-up plan(51), the DRC aims to significantly increase the number of people on ART. However, providing ART in an effective manner requires daily dosing and regular monitoring of patients on ARVs. Providing inadequate ART can lead to inadequate viral load suppression, high rates of HIV transmission, and ultimately poor patient outcomes. Therefore, understanding the effectiveness of ART, and the associated barriers to ART services, is critical.

Although ART is a highly efficacious treatment, significant population-level variation exists. According to a 2015 CDC report(52), rates of viral load suppression among patient on ART varied considerably among seven sub-Saharan countries. Among those who received a VL test, rates of VL suppression varied from 94% in Uganda to 53% in Côte d'Ivoire. Furthermore, Uganda was the only country meeting the 90% viral load suppression target set by UNAIDS as part of the 90-90-90 strategy(53). At present, little is known about rates of VL suppression in DRC. The largest published study comes from 13 PHCs in Nord Kivu, one of the provinces outside the proposed provincial approach, and unique in its geopolitical and security situation. In that study, they found that 30-50% of patients experienced virologic failure (depending on assay technique), with nearly 15% demonstrating resistance mutations.(54)

In order to better understand ART effectiveness and the cascade of care in DRC, more information is needed. Given the availability of budget allocated to fill this data gap in DRC, the PCE could propose to assess viral load suppression and determinants of ART effectiveness through supplementary primary data collection efforts in four districts. The sampling frame for the proposed study would be derived from a list of facilities within each of the selected provinces. Facilities that provide ART would be selected using a two stage cluster random sampling strategy taking into account urban/rural characteristics and facility type (district hospital, PHC, etc.). Consecutive patients presenting for ART care at each of the selected facilities would be approached and, if consented, a blood sample would be obtained and a questionnaire completed. Due to logistic challenges associated with plasma testing, it would be required to use a previously validated VL assay.

We estimate that in order to achieve VL suppression estimates at the provincial level with at least 95% confidence we would need to obtain a viable sample from a minimum of 380 patients. (26) In order to ensure the necessary sample size, it would be important to sample approximately 400-450 patients in each of the selected provinces to account for inadequate, insufficient and lost samples.

In addition to obtaining blood specimens to measure viral load, a short questionnaire could be administered to better understand the determinants of virologic failure. Both supply- and demand-side factors should be investigated, including wait times, transportation, employment, stigma, medication availability and numerous other potential factors that could influence compliance with ART. This investigation would provide the data needed to understand if current Global Fund programing is meeting the needs of clients on ART, and how the business model more broadly support patients on ART. In the case that budget restrictions do not allow for collection of blood samples to measure viral load suppression, health facility surveys alone could

provide useful information. The PCE team proposes continued consultation with the TERG, TERG Secretariat, and CT regarding alternative primary data collection plans as we learn more about important information gaps during the next evaluation phase

Tuberculosis

Outputs

Health systems outputs for TB will primarily include patients on TB treatment.

Administrative data will be supplemented with supply chain data (Table 28) in each country to measure outputs using similar methods to HIV outputs. In DRC, parallel administrative information systems will be merged to ensure the most complete count, and multiple imputation will assist with incomplete records. As with HIV, stock-and-flow curves using supply chain data will be constructed to correct administrative bias. Because survey data on TB treatment coverage is limited, validation of TB outputs will be less extensive than HIV outputs.

Table 28. Data sources for TB outputs and outcomes

Indicator(s)	Country	Sources
Patients on treatment	DRC, Guatemala and Uganda	HMIS Summary Tables (DRC: SNIS, Guatemala: SIGSA)
	DRC	National TB Program Summary Tables
Case detection/RDT coverage	DRC, Guatemala and Uganda	HMIS TB Registry (DRC: SNIS, Guatemala: SIGSA)
	DRC	ENGAGE TB Program
Treatment completion	Uganda	SEARCH Collaboration
Drugs distributed	DRC, Uganda and Guatemala	National Distribution Systems (DRC: TBD, Uganda: National Medical Stores, Guatemala: TBD)
Treatment success	DRC, Guatemala and Uganda	HMIS TB Registry (DRC: SNIS, Guatemala: SIGSA)

Output indicators will be measured disaggregated by sex (wherever applicable), HIV status, latent vs active, and drug-resistance status, conditional on data availability.

Outcomes

Coverage indicators will primarily include the proportion of eligible patients on TB medication. Effective coverage will include TB patient smear-negative rates (at the end of treatment) and TB treatment completion rates.

Crude coverage estimates will simply be based on the ratio of TB patients on medication to estimates of TB incidence (see burden of disease section below). Case detection will be estimated

by comparing final estimates of incidence (see below) with observed counts from administrative data, corrected for data quality issues.

Effective coverage estimates of TB treatment completion rates will be based on patient records from administrative data sources, used in combination with indirect methods based on incidence, remission and mortality (Table 28). Bacteriologically confirmed treatment success will be based on available sputum smears in patient registries. Completeness of confirmatory testing at the end of TB treatment will be assessed. Diagnostic coverage (case detection, described above) and other facility correlates of confirmatory testing rates will be used to adjust for compositional bias.

Similar to output measurements, outcomes will be disaggregated by sex, HIV status and drugresistance status, conditional on data availability.

Covariates

Covariates for TB will focus largely on behavioral risk factors and environmental covariates, but will also include many of the socio-demographic covariates listed above for HIV. Behavioral risk factors will include alcohol consumption and tobacco consumption. Environmental risk factors will include indoor air pollution, outdoor air pollution, population density, urbanicity and PBF activity (both existence and dates of PBF programming).

Data for the socio-demographic covariates and behavioral risk factors will primarily come from the surveys and surveillance systems listed in Table 29. Data for environmental and population covariates will come from methodologies described elsewhere.(41)

Given the extensive comorbidity between TB and HIV, HIV prevalence (described above) will also be included a covariate for some indicators and models.

Burden of Disease

Key burden of disease metrics for TB will include activation/reactivation rates from latent TB, mortality rates, case fatality, and mortality fraction (in Guatemala only).

Administrative data will be supplemented with survey and surveillance data for activation rates. For TB, prevalence surveys and community-based surveillance systems will be used to directly measure latent prevalence or active prevalence, depending on the methodology of the data source. The rate of activation/reactivation from latent TB will be inferred from prevalence measurements using systematic reviews of relative risk stratified by skin test induration size, or systematic reviews of duration of symptoms. Survey-based TB incidence will then be combined with covariates and administrative counts of incidence, and prediction models will be used to estimate incidence outside of survey and surveillance areas in order to correct administrative biases.

Table 29. Data sources for TB burden of disease

Indicator(s)	Country	Sources

New cases /	DRC, Guatemala and Uganda	HMIS Summary Tables (DRC: SNIS, Guatemala: SIGSA)
Case fatality	DRC	National TB Program Summary Tables
	Guatemala	Vigilancia Epidemiologica de TB
	DRC	ENGAGE TB Program
	DRC	ProVIC
Latent prevalence	Uganda	Child TB Infection Study
	Uganda	SEARCH Collaboration
	Uganda	TB Surveillance Project
Active prevalence	Uganda	National TB Prevalence Survey
Mortality	Guatemala	Vital registration

Epidemiological compartmental models will be used to estimate rates of transmission and mortality at the small-area level based on incidence and treatment estimates described above, following Flaxman 2015(55). A diverging approach will be taken for Guatemala, since vital registration data in that country offers much more accurate metrics of mortality. Established techniques to account for known biases in death certificates will be applied.(45) A separate epidemiologic model may be developed for Guatemala based on the methods developed by Dowdy 2014(46), which take advantage of stronger mortality data to estimate prevalence instead of the reverse. Similarly, to HIV, TB mortality fractions will be possible in Guatemala only, owing to near-complete vital registration.

Where possible, indicators will be disaggregated by age and sex. TB activation/reactivation and mortality rates will be disaggregated by HIV status and drug-resistance status based on available data.

Malaria

For malaria, we will leverage work undertaken by the Malaria Atlas Project (MAP) that are produced annually as part of the Global Burden of Disease study. Intervention indicators are produced at the 5x5 km level for Insecticide-Treated Bed Net (ITN) coverage, IRS coverage, IPTp coverage, IPTi coverage and ACT coverage. Estimates of intervention coverage are based on models that triangulate data from surveys and distribution systems. Direct measures of key outputs (patients treated and bed nets distributed) will be used in comparison with model-based estimates by combining supply chain and administrative data, where available.

Burden of disease metrics for malaria will include incidence, prevalence (PfPR), entomological inoculation rate (transmission risk), mortality rates, case fatality and mortality fraction (in Guatemala only). Estimation of PfPR relies on prevalence surveys and covariates, following methodology defined by Bhatt et al. 2015(56). Briefly, this entails a Bayesian analytical framework that combines ACT, ITN, and IRS coverage estimates (see above) with point estimates of prevalence and environmental, socio-demographic and behavioral covariate surfaces to estimate a spatio-temporal "cube" of age-structured PfPR. Entomological inoculation

rates, the number of infective bites an individual is expected to endure annually, will be estimated based on entomological surveillance data and an established population dynamic model(57), following methods defined by Smith et al. 2011(58). Estimates related to mortality (mortality rates and case fatality) will be estimated based on survey data, efficacy estimates and modeled relationships between clinical incidence, PfPR and treatment coverage, following methods defined by Gething et al. 2016.(59)

Table 30. Estimates of key indicators for malaria

Indicator(s)	Country	Sources
ITN coverage	DRC, Uganda and Guatemala	Bhatt 2015(60)
IRS coverage	DRC, Uganda and Guatemala	Brady 2015(61)
ACT coverage	DRC, Uganda and Guatemala	Bhatt 2015(56)
IPTp coverage	DRC, Uganda and Guatemala	Van Eijk 2011(62)
Treatment- seeking	DRC, Uganda and Guatemala	Battle 2016(63)
ACT efficacy	DRC, Uganda and Guatemala	WorldWide Antimalarial Resistance Network(64)
RDTs performed	DRC, Uganda and Guatemala	HMIS Summary Tables (DRC: SNIS, Guatemala: SIGSA)

Table 31. Data sources for malaria outputs

Indicator(s)	Country	Sources
Patients treated Bed nets	DRC, Guatemala and Uganda	HMIS Summary Tables (DRC: SNIS, Guatemala: SIGSA)
Drugs distributed	DRC, Uganda and Guatemala	National Distribution Systems (DRC: TBD, Uganda: National Medical Stores, Guatemala: TBD)
Bed nets	DRC, Uganda and	National Distribution Systems (DRC: TBD,
distributed	Guatemala	Uganda: TBD, Guatemala: TBD)

6.4 Health Management Information System Performance Assessment

A supplementary analysis will assess the strengths and weaknesses of health management information systems (HMIS) in each country and progress in improving their performance. We will develop an innovative performance assessment system that harmonizes established guidelines for evaluating surveillance systems(65) with methods and expertise of our team in performance assessment for civil registration and vital statistics(66). The performance assessment will be catered to each country's HMIS, including parallel systems such as PNLS in DRC, or additional systems such as vital registration in Guatemala, to produce an analysis that is both relevant and comparable. This will enable us to track the quality of HMIS across multiple dimensions over time. Global Fund investments in health system strengthening, especially investments dedicated to HMIS, will be aligned with HMIS performance assessments in order to

monitor the contribution of these investments. The contribution of the Global Fund to changes in HMIS performance will be assessed using primarily qualitative approaches.

6.5 Impact Evaluation

While the resource tracking and output/outcome/burden of disease approaches (above) will measure the spatial-temporal distribution of each step along the impact chain, impact evaluation techniques will measure the linkages between them. Our general approach to impact evaluation is based on a quasi-experimental methodology that is grounded in geospatial analysis and disease models for translating changes in program outputs into changes in disease outcomes.

Briefly, we will measure the intensity of Global Fund-supported activities throughout the country (see Resource Tracking section above), measure the spatial distribution of outputs and health outcomes (see Output, Outcome and Burden of Disease Measurement section above), and quantify the "dose-response" relationship between them. Results may be demonstrated in a number of ways, including graphical visualization, narrative discussion and counterfactual analysis, where appropriate. This general approach may be supplemented by more targeted outcome and impact assessments that will leverage both existing data and, potentially, targeted primary data collection. This work builds on our consortium's leading role in the GBD and extensive experience in impact evaluation methods and applications across HIV, tuberculosis (TB), malaria, as well as other areas. We describe below in more detail our approach for outcome and impact assessment for each program area.

Linkages between Inputs and Outputs/Outcomes

A combination of time series approaches and geospatial analyses will measure the relationship between Global Fund investments and program outputs/outcomes. National-level analyses will take advantage of greater completeness in measurements of total health expenditure in order to track Global Fund investment as a fraction of domestic and other health spending. Subnational analyses will leverage more detailed local-level trends in Global Fund investment, but may be limited by available data on total health expenditure. The combination of the two approaches will yield a more complete picture of Global Fund impact.

At the national level, a time series of Global Fund disbursement and expenditures will be constructed along each dimension of SHA 2011 and expressed as a fraction of total health expenditure by disease. Global Fund input fractions will be tracked by the most detailed possible cost categories so that they can be directly related to health system outputs and indicators of "crude" coverage. Analytical techniques such as interrupted time series regression with change-point detection will be used to correlate changes in inputs with corresponding changes in outputs. These analytical techniques are particularly suited to take advantage of the discontinuities between previous Global Fund grants, as an exogenous change in inputs would be expected to coincide (with appropriate time-lags) with an acceleration or deceleration of outputs and outcomes.

At the subnational level, the time series of Global Fund disbursement and expenditure will again be constructed along the SHA 2011 dimensions. Parallel analytical techniques will be pursued, assuming a sufficient level of detail is available. Under the circumstance that a subnational time series of total health expenditure (by disease and cost category) cannot be constructed, Global Fund investment will not be expressed as a fraction of total health expenditure, and instead a more descriptive approach will be undertaken to correlate Global Fund investments with

changes in outputs and outcomes. This will serve to complement both the national-level impact evaluation approach as well as process evaluation approaches in describing the allocation of resources. Under the circumstance that subnational data on total health expenditure are available, even partially, the spatial-temporal relationship between relative Global Fund investment intensity and local outputs and outcomes will be measured using analytical techniques that allow for incomplete input measurement.

Linkages between Outputs and Outcomes

Geospatial analyses will primarily be used to translate changes in program outputs to outcomes such as "crude" coverage and effective coverage. As described above, we will measure both outputs and outcomes with the highest possible spatial resolution, in some cases using primary data we propose collecting as part of the PCE. Spatial covariates will be employed to control for known confounding factors. The spatial correlation between outputs and outcomes will characterize impact at this stage in the results chain.

As small area estimates of outcome measures will largely be estimated at a higher spatial resolution than small area estimates of outputs, all estimates will be aggregated to a common denominator, limited by resolution of the data. Estimates will then be aligned both in space and time, as well as according to type of indicator (i.e. ART outputs will be correlated with ART outcomes and viral load suppression, condom distribution outputs will be correlated with unsafe sex rates etc.). Multilevel regression techniques will be used, with appropriate time lags, to measure the correlation between the estimates.

Linkages between Outputs/Outcomes and Burden of Disease

A combination of epidemiologic compartmental models and geospatial analyses will be used to measure the final linkage in the impact chain: between outputs/outcomes and burden of disease.

As noted above, some of the burden of disease metrics will be estimated as the result of a transmission model, which incorporates treatment coverage, incidence and prevalence in order to measure transmission rates and mortality rates. Inherent to fitting such a model is quantification of burden of disease by treatment status. As such, the impact of ART, ACT and TB treatment coverage/effective coverage will be quantified as part of the burden of disease estimation process.

The impact of other outcome indicators such as preventive interventions will be quantified separately. Interventions such as bed net usage and unsafe sex rates may be measured as standalone indicators and not involved in the epidemiologic compartmental models. For these types of outcome indicators, geospatial correlation analysis similar to those described in the previous section will be employed.

Linkages between outputs/outcomes and burden of disease metrics will take advantage of the numerous pairwise combinations of relevant indicators within these broad categories. For example, the impact of "crude" ART coverage will be estimated with HIV prevalence, but will also be estimated with HIV mortality. Likewise, the impact of effective ART coverage (successful viral load suppression) will also be estimated against HIV prevalence and HIV mortality. In this way, further detail about the final linkage in the results chain can be revealed for greater insight into impact.

6.6. Value for Money Assessment

Value for money (VfM) assessments within the PCE will cover a diverse but complementary set of activities that will include applying a VfM "lens" to each of the PCE components. Multiple PCE components will be interpreted together to cover VfM areas such as efficiency, effectiveness and equity.

In short, we will assess the extent to which Global Fund resources are being spent economically. We will assess efficiency of investments and implementation by exploring operational challenges and the degree to which resources are allocated in accordance with need. We will assess effectiveness of investments and implementation using impact evaluation methods, and we will assess equity by analyzing data across a range of socio-economic indicators.

Operational and Productive Efficiency

The findings from the process evaluation will speak to key bottlenecks and challenges in the grant application process. By exploring the root causes of problems that delay or otherwise burden grant development and grant-making, process evaluation will offer insight into the operational efficiency of Global Fund and its associated processes and elements at the global and country level. For example, VfM questions would include:

- What are the barriers and facilitators to achieving outputs and outcomes?
- Does the CCM enable a more efficient implementation of Global Fund resources?
- Does the new grant making process lead to a set of evidence-based investments that maximize impact?

Methods to answer these questions will, in part, rely on primarily qualitative methods described in the section on process evaluation. We aim to better understand both the efficiency of decision-making processes at the CCM level, as well as the degree to which cost-effectiveness is considered during resource allocation and intervention determination discussions.

Results from the resource tracking study and linkages between inputs and outputs will complement the process evaluation in assessing productive efficiency. Comparisons between interventions, specifically the linkage between resources dedicated to specific interventions, and the associated change in outputs will be made to assess how efficiently resources are translating into outputs relative to other cost categories in Global Fund grants. We will triangulate these findings with process evaluation findings about bottlenecks and root causes to gain more multifaceted insight into this aspect of VfM.

Allocative Efficiency

A key question for Global Fund grants is whether Global Fund and non-Global Fund resources are being allocated towards those areas of the highest need (i.e. disease burden) within a country, and towards effective/cost-effective interventions in order to maximize potential impact. Geospatial estimates of resource tracking and outcome and impact assessments (described above) naturally lend themselves towards assessing allocative efficiency, and will be complemented by aspects of the process evaluation.

First, the mix of interventions funded through Global Fund grants will be analyzed descriptively in comparison with the current coverage of outcomes in each country. For example, output and outcome measurement will be used to highlight gaps in the HIV continuum of care, and the

resource tracking study will be examined through that lens to assess whether those gaps are proportionately reflected in budgets.

In addition, we will assess whether allocation of resources is proportional to geographical needs. For this, the estimated spatial distribution of burden of disease and outcome coverage (described above) will be compared with the geographic location of financial flows described in the resource tracking study.

These results will again be triangulated with process evaluation findings, in this case findings surrounding the grant development process and decision-making related to allocation of resources. Through the more qualitative methods described in the process evaluation section above, a richness of information will be gathered about how allocation decisions are reached within each country's context. These will be compared with findings about the degree to which resource allocation aligns with need to offer a deeper understanding of how allocation decisions are reached and why.

Technical Efficiency and Effectiveness

A combination of other analyses will be used to triangulate an assessment of technical efficiency. The absorption analyses (described above) will be used to describe the efficiency by which disbursement is translated into expenditure by cost category. This will include an evaluation of the time lags and relative ease of absorption between diseases and between health functions within diseases. Analysis of absorption will be enhanced by qualitative data from the process evaluation regarding the mechanisms by which absorption is achieved.

The first linkage of the impact evaluation (see Impact Evaluation section above) will add further detail about technical efficiency, by describing the rate by which inputs are translated into their most immediate outputs. In other words, we will measure the spatial-temporal correlation between investment intensity (measured in the resource tracking study) and health system outputs. Through this analysis, another aspect of technical efficiency will be explored both in terms of how it varies between cost categories (health functions), but also how it may vary geographically around each country.

As part of the disease modeling process, the effectiveness by which outputs and outcomes generate improved health will be measured for each of the key treatment and prevention indicators such as ART coverage. This measurement will be inherent to each burden of disease model and will essentially describe the rate of treatment success. In this way, another component of technical efficiency will be assessed: the translation of outcomes into changes in burden of disease.

Taken together, especially in combination with a richness of information gained through process evaluation, multiple aspects of technical efficiency can be addressed. The PCE will not have the capacity to assess the technical efficiency of Global Fund more holistically however, nor to present it the form of an efficiency frontier relative to other organizations, as it often done in economic evaluations.

Equity

In addition to examining efficiency, the process evaluation, resource tracking and outcome and impact assessments will be utilized to assess equity.

At the national level, small area estimates can be summarized according to their spread and variance around the country. Some indicators may be found to be more evenly distributed than others are; as such, we will assess the extent to which resources are allocated in alignment with those equity considerations. Similar to above, process evaluation results will serve to compliment resource tracking findings in order to add a depth of information about how equity is incorporated into the allocation decision-making process.

In addition to exploring allocation through the lens of geographic equity, we will assess equity by leveraging spatial covariates such as household wealth and other demographic and socioeconomic indicators (see Covariates section above), as well as gender-disaggregated small area estimates. Small area estimates of outcomes and burden of disease will be summarized across the spectrum of socio-economic covariates to describe their spread in non-geographic terms as well. These results alone will aid to describe the equity of the distribution of disease burden. In addition, however, by comparing these measures of dispersion with resource tracking data about the mix of Global Fund-funded interventions, we will assess the extent to which resources are apportioned equitably.

Chapter 7 Evaluation Phase Work Plan

The following high-level work plan outlines the timing of key activities and major deliverables for the evaluation phase of the PCE.

Sep Oct Nov D	Evi	Mar Apaluation P		2018 in Jul A	ug Sep C	oct Nov	Dec Jan	Feb Mai	Apr Ma	2019 By Jun Ju		Oct Nov [Dec Jan Feb Mar
Sep Oct Nov D	Evi	aluation P		ın Jul A	ug Sep C	oct Nov	Dec Jar	Feb Mai	Apr Ma	y Jun Ju	Aug Se	Oct Nov [Dec Jan Feb Mar
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	Eva	aluation P	hase 1										
		Ev	Evaluation P	Evaluation Phase 1	Evaluation Phase 1	Evaluation Phase 1	Evaluation Phase 1	Evaluation Phase 1	Evaluation Phase 1	Evaluation Phase 1	Evaluation Phase 1	Evaluation Phase 1	Evaluation Phase 1

The following table outlines the timing of key activities and projected milestones for the first six months of the PCE Evaluation Phase.

Milestones and activities	Oct	Nov	Dec	Jan	Feb	Mar
Data permissions /data access/ capacity building						
 Complete IRB procedures and ethical approval process for secondary data Complete procedures for access to HMIS/ PNLS (DRC) /SIGSA (GTM) GEP will develop capacity building training materials and schedule 1-week trips to work with Guatemala and DRC CEPs on qualitative data collection and resource tracking capacity building. Topics covered will include: analyzing observation data, identifying data gaps, building KII topic guides, interview techniques and practice, qualitative data management and analysis, and partnership survey guidance. Orientation on resource tracking and quantitative data seeking/management Begin resource tracking data collection: Request budget, disbursement, expenditure data from PRs, SRs, MoH, MoF, LFA Conduct KIIs with Ministry of Finance and Ministry of Health/ request total health expenditure data Conduct KIIs with PRs and SRs/ request subnational budget and expenditure data Request access to key survey/surveillance data: UGA: PHIA, AIS 2004, National TB Prevalence Survey, Childhood TB Infection Study, TB Surveillance Project, SEARCH baseline survey, HDSS (Awach, Iganga, Rakai), and others GTM: TRaC Study, VICITS Study, Epidemiological Surveillance for TB (and HIV and malaria if different than SIGSA), and others DRC: ProVIC, ENGAGE TB, PEPFAR/PMI program surveys, and others All: Supply chain/distribution data for ART, ACT, TB medication, bed nets, condoms 						
 PATH will develop tools and question bank for grant application and grant making KIIs. Review question bank with CEPs at September TERG meeting. PATH will develop tools for global KIIs (to be informed by early country-level findings) PATH will introduce CEPs to Dedoose qualitative analysis software CEPs should become familiar with the cross-country thematic areas, and country-specific questions to be evaluated related to the application and grant-making process. CEPs will continue to focus on process tracking of the application and grant-making process through observation and document review. CEPs will identify gaps in observation and document review data, developing Key Informant Interview (KII) topic guides based on the PCE question bank developed by PATH, fact-checking interviews, and planning qualitative data collection/scheduling interviews with key informants. GEPs will agree on thematic areas for cross-country synthesis of process evaluation findings. 						

Stakeholder and global KIIs/partnership survey, and data analysis			Ī
• CEPs will focus on conducting KIIs*, including module for partnership survey (as needed), to fill identified data gaps. * The number of KIIs will depend on the CEPs' assessment of which stakeholders should be interviewed based on their knowledge of the stakeholder landscape, overlap across disease areas, and based on their assessment of the gaps in observational data. We expect that more than 30 KIIs would be challenging and that a range closer to 15-20 would be reasonable both logistically and from a data management and analysis perspective.			
 In coordination with other GEPs, implement global KIIs on grant application/making in Geneva. PATH to support CEPs in continued analysis of qualitative data, identification of key issues, and starting to outline root cause analysis (RCA) diagrams. 			
PATH to conduct/support network analyses of partnership study data RCA/data analysis and recommendations workshop			4
RCA/data analysis and recommendations workshop			
Finalize stakeholder KIIs.			
• GEP will schedule 1.5-2 week long trips to support Guatemala, DRC, and Uganda CEPs (or schedule a joint multi-country analysis workshop in Seattle). Week 1 will include analyzing qualitative data and partnership survey data, developing RCA diagrams, and synthesizing findings. In week 2, PATH will support CEPs with hosting a preliminary findings presentation and recommendations workshop with stakeholders*. * Timing of the country visit and stakeholder workshop in December or January will need to take into account holiday schedules and stakeholder availability.			
• CEPs will host a preliminary findings presentation and recommendations workshop with stakeholders to solicit input on findings and co-develop recommendations.			
Data analysis, visualization, and interpretation			
 PATH will begin developing routine data dashboards in Tableau software IHME to lead resource tracking analyses and interpretation of results with CEP IHME to lead outcome/burden of disease initial analysis and interpretation of results of early malaria outcome/burden of disease small area estimates CEPs and IHME to present initial resource tracking study results during workshop with stakeholders to solicit input on findings and co-develop recommendations. CEPs and IHME to present initial outcome/burden of disease results during workshop with stakeholders to solicit input on findings and co-develop recommendations. 			
CEPs prepare presentations on preliminary findings for February TERG.			

Primary data collection preparation (DRC and GTM)				
Complete IRB procedures and ethical approval process				
Identify sources for sampling frames				
Estimate sample sizes				
Draft specific objectives				
Begin development of work plan				
Draft country report				
GEP and CEPs will draft annual country reports				
• CEPs prepare presentations on preliminary findings for February TERG.				
Country report (due in Feb) and present findings at February TERG				
• GEP and CEP representatives will attend the February TERG in Geneva, present preliminary findings, and participate in cross-consortia synthesis report discussions/planning.			⋄	
Based on feedback from February TERG presentations, finalize country report.				
Cross-country synthesis report (due in March) and regular process evaluation activities				
• At a cross-consortia synthesis meeting in December, GEPs will discuss initial cross-country findings and develop a synthesis report outline. GEPs write and refine assign				
GEPs write assigned portions of synthesis report and review full report				<mark>♦</mark>
CEPs review/provide input on cross-country synthesis report.				
• CEPs continue with process evaluation activities, focusing on key evaluation themes for the grant implementation stage.				
• Develop evaluation work plan for April – September 2018 tied to the implementation roll out of new grants.				

References

- 1. Uganda Bureau of Statistics. National Service Delivery Survey 2015 Report [Internet]. Kampala, Uganda: UBoS; 2016 [cited 2017 Aug 4]. Available from:
- http://www.ubos.org/onlinefiles/uploads/ubos/pdf%20documents/2015%20NSDS%20report.pdf
- 2. Uganda Ministry of Health. Concept Note on Health Systems Strengthening. Kampala, Uganda: UMoH;
- 3. Uganda Ministry of Health, ICF International, Centers for Disease Control and Prevention, US Agency for International Development, World Health Organization. AIDS Indicator Survey 2011. Kampala, Uganda; 2012 Aug.
- 4. Uganda Population-Based HIV Impact Assessment. UGANDA POPULATION-BASED HIV IMPACT ASSESSMENT. AFRO WHO. 2017;1–4.
- 5. UN AIDS. UGANDA 2016. 2017 [cited 2017 Dec 15]; Available from: http://www.unaids.org/en/regionscountries/countries/uganda
- 6. World Health Organization. Global Tuberculosis Report 2013. Geneva, Switzerland: WHO; 2015.
- 7. Uganda Ministry of Health. The Uganda Malaria Reduction Strategic Plan 2014-2020. Kampala, Uganda: UMoH; 2014 May.
- 8. Uganda Ministry of Health, ICF International, Centers for Disease Control and Prevention, US Agency for International Development, World Health Organization. Uganda Demographic Health Survey 2011. Kampala, Uganda; 2012 Aug.
- 9. Uganda AIDS Commission. A Case for more Strategic and Increased Investment in HIV/AIDS Program for Uganda 2015- 2025. Kampala, Uganda; 2014 May.
- 10. Uganda AIDS Commission. National AIDS Spending Assessment: Uganda 2008/9 2009/10. Kampala, Uganda; 2012 Jun.
- 11. Zikusooka CM, Tumwine M, Tutembe P, Consult H. Financing for HIV, AIDS, TB and malaria in Uganda: An equity analysis [Internet]. Regional network for equity in health in east and southern Africa (EQUINET); 2009. Available from:
- https://www.researchgate.net/profile/Charlotte_Zikusooka/publication/237807453_Financing_for_HIV_AIDS_TB_and_malaria_in_Uganda_An_equity_analysis/links/00463531234cc5c3fa000000.pd f
- 12. Nabyonga J. Economic burden of Malaria in Uganda, unpublished study report. Kampala, Uganda: Ministry of Health of Uganda and WHO/Uganda Country Office; 2005.
- 13. National Registry of Persons (RENAP). Guatemala City, Guatemala: Guatemala Judicial Department; 2016.
- 14. de Guatemala G. Caracterizacion Estadistica, Republica de Guatemala 2012. Guatemala; 2013.
- 15. World Bank. World Bank Open Data [Internet]. [cited 2017 Aug 4]. Available from: http://data.worldbank.org/
- 16. Ministry of Public Health and Social Assistance, Government of Guatemala. Strategic Plan 2014-2019. Guatemala City, Guatemala: Ministry of Public Health and Social Assistance, Government of Guatemala; 2014.

- 17. La Forgia GM, Mintz P, Cerezo C. Is the perfect the enemy of the good? A case study on large-scale contracting for basic health services in rural Guatemala. World Bank Work Pap. 2005;57:9.
- 18. USAID, Health, Finance and Governance. Analysis of the Health System in Guatemala 2015 [Internet]. Abt Associates Inc.; 2015 Aug [cited 2017 Aug 4]. Available from: http://pdf.usaid.gov/pdf_docs/PAooKW5C.pdf
- 19. PEPFAR. FY 2016 Regional Operational Plan: Central America Region. Strategic Direction Summary. [Internet]. PEPFAR; 2016 Jun [cited 2017 Aug 4]. Available from: https://www.pepfar.gov/documents/organization/257655.pdf
- 20. UNAIDS, Ministry of Public Health and Social Assistance, Government of Guatemala, PAHO. HIV National Strategic Plan, 2017-2019. 2015.
- 21. UNAIDS. PEOPLE LIVING WITH HIV WHO HAVE SURPRESSED VIRAL LOADS (%) LATIN AMERICA. [cited 2017 Dec 15]; Available from: http://aidsinfo.unaids.org/
- 22. PAHO, World Health Organization. Mission Report on Visit to Guatemala to Evaluate MDR Tuberculosis; Nov-Dec 2016. WHO; 2016.
- 23. National Center of Epidemiology, National TB Program, MoH. TB Surveillance Report. 2015 May.
- 24. The Global Fund. Funding Request Submissions & Status [Internet]. Available from: https://www.theglobalfund.org/en/applying/funding/submissions/
- 25. Global Fund Office of the Inspector General. Audit Report: Global Fund Grants to the Democratic Republic of the Congo. The Global Fund; 2016.
- 26. UN AIDS. DEMOCRATIC REPUBLIC OF THE CONGO 2016. [cited 2017 Dec 15]; Available from: http://www.unaids.org/en/regionscountries/countries/democraticrepublicofthecongo
- 27. World Health Organization. World Malaria Report 2015 [Internet]. WHO; 2016. Available from: https://books.google.com/books?hl=en&lr=&id=rg4LDgAAQBAJ&oi=fnd&pg=PP1&dq=who+world+malaria+report+2016&ots=XSgASVNZEz&sig=TTnpTueJY4DSAqZkoqGc5PJlJa4
- 28. USAID. USAID DRC Health Fact Sheet [Internet]. 2016. Available from: https://www.usaid.gov/democratic-republic-congo/fact-sheets/usaiddrc-fact-sheet-health
- 29. World Health Organization, The Global Fund, Soins de Sante Primaire en Milieu Rural. Rapport sur les comptes de la santé RDC 2014. République Démocratique du Congo Ministère de la Santé Publique; 2016 Oct.
- 30. Gavi Full Country Evaluations team. Gavi Full Country Evaluations: 2016 Annual Dissemination Report. Cross-Country Findings. Seattle, USA: Institute for Health Metrics and Evaluation; 2017.
- 31. Institute for Health Metrics and Evaluation. Financing Global Health Visualization [Internet]. Seattle, USA: IHME, University of Washington; 2017. Available from: http://vizhub.healthdata.org/fgh/
- 32. Institute for Health Metrics and Evaluation. Health Service Provision in Uganda: Assessing Facility Capacity, Costs of Care, and Patient Perspectives. Seattle, USA: IHME, University of Washington; 2014.
- 33. Dieleman JL, Graves CM, Hanlon M. The fungibility of health aid: reconsidering the reconsidered. J Dev Stud. 2013;49(12):1755–1762.

- 34. Flaxman AD, Fullman N, Otten Jr MW, Menon M, Cibulskis RE, Ng M, et al. Rapid scaling up of insecticide-treated bed net coverage in Africa and its relationship with development assistance for health: a systematic synthesis of supply, distribution, and household survey data. PLoS Med. 2010;7(8):e1000328.
- 35. Ahoua L, Guenther G, Pinoges L, Anguzu P, Chaix M-L, Le Tiec C, et al. Risk factors for virological failure and subtherapeutic antiretroviral drug concentrations in HIV-positive adults treated in rural northwestern Uganda. BMC Infect Dis. 2009;9(1):81.
- 36. Chang LW, Alamo S, Guma S, Christopher J, Suntoke T, Omasete R, et al. Two year virologic outcomes of an alternative AIDS care model: evaluation of a peer health worker and nurse-staffed community-based program in Uganda. J Acquir Immune Defic Syndr 1999. 2009;50(3):276.
- 37. Shengelia B, Tandon A, Adams OB, Murray CJ. Access, utilization, quality, and effective coverage: an integrated conceptual framework and measurement strategy. Soc Sci Med. 2005;61(1):97–109.
- 38. Kassebaum NJ, Arora M, Barber RM, Bhutta ZA, Brown J, Carter A, et al. Global, regional, and national disability-adjusted life-years (DALYs) for 315 diseases and injuries and healthy life expectancy (HALE), 1990-2015: a systematic analysis for the Global Burden of Disease Study 2015. The Lancet. 2016;388(10053):1603.
- 39. Lloyd CT, Sorichetta A, Tatem AJ. High resolution global gridded data for use in population studies. Sci Data. 2017;4:170001.
- 40. Uchida H, Nelson A. Agglomeration index: towards a new measure of urban concentration. 2009; Available from: https://openknowledge.worldbank.org/handle/10986/9039
- 41. Hay SI, Snow RW. The Malaria Atlas Project: developing global maps of malaria risk. PLoS Med. 2006;3(12):e473.
- 42. UNAIDS. Spectrum/EPP HIV Estimates [Internet]. 2015. Available from: http://www.unaids.org/en/dataanalysis/datatools/spectrumepp
- 43. Brown T, Bao L, Raftery AE, Salomon JA, Baggaley RF, Stover J, et al. Modelling HIV epidemics in the antiretroviral era: the UNAIDS Estimation and Projection package 2009. Sex Transm Infect. 2010;86(Suppl 2):ii3–ii10.
- 44. GBD 2015 HIV Collaborators. Estimates of global, regional, and national incidence, prevalence, and mortality of HIV, 1980–2015: the Global Burden of Disease Study 2015. The Lancet. 2017 Aug;3(8):361–87.
- 45. Naghavi M, Makela S, Foreman K, O'Brien J, Pourmalek F, Lozano R. Algorithms for enhancing public health utility of national causes-of-death data. Popul Health Metr. 2010;8(1):9.
- 46. Dowdy DW, Golub JE, Saraceni V, Moulton LH, Cavalcante SC, Cohn S, et al. Impact of isoniazid preventive therapy for HIV-infected adults in Rio de Janeiro, Brazil: an epidemiological model. J Acquir Immune Defic Syndr 1999. 2014;66(5):552.
- 47. Campbell JI, Ruano AL, Samayoa B, Estrado Muy DL, Arathoon E, Young B. Adherence to antiretroviral therapy in an urban, free-care HIV clinic in Guatemala City, Guatemala. J Int Assoc Physicians AIDS Care. 2010;9(6):390–395.
- 48. Duber HC, Roberts DA, Ikilezi G, Fullman N, Gasasira A, Gakidou E, et al. Evaluating facility-based antiretroviral therapy programme effectiveness: a pilot study comparing viral load suppression and retention rates. Trop Med Int Health. 2016;21(6):750–758.

- 49. Piñeirúa A, Sierra-Madero J, Cahn P, Guevara Palmero RN, Martínez Buitrago E, Young B, et al. The HIV care continuum in Latin America: challenges and opportunities. Lancet Infect Dis. 2015 Jul 1;15(7):833–9.
- 50. Naing L, Winn T, Rusli BN. Practical issues in calculating the sample size for prevalence studies. Arch Orofac Sci. 2006;1:9–14.
- 51. UNAIDS. DRC HIV and AIDS Estimates [Internet]. 2015. Available from: http://www.unaids.org/en/regionscountries/countries/democraticrepublicofthecongo
- 52. Scale-up of HIV Viral Load Monitoring Seven Sub-Saharan African Countries [Internet]. [cited 2017 Sep 1]. Available from: https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6446a3.htm#Tab1
- 53. 90–90–90 An ambitious treatment target to help end the AIDS epidemic | UNAIDS [Internet]. [cited 2017 Sep 1]. Available from: http://www.unaids.org/en/resources/documents/2017/90-90-90
- 54. Boillot F, Serrano L, Muwonga J, Kabuayi JP, Kambale A, Mutaka F, et al. Implementation and Operational Research: Programmatic Feasibility of Dried Blood Spots for the Virological Follow-up of Patients on Antiretroviral Treatment in Nord Kivu, Democratic Republic of the Congo. J Acquir Immune Defic Syndr 1999. 2016 Jan 1;71(1):e9-15.
- 55. Flaxman AD, Vos DT, Murray CJ. An integrative metaregression framework for descriptive epidemiology. University of Washington Press; 2015.
- 56. Bhatt S, Weiss DJ, Cameron E, Bisanzio D, Mappin B, Dalrymple U, et al. The effect of malaria control on Plasmodium falciparum in Africa between 2000 and 2015. Nature. 2015;526(7572):207–211.
- 57. Ross R. The prevention of malaria [Internet]. John Murray; London; 1911. Available from: http://krishikosh.egranth.ac.in/bitstream/1/2047440/1/404.pdf
- 58. Smith DL, Dushoff J, Snow RW, Hay SI. The entomological inoculation rate and Plasmodium falciparum infection in African children. Nature. 2005;438(7067):492.
- 59. Gething PW, Casey DC, Weiss DJ, Bisanzio D, Bhatt S, Cameron E, et al. Mapping Plasmodium falciparum mortality in Africa between 1990 and 2015. N Engl J Med. 2016;375(25):2435–2445.
- 60. Bhatt S, Weiss DJ, Mappin B, Dalrymple U, Cameron E, Bisanzio D, et al. Coverage and system efficiencies of insecticide-treated nets in Africa from 2000 to 2017. Elife. 2015;4:e09672.
- 61. Brady OJ, Godfray HCJ, Tatem AJ, Gething PW, Cohen JM, McKenzie FE, et al. Adult vector control, mosquito ecology and malaria transmission. Int Health. 2015;7(2):121–129.
- 62. van Eijk AM, Hill J, Alegana VA, Kirui V, Gething PW, ter Kuile FO, et al. Coverage of malaria protection in pregnant women in sub-Saharan Africa: a synthesis and analysis of national survey data. Lancet Infect Dis. 2011;11(3):190–207.
- 63. Battle KE, Bisanzio D, Gibson HS, Bhatt S, Cameron E, Weiss DJ, et al. Treatment-seeking rates in malaria endemic countries. Malar J. 2016;15(1):20.
- 64. DP TWARNW, Group S. The effect of dosing regimens on the antimalarial efficacy of dihydroartemisinin-piperaquine: a pooled analysis of individual patient data. PLoS Med [Internet]. 2013;10(12). Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3848996/
- 65. German RR, Lee LM, Horan J, Milstein R, Pertowski C, Waller M, et al. Updated guidelines for evaluating public health surveillance systems. MMWR Recomm Rep [Internet]. 2001;50(1–35).

 $Available\ from:\ http://www.columbia.edu/itc/hs/pubhealth/p8475/readings/cdc-updated-guidelines.pdf$

66. Phillips DE, Lozano R, Naghavi M, Atkinson C, Gonzalez-Medina D, Mikkelsen L, et al. A composite metric for assessing data on mortality and causes of death: the vital statistics performance index. Popul Health Metr. 2014;12(1):14.

Appendix A. PCE guides and tools

A.1 Stakeholder consultations guide

Meeting/Event Name:	Date: [dd-mm-yyyy]
Location/Level: [name city or town and district as well as setting: institution, facility, and indicate 'National' or Sub-national' Level]	Time length: [minutes, hours]
In attendance: [List Name/affiliation of key persons, to the extent possible]	Notes written by: [List primary and secondary authors of CEP Team]
Purpose/Agenda of the meeting: [Provide bulleted list]	

Talking points for explaining the PCE to stakeholders:

1. What is the PCE?

- The PCE is an independent evaluation of the Global Fund. The PCE will evaluate the Global Fund's business model and its investments.
- The goal of the PCE is to generate evidence on program development, implementation, and impact to (1) accelerate achievement of Global Fund strategic objectives, and (2) facilitate continuous improvement of program development, implementation, and quality.
- The PCE will use a range of both qualitative and quantitative methods to answer the evaluation questions.

2. How is the PCE being conducted?

- Eight countries were selected by the Global Fund's Technical Evaluation Reference Group (TERG) for the PCE: Cambodia, Guatemala, Mozambique, Myanmar, Senegal, Uganda, the Democratic Republic of Congo (DRC), and Sudan. Three global-level evaluation partners are supporting a country evaluation partner (CEP) in each country. IHME/PATH, in partnership with CEPs are conducting the PCE in Guatemala, Uganda, and DRC.
- The PCE is prospective, meaning it will evaluate Global Fund activities and policies in real time starting in 2017 and ending in 2019.
- Between now and September 2017, in each country the evaluation priorities are being identified through consultations with Global Fund stakeholders in countries and the specific evaluation approaches are being developed. A country stakeholder workshop is planned for __(insert date) _ to finalize the evaluation priorities and specific evaluation questions.

3. How is the PCE different from other Global Fund evaluations?

- The PCE is a *learning platform* that goes deeper than a thematic review and broader than an ordinary evaluation.
- It will be conducted in close collaboration with country stakeholders to ensure that the findings are useful and actionable to inform their day-to-day work.

- It is an opportunity to explore what is working (or not) in more detail, and to understand why.
- Because it is prospective, the PCE offers dynamic, continuous learning and problem solving.

 Describe your role at this organization and in relation to the Global Fund. Follow-up points to probe further: How specifically do you interface with the implementation of Global Fund investments? 	Introductions	
	1. Describe your role at this organization and	 How specifically do you interface with the implementation of Global Fund

PCE Evaluator: Restate that the purpose of the meeting is to collect perspectives from different Global Fund stakeholders on what priority areas they would like the PCE to explore and what kinds of evaluation questions would be most relevant for the country.

The suggested questions in each of the topic areas below are intended to solicit information on the challenges and bottlenecks that may inform the development of PCE evaluation priorities and evaluation questions. The guide may be adapted, as appropriate, for the different types of stakeholders that will be consulted.

Topic Area 1 Disease-specific challenges	
What are the key bottlenecks in reducing the burden of disease for HIV, TB, malaria in _(country)_?	 Follow-up points to probe further: Ask about what's working well / what is not working well. Do you know why it is working well or not working well? Is it an area that needs further research? In relation to reducing the disease burden, how well are these areas addressed: Population coverage and equity, key and vulnerable populations, human rights and gender considerations? Resource mobilization, sustainability and transition?

	Resilient and sustainable health systems?
Tonic Area a Implementation of Clobal Fund or	ranta
Topic Area 2 Implementation of Global Fund gr	
a. Can you tell us about the development and implementation of Global Fund grants in (country), including strengths and weaknesses?	 Note: this is not limited to grant implementation, but also includes application and grant-making processes. Follow-up points to probe further: Ask about what's working well / what is not working well. Do you know why it is working well or not working well? Is it an area that needs further research? Have past or current evaluations already explored these issues or not?

b. Can you tell us what about Global Fund's approach to investing in combating HIV, TB, and malaria has worked well and what has not worked well?

Note: explain that the PCE is interested in what drives successful implementation of GF investments, therefore understanding key processes is important.

Related to the following processes, probe further on what has worked well / not worked well:

- Coordination mechanisms among key stakeholders
- Application process
- Grant implementation (including grant management and administrative processes)

Related to the following aspects of the Global Fund model, probe further on what has worked well / not worked well:

- CCM
- Partnerships
- Country ownership

Topic Area 3 Existing evaluations

c. Are you aware of any Global Fund-specific evaluations that are already underway or will be conducted in country?

Note: the point is to understand if plans already exist to investigate any of the challenges or bottlenecks raised by the stakeholder.

Collect relevant details on any evaluation activities such as:

- Who is conducting the evaluation?
- What is the research objective / or evaluation questions under review?
- Timeline?

Probe further on any evaluations in the 3 disease areas (HIV, TB, malaria) that are not Global Fund-specific.

PCE Evaluator: At the end of the conversation, summarize the potential evaluation topics that were discussed and ask the stakeholder to prioritize the top 2-3 topics that they would recommend for further investigation.

Topic Area 4 Evaluation priorities

Based on our discussion, what do you think are the top 2-3 topics that require further investigation when it comes to Global Fund investments, and should therefore be prioritized by the PCE?

Follow-up points to probe further (if stakeholder doesn't have a response to the question):

Do you know challenges that lack adequate evidence to support changes in Global Fund policy and/or implementation approaches?

Where are there gaps in data and knowledge of program performance?

Criteria for developing PCE evaluation questions

	SMART Criteria
S	Specific: is this question clearly defined?
	- Is it clear and focused enough?
	- Is it answerable?
M	Measurable: can we measure that which we need to answer this question?
	- Do we have data on hand to answer this question?
	 If yes, do we have easy access to this data?
	 If not, do we have secondary data to answer this question?
	 If no, can we easily collect data to answer this question?
	- Within the PCE, can we apply the methods needed to answer this question?
	O What methods do we need to apply to the data to answer this question?
A	Actionable: does this question exist within a context that is amenable to change?
	- Will answering this question generate information/recommendations that will help improve
	program implementation and impact of Global Fund grants? How?
	- What actions would be taken based on potential answers to this question?
R	Relevant: is there value in answering this question?
	- Does this question help Global Fund and country stakeholders respond to existing needs
	related to improving program implementation and quality?
	 Does it help to generate learning lessons that can improve the Global Fund model?
	Is it relevant to the country context?
	- Does this question relate to Global Fund strategic objectives (i.e., impact, transition, and
	COE; resilient and sustainable systems for health; human rights and gender; resource
	mobilization)
	- Is this a question that's been answered or that is currently being answered through a
	different process?
T	Time-bound: within what timeframe do we need this question answered?
	- What is the desired timeframe to answer the question? Does it align with the PCE timeline?
	- Are there time-bound policy windows or specific opportunities to take action that should be
	considered? Will the results be available in time?
E	Energy/ enthusiasm: is there strong stakeholder buy-in?
	- Is there enthusiasm around answering this question among stakeholders?
	- Which stakeholders have shown interest in the question?
	- Does the question already connect to work that is underway?

Evaluation questions

	Theme / high- level evaluatio n topic	Specific evaluatio n questions	Measure (Method s & data source)	Actionabl e	Relevant (Connectio n to the ToC)	Time- bound (Urgency)	Energy/ enthusiasm (Stakeholde r buy-in)
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

A.3 Evaluation workshop objectives guide

Evaluation Workshop Objectives

Before the workshop

Primary Objective

1. Understand what are the major priorities of country-level stakeholders and what evaluation questions they would like us to answer

Secondary Objectives

- 1. Identify, meet and form relationships with key stakeholders related to Global Fund grant applications and Global Fund grant implementation
- 2. Explain to key stakeholders what the PCE is in general
- 3. Invite key stakeholders to the workshop
- 4. Create a preliminary list of the major evaluation priorities of stakeholders
- 5. Become familiar with Global Fund policies and previous evaluations/audits that they have done

During the workshop

Primary Objectives

- 1. Finalize a list of the major evaluation priorities of the country-level stakeholders
 - a. Generate discussion among stakeholders about each other's priorities.
- 2. Obtain buy-in from stakeholders on the list of evaluation priorities

Secondary Objectives

- 1. Introduce stakeholders to each other (if necessary)
- 2. Explain (again) what the PCE is and why it is useful
 - a. Explain some of the PCE methods
 - b. Explain what the Theory of Change is and how it will be used
 - c. Obtain feedback from stakeholders on what aspects of the Theory of Change are most relevant and applicable to Global Fund grant implementation

Guidance on identifying evaluation priorities and questions

Remind stakeholders of the PCE goals and objectives

- 1. The goal of the PCE is to generate evidence on program implementation and impact to (1) accelerate achievement of Global Fund strategic objectives, and (2) facilitate continuous improvement of program implementation and quality.
- 2. The PCE is an opportunity to generate evidence on bottlenecks that affect the quality of program implementation, and make recommendations to improve Global Fund policies and procedures on a global scale.
- 3. The PCE will use a range of both qualitative and quantitative methods to answer the evaluation questions.

What should stakeholders consider when thinking about evaluation priorities?

- 1. How well are the Global Fund strategic objectives being met?
- 2. What challenges impede program performance?

- 3. Is progress lagging in the achievement of any one particular Global Fund strategic objective and could therefore benefit from in-depth evaluation?
- 4. Global Fund strategic objectives for 2017-2022 are:
 - a. Maximize impact against HIV, TB, and malaria
 - b. Build resilient and sustainable systems for health
 - c. Promote and protect human rights and gender equality
 - d. Mobilize increased resources
- 5. Are there challenges that are well known to stakeholders but lack the adequate evidence to support changes in Global Fund policy and/or implementation approaches?

Where are there gaps in data and knowledge of program performance

A.4 PCE document review & iLearn tracking

	Priority for review
List of Global Fund iLearn Modules for review https://www.theglobalfund.org/en/ilearn/	1 = High
nttps://www.tnegrobantand.org/en/nearn/	2 = Medium
	3 = Low
Grant Application and Implementation	
1. Understanding the differentiated funding application process	1
2. Understanding sustainability and transition	1 (Guatemala)
3. Understanding co-financing	2
4. Engage! Practical tips to ensure the new funding model delivers the impact communities need	3
5. Achieving inclusive country dialogue	3
6. Eligibility requirements for country coordinating mechanisms	3
7. Understanding program split	2
8. Understanding modular approach	2
9. Understanding the programmatic gap table and funding landscape table	3
10 Understanding the performance framework and budget	3
11. Understanding the funding request review process	1
12. An introduction to the grant-making process	1
13. Understanding implementation arrangement mapping	2
14. Understanding technical cooperation	2
15. Global Fund's policy on reprogramming during grant implementation	3
16. Global Fund's grant extensions policy	3
17. Global Fund's policy on grant closures	3
Disease and Health Systems	
1. HIV overview	3
2. HIV prevention	3
3. Malaria overview	3

4. Malaria control	3
5. TB overview	3
6. TB prevention and control	3
7. Health system strengthening module 1 (GF approach to HSS)	2
8. Health system strengthening module 2 (M&E tools)	3
9. Health system strengthening module 3 (grant allocation)	1
7. Health system strengthening module 4 (WHO building blocks)	3
8. Health system strengthening module 5 (MNCHN)	3
9. Health system strengthening module 6 (community systems)	2
10. Health system strengthening module 7 (GF initiatives & partnerships)	3
CCM Orientation Program	
1. Introduction	3
2. The Global Fund basics	1
3. CCM basics	1
4. CCM governance	2
5. CCM structure	2
6. Funding process	2
7. CCM oversight	2
8. CCM member effectiveness	3
9. Module for executive committee members	3
10. Module for oversight committee members	3
11. Human rights	3
12. Gender	3
13. Key populations	3
14. Community systems and responses	3
15. Resilient and sustainable systems for health	3
16. Climate change and health	3
Webinars	
1. Introduction to the differentiated funding application process	1

2. Funding application materials	1
3. Allocations and catalytic investments	
4. The Global Fund policy on sustainability, transition, and co-financing	3
5. CCM eligibility requirements	3
6. Challenging operating environments	1 (DRC)
7. Building resilient and sustainable systems for health	2
8. Human rights, gender, key populations and community systems in the funding request	2

Global Fund global documents for CEPs to review Files o-7, listed below include the document packet shared by Global Fund "Other global documents" have been identified by PATH & IHME	
	3 = Low
o. Global Fund and TERG	
READ FIRST Overview Training Materials	1
Global Fund Brochure - Final 2016	2
Global Fund Organigram	3
List of TERG Thematic Reviews by Year	3
One Page - How GF Works graph	1
Useful links	3
TERG Governance documents	
TERG ToRs 2016	3
TERG SOPs Updated Sept 2015	3
1. Access to Funding Processes	
Funding Model 2017 - 2019 Cycle	1
Links	1
2. Grant Management operations	
Access to Funding (A2F), Grant Making and Approval Operational Policy Note (OPN)	1

3. CCMs	
Core Projected Transitions 2016 List	3
Important CCM Requirements Guidelines	1
Publication Key Populations Case Study	2
4. Supply Chain	
Procurement Supply Management	3
5. Program Finance	
Links and training	2
6. M&E and Measuring Results for Impact	
Approach to Monitoring and Evaluation	2
Funding Model Modular Framework Handbook	3
M&E Plan Guidelines	3
Strategic Information Priorities 2017	2
Lins to visit M&E	2
7. LFAs	
LFA Role for External Stakeholders	1
OTHER Global Documents	
Global Fund Strategy 2017-2022	1
Funding Model Applicant Handbook	1
Operational Policy Manual	2
Funding Model 2017 Cycle FAQ	2
Challenging Operating Environment Policy	1 (DRC)
	1 = High
Documents for CEPs to collect, review, and load to Basecamp	2 = Medium

3 = Low

Cateogry	Document		
Stakeholder and Partner Preliminary stakeholder list		1	
Mapping	Preliminary partnership list	1	
	Funding requests, by disease or policy	1	
	Performance frameworks	3	
	Grant agreements	1	
	M&E plan	3	
Current Grants	Application "core documents"	1	
Current Grants	Activity timelines	3	
	List of principle and sub-recipients, by award	1	
	Meeting minutes of CCM, technical working groups (as appropriate)	3	
	Progress reports	2	
	LFA reports	2	
	Activity timelines	1	
	List of funding requests submitted and in the works	1	
Funding Requests in	Meeting minutes	1	
Development	Draft funding request	1	
	Draft performance framework	1	
	Draft M&E plan	1	
	Inventory of surveys	1	
Data Landscaping	Inventory of other health data, including HMIS	1	
	Inventory of resource tracking data sources	1	
	National strategic plan (NSP), by disease	1	
Country Context	Disease-specific strategies for HIV, TB, and malaria	1	
	National M&E strategy (if applicable)	1	
	National HMIS strategy (if exists)	1	

Audits of Global Fund programs	1
Evaluations and assessments of NSP, Global Fund programs, health system, etc.	1

A.5 Process evaluation observation tool

Meeting/Event Name:	Date: [dd-mm-yyyy]
Location/Level: [name city or town and district as well as setting: institution, facility, and indicate 'National' or Sub-national' Level]	Time length: [minutes, hours]
Purpose/Agenda of the meeting: [Provide bulleted list]	Notes written by: [List primary and secondary authors of CEP Team]
In attendance: [List Name/affiliation of key persons, including UNZA team members, to the extent possible]	Apologies: [List key persons expected to attend but didn't, if known]

Topic Area 5 [Enter Description e.g., Opening remarks, Discussion of Findings, Q&A]			
Observations:	Non-verbal Behaviors/Reactions:		
[Summarize with sufficient detail, statements and opinions given, and core activities carried out and meeting highlights: WHAT was said/done, WHO said/did it (provide name and affiliation if possible)	• [Provide observations about behaviours and reactions that relate to the Observations in the left column. These include qualitative description of reactions to specific statements or activities listed in left column and observations about the overall "feel" of meeting.		
Demarcate Direct Quotes from descriptive text using quotation marks (" ") and paragraph indentation. For example:	 Aim to clearly link observations on the left to those in this column as in the example below using the arrow. 		
The group did not agree on the next steps and an argument ensued. The ministry official, Mr. David said, "The proposed strategy has several short comings, which are the followingtext text text text text text text"	The EPI Program Director shook her head when hearing this. Two people got up and left the room.]		

CEP Team Impressions:

[After compiling notes in above columns, Document your impressions of the meeting and specific observations, including

- Questions/uncertainties that require clarification through fact-check interviews or discussion with CEP partners
- Potential implications and possible consequences (intended or unintended) of what was observed
- Issues/topics that would be good candidates for further investigation in targeted study with KIIs, FGDs, AARs.]

[Copy table above and Paste below to add new numbered Topic Areas...]

(See additional table on next page]

Action Points [WHAT are the follow up actions? WHO will do it? By WHEN?]

Please consider whether and how the following are addressed in the meeting discussions.

- **Changes to planned activities**: describe below the reason for any changes to activities, timing of activities, or assigned roles as a result of the meeting. Be sure to also update the comprehensive implementation plan (Gantt chart) to reflect these changes.
- **Decision-making process**: What key decisions were made? How were they reached? How would you characterize the mode of decision-making (e.g. emergency action, routine procedures, analysis-centered, elite corps, conflict management, collaborative learning see the observation guide for definitions of these)? What was the level of consensus about the issue? What was the level of consensus about the solution?
- Links to other streams of Global Fund support: Note any discussion about processes, issues, challenges or connections made to other streams of Global Fund support.
- Global Fund partnership: note observations related to the functioning of the Global Fund partnership in this meeting. Who was present? Which organizations did they represent? Were any individuals or organizations notably absent? Who were the influential participants, what were the levels of agreement or discord between partners? Was notable agreement or discord observed around any particular issues or domains? Who led the meeting? Were any other roles or responsibilities defined? Also: look for body language and listen for tone of voice. Do some partners seem to have better/more trusting relationships than others?
- **Stakeholder input to evaluation plan:** List below any issues or topics mentioned by stakeholders during or after the meeting as of interest to include as key questions for the ongoing process evaluation.
- Concerns or Action Items to share with Global Evaluation Team: As a result of your observation of the meeting, are there any key concerns or action items which need to be discussed and addressed by the Global Evaluation Team?

A.6 Stakeholder and process mapping template

Global Fund PCE stakeholder mapping

Inception phase 2017

Entity/Organization	Person	Title	Role in relation to GF funding/activities	Contact details	Phone numbers
Entity/Organization	reison	Title	runumg/activities	Contact details	r none numbers
Country Coordinating Mechanism (CCM)					
Principal Recipients, HIV/AIDS					
Sub-Recipients, HIV/AIDS					
Principal Recipients, Tuberculosis					
Sub-Recipients, Tuberculosis					
Principal Recipients, Malaria					
Sub-Recipients, Malaria					

LFA			
Ministry of Health departments (e.g., national disease programs, Health Management Info System)			
Others ministry departments or relevant bodies (e.g., epidemiological monitoring system)			
Technical working groups by disease			
Technical partners (e.g., PAHO, USAID/PEPFAR, USAID/PMI, UNAIDS, National AIDS Commission, etc.)			

Global Fund PCE process mapping

Inception phase 2017

Process mapping	Stakeholders organizations/entities involved

			Global Fund			Recip	oients	Ministry o	Ministry of Health			Technical Partners						
	Key steps in the Global Fund process	Key relevant dates	ССМ	LFA	СТ	TRP	PRs	SRs	Disease program	HMIS	CNE	Other?	TWG	OMS	UNAIDS	USAID	UNICEF	Oth
1																		
2																		
4																		
3																		
5																		
6																		
7																		
8																		
9																		
10								_										

A.7 PCE Meeting tracker

	NAME OF MEETI NG OR EVENT (Point of contact)	LOCATI	SCHED ULE DATE	DATE OF OCCURR ENCE	PCE TEAM ATTEND ED?	PCE OBSER VER	NOTES UPLOA DED	MINUTE S REQUES TED (note the date requeste d)	MINUT ES UPLOA DED
1.									
2									
3									
4									
5									
6									
7									
8						_			
9									

A.8 Data sources inventory template

Data Title	Institution	Data Collection				Data			Contains HIV/TB/Malaria Information (1=Yes)				
		Start Date	End Date	Geographic Coverage	Spatial Resolution	Туре	Availability	Description	Incidence / Prevalence	Treatment Coverage	Preventive Coverage	Other	

Prospective Country Evaluations (PCE)

Information brief

What is the **PCE**?

The PCE is a process for continuous **learning** and quality **improvement** in the Global Fund. The PCE will assess issues in applying for and using Global Fund resources **from the country's perspective**, and will generate evidence to help the Global Fund do a better job to end AIDS, TB and Malaria. The "Investing to End Epidemics" Strategy defined by the Global Fund's Board will be a main focus of the PCE.

The PCE is independent and prospective, meaning it will evaluate Global Fund activities and policies impartially and in real time. The PCE started in 2017 and will end in February 2020.

What types of **questions** will we explore?

- What impact has the Global Fund had on AIDS, TB, and Malaria?
- What are the country level experiences in applying for funding?
- Are Global Fund investments reducing human rights and gender-related barriers to HIV, TB and malaria services?
- How does the Global Fund enable or impede health system strengthening?
- How well are key populations defined and addressed through Global Fund investments?
- How does the Challenging Operating Environment policy support relevant countries?
- How does the Sustainability, Transition and Co-financing policy help prepare countries for transition?
- How efficiently are programmes and their activities implemented?
- How effectively do partnerships work at the country level?

In addition to the above topic areas, PCE researchers will also seek country input on their major evaluation priorities and questions.

How is it **different** from other Global Fund evaluations?

The PCE goes **deeper** than a thematic review and **broader** than an ordinary evaluation. It is an opportunity to explore what's working (or not) in more detail, and to understand why. The PCE aims to assess the whole Global Fund impact chain, from grant application to implementation using the best tools for the purpose. In doing so, the PCE will identify and

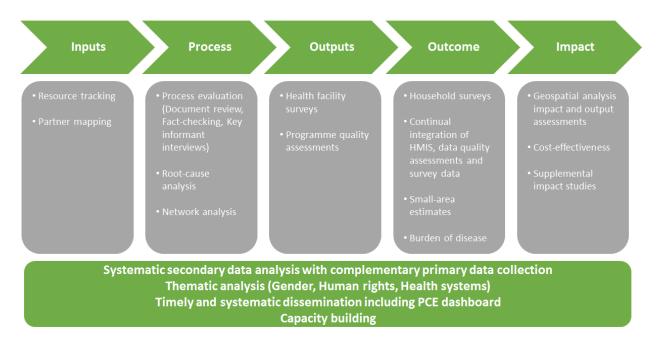
disseminate best practices to improve the Global Fund model. Because it's prospective and **country-focused** the PCE offers dynamic, continuous learning and problem solving.

Who is involved in the PCE?

Eight countries were selected by the Global Fund's Technical Evaluation Reference Group for PCE: Cambodia, Democratic Republic of Congo (DRC), Guatemala, Mozambique, Myanmar, Senegal, Sudan and Uganda. Three global-level evaluation partners are supporting an evaluation partner within each country: IHME/PATH (DRC, Guatemala and Uganda), Johns Hopkins University (Mozambique and Senegal) and Euro Health Group (Cambodia, Myanmar and Sudan). IHME/PATH is working with the following country evaluation partners:

- DRC: PATH Country Office in DRC
- Guatemala: Centro de Investigación Epidemiológica en Salud Sexual y Reproductiva (CIESAR)
- Uganda: Infectious Diseases Research Collaboration (IDRC)

How will the PCE happen?



We will use mixed qualitative and quantitative methods to explore the above questions. Specific approaches like partnership studies, root-cause analysis and geospatial analysis will be used to triangulate the answers to multiple questions at a time from different perspectives. Evaluation goals will be driven by the **priorities of country stakeholders** through an inclusive, prospective learning process.