GLOBAL FUND PROSPECTIVE COUNTRY EVALUATION

RESOURCE TRACKING STUDY FOR MALARIA

SUBMITED BY: HEALTHNET CONSULT

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List of Acronyms

ACTs	Artemisinin-Based Combination Therapy
BMGF	Bill and Melinda Gates Foundation
CAO	Chief Administrative Officer
CBO	Community Based Organisation
CDC	Centers for Disease Control and Prevention
CFO	Chief Financial Officer
CHAI	Clinton Health Access Initiative
DFID	Department For International Development
DHO	District Health Office
FA	Financing Agent
FBO	Faith Based Organisation
FY	Financial Year
GF	Global Fund
GoU	Government of Uganda
HF	Health Facility
IEC	Information, Education and Communication
HR	Human Resource
HSS	Health System Strengthening
ICHA	International Classification of Health Accounts
IHAT	International Health Accounts Team
ITNs	Insecticide Treated Nets
IRS	Indoor Residual Spraying
IPTp	Intermittent Preventive Treatment in Pregnant women
KII	Key Informant Interview
LLINs	Long-Lasting Insecticide-Treated Nets
M&E	Monitoring and Evaluation
MAAM	Mass Action Against Malaria
MAPD	Malaria Action Plan for Districts
MOFPED	Ministry of Finance, Planning and Economic Development
MOH	Ministry of Health
NHA	National Health Accounts
NFM	New Funding Model
NGO	Non-Government Organisation
NHE	National Health Expenditure
NMCP	National Malaria Control Program
NMS	National Medical Stores
NU-HITES	Northern Uganda - Health Intergration to Enhance Services
OOP	Out of Pocket
PACE	Program for Accessible Health, Communication and Education
PCE	Prospective Country Evaluation
PHC	Primary Health Care
PMI	United States President's Malaria Initiative
PNFP	Private Not-for-Profit
RHITES	Regional Health Intergration to Enhance Services
SHA	System of Health Accounts
TASO	The AIDS Support Organisation
THE	Total Health Expenditure
UCMB	Uganda Catholic Medical Bureau
UKAID	United Kingdom AID
UNICEF	United Nations Children's Fund
UPMB	Uganda Protestant Medical Bureau
USAID	United States Agency for International Development
WHO	World Health Organisation

Executive Summary

Executive Summary

Malaria remains a major cause of morbidity and mortality in Uganda with enormous effects on economic productivity of the country. Resources from various development partners and Government of Uganda have greatly contributed to curbing the malaria epidemic and to promoting implementation of interventions for malaria prevention and treatment. Even with the big gains, the declining pattern in development assistance for health and competing priorities for domestic resources require countries to rely more on evidence to make resource allocation decisions. This is critical in the era of GF's New Funding Model (NFM) which emphasizes that strategic investments should be on grounded in evidence to ensure that the GF does better in achieving highest possible effectiveness. Resource tracking exercises / tools are important because they make the generation of valuable information on the flow of funds from the source to the beneficiaries possible. The present study had two broad objectives: firstly, to compile and document the malaria financing landscape in Uganda for three financial years i.e. 2015/16, 2016/17 and 2017/18 at national level. Secondly, the study aimed to *undertake a malaria expenditure analysis at sub-national level* while highlighting bottlenecks in the flow of funds using case studies from 6 districts.

Methods

A resource mapping methodology was employed using the System of Health Accounts (SHA) 2011 framework (Figure 1) for the financial mapping. This approach covers the mapping of both financial and non-financial (commodity and equipment) resources for the malaria program. The approach also restricts itself to collecting information from all known sources of funding, managers (financing agents) of these funds as well as providers of services using the funds (service providers). Using the SHA framework, the following questions on health care financing can be answered: How much is being spent on malaria? Who is paying? Who manages the available resources? What services and products are purchased?

Findings for financial mapping for malaria activities at National level

To estimate the total envelope of malaria funds the following resources were summed up: (a) the measured resources from development partners, plus, Government of Uganda's expenditure on medicines and other direct costs to the malaria program, plus Government of Uganda's expenditure on salaried labor and the proportion of Primary Health Care (PHC) funds spent on malaria at sub national level. In other words, the total resource envelope comprises:

> *Total resource envelope* = Development partner funds + GoU funds (direct contribution at national level) + GoU funds (PHC proportion for malaria and % salaried labor attributed to malaria).

The total resource envelope for malaria was UGX 388.7 billion (US $112.9 million) in FY 2015/16, UGX 727.2 billion (US $206.1 million) in the FY 2016/17, and UGX 419.7 million (US $114.7 million) in FY 2017/18. We note a remarkable 87% increment in the resource envelope in the financial year 2016/17 and this is attributed to the fact that the Global fund made large procurements of ACTs and artesunate. As a result of these large investments, malaria cases went down by 33%[1] in the FY 2017/18 and this partly explains the 42% decrement in the resource envelope in that year. Global Fund provided the biggest contribution to the malaria resource envelope for the period under assessment; providing a total of UGX 510.1 billion for the three years i.e. UGX 55.1 billion in 2015/16 (14.4%), UGX 376.7 billion in 2016/17 (52.1%) and 78.3 billion in 2017/18 (18.9%). Looking at the individual years, we note that the partners' proportional contribution every single year varies for

[1] National Malaria Control Program: Mid-Term Review of the National Malaria Strategic Plan 2018

instance in FY 2015/16, the largest financial contributor to the malaria program was GOU providing 31.0% of the resource envelope. In 2016/17, Global Fund was the leading contributor providing 52.1% of the available resources that year. In 2017/18, USAID was the biggest contributor to the malaria program providing 29.2% of the resource envelope.

GOU has made significant contributions to the malaria program; providing UGX 118.42 billion (31.0%) in 2015/16, UGX 125.5 billion (17.3%) in 2016/17, and 89.2 billion (21.6%) in 2017/18. DFID also made significant contributions to the malaria program; providing UGX 108.14 billion (%) in 2015/16, UGX 91.7 billion (%) in 2016/17, and 120.4 billion (%) in 2017/18. Approximately 3% of the total resource envelope, in the three years under assessment, was contributed by UNITAD, UNICEF and the China government.

In a resource tracking, in addition to mapping the sources of funds, it is important to understand the entities that manage and make resource allocation decisions for these funds. We found that the bulk of the funds (over 75% of total funding) in the period under assessment were managed by development partners, which include Global Fund, DFID, USAID and UNICEF. Ministry of Health (MOH) also managed a considerable amount (24% of total funds in 2015/16, 13% in 2016/17 and 14% in 2015/16). NMS; given the critical role they play in the procurement and supply chain management also managed a considerable share (7%) of the resource envelope for the period under assessment.

In a resource tracking, we also seek to get an understanding of who is providing malaria-related services. We found that the majority of service provision is done by NGO entities whose services accounted for 62%, 33%, and 54% of total resource envelop in 2015/16, 2016/17 and 2017/18, respectively. These entities include: Malaria consortium, TASO (which is a Global Fund principal recipient), MAPD, Abt Associates, Pilgrim, etc. Services provided by public entities such as NMS, MOH, NMCP, public health facilities at district level and District Health Offices accounted for 35%, 65%, and 39% of the total resource envelop in 2015/16, 2016/17 and 2017/18 respectively.

Lastly, a resource tracking answers the question: what are the funds spent on? With regards to categorization of malaria resources by program area, we note that the biggest proportion of the funds was spent on malaria treatment (accounting for 16%, 45% and 24% of total malaria funding in 2015/16, 2016/17 and 2017/18 respectively) and this is expected due to the large investment in the procurement of ACTs. Program management also accounts for a substantial amount of the resources (accounting for 28%, 15% and 20% of total malaria funding in 2015/16, 2016/17 and 2017/18, respectively) and this is largely because it includes GOU's indirect cost on HR and Utilities costs.

Findings for assessment of flow of funds for malaria activities at sub national level

To address this study objective, six districts were selected for case studies. The main focus of the analysis at district level was to conduct a malaria expenditure analysis, as well as to comprehensively assess for bottlenecks in the flow of funds from national to sub-national level. From the 6 districts, the three most common bottlenecks were found to be: (a) no funds specifically earmarked for malaria (b) Inability to tease out malaria-specific expenditures (c) delays in the release of funds. With regards to support from development partners, the most common bottlenecks highlighted were: (a) unpredictability of the funds and therefore these funds are usually not budgeted or planned for, and (b) late communication to alert recipients of the release of funds and this delays implementation of activities.

Due to the integrated nature of service delivery at the sub-national and the lack of earmarked malaria-specific resources, it was not possible to conduct a meaningful expenditure analysis at the sub-national level. The team was only able to get PHC non-wage disbursements made to the districts as well as to the health facilities, however, it was impossible to tease out how much of these funds were spent on malaria specific activities.

Background and objectives

1.0 Introduction

1.1 Background

Malaria remains a major cause of morbidity and mortality in Uganda with enormous effects on economic productivity of the country. Resources from the Global Fund (GF) have greatly contributed to curbing the malaria epidemic and promoting the implementation of interventions for malaria prevention and treatment in Uganda and other countries[2]. These resources will remain critical in sustaining the reduction in malaria specific morbidity and mortality as we move towards malaria pre-elimination and eventually the elimination stages. Even with the big gains, the declining pattern in development assistance for health and competing priorities for domestic resources require countries to rely more on evidence to make resource allocation decisions. This is critical in the era of GF's New Funding Model (NFM) which emphasizes that strategic investments should be on grounded in evidence to ensure that the GF does better in achieving highest possible effectiveness.

This study which is part (a sub-component) of the Global Fund Prospective Country Evaluation (PCE); a process for continuous learning and quality improvement in the Global Fund. It focusses on tracking all resources for malaria, with the view to gain an understanding of the contribution of Global Fund, as well as other sources of funds. Robust, regular and systematic tracking of resources for malaria are critical in informing efforts for sustainable scale up for malaria activities in countries supported by GF.

1.2 Financing of Malaria in Uganda

Malaria remains a leading cause of morbidity and mortality in Uganda. This high burden has been associated with immense health, social and economic impacts. With about 93% of the population being at the risk of infection, malaria has led to decreased long-term economic growth, and thus exacerbating poverty in the country[3]. This has led to intensified efforts by both government and development partners, aimed at scaling up prevention and treatment efforts to support the implementation of National Malaria Strategic Plan 2016 aimed at moving the country to the elimination phase. The president recently launched the Mass Action Against Malaria (MAAM) strategy as a demonstration of political commitment towards malaria elimination. While various stakeholders have come on board to address the burden of malaria, achieving the ambitious target of elimination will require coordination to ensure that all available resources are put to effective use. As such, there is need to identify which stakeholders are involved in the malaria response and how the country can effectively mobilize and utilizes available resources.

Although Uganda has made progress in scaling up malaria prevention and control measures, it faces significant resource constraints to financing all the prevention and treatment interventions to the desired scale. The resource inadequacy is in spite of the fact that malaria is a major expenditure component for both donor and domestic funds. While financial information on resource flows for malaria remains generally weak and poorly documented, Uganda's most recent National Health Accounts (NHA) 2018 was able to show disease-based expenditure allocation. From the NHA, malaria receives the second largest share of total public health expenditure (12% in 2015/16) in

[2] Yan, I., Korenromp, E., & Bendavid, E. (2015). Mortality changes after grants from the Global Fund to Fight AIDS, tuberculosis and malaria: an econometric analysis from 1995 to 2010. *BMC Public Health*, *15*, 977.
[3] Orem, J. N., Kirigia, J. M., Azairwe, R., Kasirye, I., & Walker, O. (2012). Impact of malaria morbidity on gross domestic product in Uganda. International Archives of Medicine, 5, 12.

Uganda only after HIV/AIDS (18.5% in 2015/16)[4]. Given the importance of financial information in decision making, there is need to routinely conduct resource tracking exercises for malaria, to understand what resources are available and how they have been used.

The role of external resources to financing malaria has been ever so dominant especially with the dawn of GF and other donors such as Presidential Malaria Initiative (PMI). Between 2000 and 2011, there was an 18-fold increase globally in financing of malaria mainly driven by donors[5] especially GF. Uganda has been one of the beneficiary countries, and has the biggest grant in East and Southern Africa with malaria a major component of the grant. However, the growing uncertainty concerning availability of resources from GF contributing countries has reawakened beneficiary countries to think more about sustainable financing for malaria programs. In order to develop the strategies for sustainability, there is need for routine monitoring of resources for malaria including commitment from all funding sources for the short to medium term.

Regardless of the funding source for malaria, it is critical that resources are utilized and allocated in a way that maximizes the value of the investment. This requires one to examine how the current resources are allocated to different malaria interventions including how these funds are aligned to country malaria priorities in the national strategic documents. Furthermore, literature from other countries has shown that often times, external resources appear to be mainly spent on areas such as procurement of LLINS, antimalarial and IRS. However, for attainment of malaria elimination, it is important that resources from development partners are directed to supporting health systems improvements in the areas such as: surveillance and program management.

To achieve effective use of resources for prevention and control of malaria, there is need to identify and address the challenges currently limiting effective utilization of available malaria resources. While there could be external factors that can affect grant absorption capacity for external resources,[6] there is need to clearly understand why the allocated/secured resources my not reach the level of the health system where they are intended to be utilized.

1.3 Aims and Objectives

Study Aim

The purpose of this assessment was to compile and document the malaria financing landscape in Uganda. It is envisaged that the information generated from this exercise will guide sustainable resource mobilization and use to ultimately strengthening the effectiveness and efficiency of resource use in malaria prevention and treatment efforts in Uganda.

Specific study objectives

1. To map out key actors supporting malaria in Uganda.
2. To estimate the total resource envelope and allocation by key categories for the last three years from 2015 to 2017 for the malaria financing sources.
3. To estimate the financial commitments for Malaria for three years: 2018 to 2020.
4. To understand the funds flow mechanism and challenges/bottlenecks at national and sub-national levels.

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4 MOH.2018. Uganda's National Health Accounts 2014/15 and 2015/16. Ministry of Health. Kampala, Uganda

5 WHO.2012. World Malaria Report 2012. World Health Organization, Geneva, Switzerland. https://www.who.int/malaria/publications/world_malaria_report_2012/en/

6 Lu C, Michaud CM, Khan K, Murray CJ. Absorptive capacity and disbursements by the Global Fund to Fight AIDS, Tuberculosis and Malaria: analysis of grant implementation. Lancet. 2006 Aug 5;368(9534):483-8.

Methodology

2.0 Methodology

To sufficiently answer the study objectives, a resource mapping methodology was utilized. The main method used to track resources in the health sector is the System of Health Accounts (SHA), which was formally called the *National Health* Accounts (NHA)[7]. The SHA are an internationally accepted tool that provide a comprehensive estimate of all national health expenditures. The SHA approach is most suited to the current study because; (a) it can be used to track disease or program specific resources (such as the malaria program, HIV/AIDS program, etc.); (b) It can be adapted to a country-specific setting and therefore the results can readily be used to answer domestic policy questions and; (c) the SHA methodology permits for international comparisons given the standardized nature of the method[8]. In turn, we provide an overview of the SHA methodology, its application to tracking malaria-specific resources, and a brief description of the SHA classification schemes for malaria resources. The subsequent sub-sections present; a conceptual framework that the present study lent itself to, a summary of the methodology for each study objective, and the data collection and analysis plan.

2.1 Overview of the SHA methodology

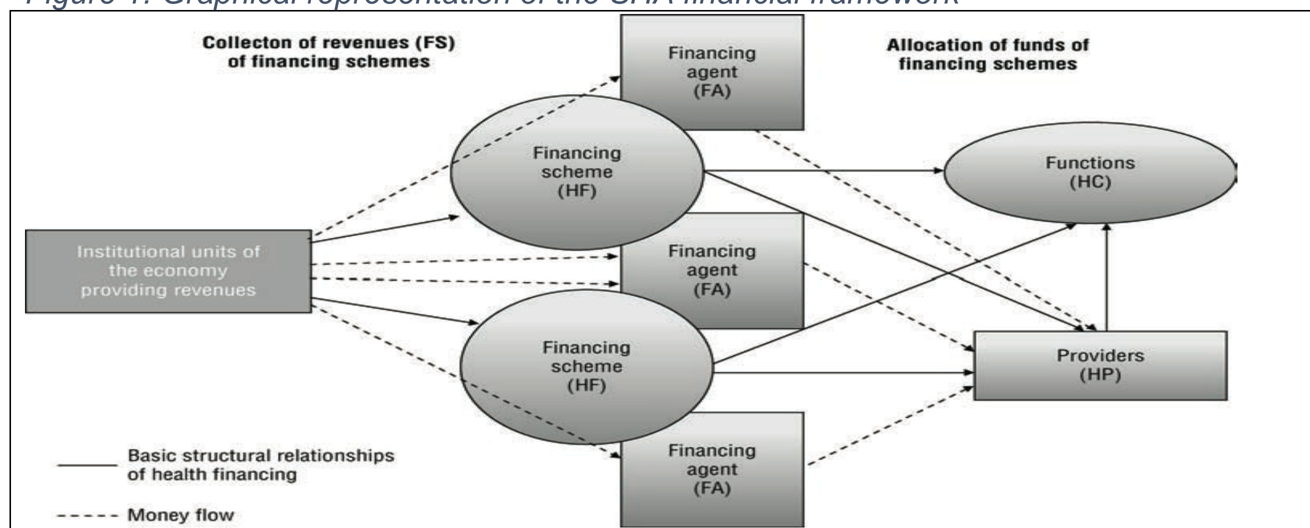
The SHA uses a framework that systematically describes financial flows related to health care with an aim of describing the health care from an expenditure perspective for both international and national purposes. The SHA method examines the use of public, private, and donor health funds in a country, by tracking the flows and amounts of spending:

- from the financiers of health care, called "***financing source***", e.g. Ministry of Finance, donors;
- to the principal managers of those funds, termed "***financing agents***", e.g. Ministry of Health (MoH), insurance schemes;
- to the "***health providers***", which deliver health care services, e.g. hospitals, pharmacies; and, finally,
- to the end users of health funds, namely the health services and products themselves, termed "***health care functions***", e.g. inpatient curative care, public health programs.

The results from the SHA methodology are organized in a series of standard tables. This approach covers the mapping of both financial and non-financial (commodity and equipment) resources. The approach also restricts itself to collecting information from all known sources of funding, managers (financing agents) of these funds as well as providers of services using the funds (service providers). ***Figure 1*** is a graphical illustration of the SHA financial tracking framework.

[7] OECD, Eurostat, WHO. A System of Health Accounts. 2011 Edition. 2011
[8] OECD, Eurostat, WHO. A System of Health Accounts. 2011 Edition. 2011

Figure 1: Graphical representation of the SHA financial framework



Source: IHAT for SHA 2011.

The SHA method briefly described above is typically used to provide a comprehensive estimate of all national health expenditures. However, the method can also be used to map and track program or disease-specific resources and when the method is used in these instances, it is referred to as a "sub-account". Subaccounts report expenditures in accordance with the SHA framework, but with a focus on a particular component of health care, in this case malaria services. A subaccount is a detailed review of expenditures on the delivery of a subset of health care services, such as disease-specific services. The next sub-section presents a definition and scope of the malaria sub-account[9].

Some limitations of the SHA methodology in relation to the current study include the following:

- The standard classifications of expenditure data might not be similar to the local context classification system. This might complicate data collection, alignment and interpretation to a certain degree. Because of these different classification systems, it is also difficult to make cross comparison between results of the resource tracking (using the SHA method) and existing national policy documents.
- The SHA method requires a very detailed breakdown and disaggregation of expenditure data which sometimes is very difficult to obtain from reporting entities.
- Lastly, the SHA method requires that data are collected from all sources of income contributing to a given program or diseases; including the expenditure made by households or individual people through out of pocket payments. This study however, was unable to obtain data on out-of-pocket expenditure for Malaria in Uganda given time and budget constraints.

2.2 Definition and scope of the malaria sub-account

A malaria subaccount can answer specific questions regarding malaria financing, in the same way that the general SHA answers questions on health care financing overall: How much is being spent

[9] WHO. Guide to producing malaria subaccounts within the national health accounts frameworks. 2011. Geneva, Switzerland. www.who.int

on malaria? Who is paying? What services and products are purchased and for whom? Policy-makers and program managers can use the expenditure estimates in various ways, e.g. to project financial requirements for controlling malaria or to monitor how resources are used. In addition, because the subaccounts use the internationally recognized SHA framework, the findings can be compared across countries with similar or different levels of malaria endemicity. A malaria subaccount allows comprehensive measurement of expenditures between financing sources, financing agents, providers, and functions (at a minimum) involved in malaria financing and delivery. The subaccount includes public, private, and donor components of malaria health services and, like the general SHA, aims to inform key policy issues. The malaria sub-account has potential to aid policy-makers in understanding the basic financing flows for malaria control and care, as the results can answer the following policy questions:

- What is the total resource envelope for malaria control and treatment?
- Who finances malaria health care and how much do they spend? Such information can be used to determine potential sources for filling in financing gaps.
- Who manages malaria funds? Who has programmatic control over their allocation? Where do these funds go? To which providers (public and private)?
- How is spending distributed among the various types of facilities? For example, how relevant are retailers, ambulatory centers, hospitals?
- What services are financed? For example, how much is spent on prevention and control versus treatment? Is the balance appropriate?

The subaccount presents a systematic summary of malaria-related spending by the malaria program and also allows spending to be disaggregated down to a particular malaria service area (disease surveillance, ITNs, distribution of antimalarial drugs, case management, etc.)[10]. In line with the SHA approach, the subaccount uses health care functions as the primary reference for defining malaria expenditures. Thus, malaria expenditures are expenditures on goods and services consumed for the primary purpose of: (a) managing malaria cases (parasitologically confirmed, clinically diagnosed, or unconfirmed acute febrile cases); (b) implementing activities to prevent malaria; or (c) providing support to malaria treatment and prevention activities (including general administration and health-related activities, such as research and training)[11]. Malaria expenditures can be grouped following the standard SHA framework expenditure groups which are:

- ***Recurrent or core expenditure on health***. In the malaria subaccount, this is expenditure directly channeled to goods and services consumed for the primary purpose of: (1) managing malaria cases (e.g. medical and nursing care, including the acquisition and consumption of medicines); (2) implementing activities to prevent malaria (e.g. distributing insecticide-treated bednets); or (3) providing support to malaria treatment and prevention activities (including general administration).
- ***Capital spending*** related to core health activities, notably capital investment expenditures of health providers. This includes both medical spending, such as for a microscope for sample analysis, and non-medical spending, such as for vehicles used for field work.
- ***Total expenditure on health (THE)*** is the sum of the core or recurrent and capital expenditure.
- ***Health-related expenditures*** refer to expenditures associated with health but outside the boundary of the account. For the malaria subaccount, this includes research and development

[10] WHO. Guide to producing malaria subaccounts within the national health accounts frameworks. 2011. Geneva, Switzerland. www.who.int
[11] WHO. Guide to producing health information systems subaccounts within the national health accounts frameworks. 2013. Geneva, Switzerland. www.who.int

on malaria, general education and training of physicians and nurses, and cash or in-kind transfers to households associated with malaria losses.

- ***The aggregate of THE*** plus ***health care related expenditures*** is referred to as ***national health expenditure (NHE).*** It includes both the expenditure associated with the malaria prevention, control and treatment as well as the health care related activities on malaria.

2.3 SHA Classification schemes for malaria sub-account

As aforementioned, the SHA framework organizes health expenditure data along four principal classifications: financing sources, financing agents, providers, and functions. Each classification consists of a series of specific entities or activities, identified by an alphanumeric code. This nomenclature has been adapted from the International Classification of Health Accounts (ICHA) and it is also the WHO recommended scheme for tracking general health expenditures in middle- and low-income countries[12]. The SHA malaria sub-account further disaggregates the standard SHA classification scheme to encompass specific malaria health care financing and delivery entities (e.g. ITNs). Furthermore, the SHA approach allows for more subcategories to be added to accommodate country-specific malaria entities and services. ***Table 1*** presents the classification scheme used for financing sources.

Table 1: Classification scheme for malaria financing sources

Code	Description
FS.1.1.1	Central government revenue
FS.1.1.2	Regional and municipal government revenue
FS.1.2	Other public funds
FS.2.1	Employer funds
FS.2.1.1	Parastatal employers
FS.2.1.2	Private employers
FS.2.2	Household funds
FS.2.3	Non-profit institutions serving individuals
FS.2.4	Other private funds
FS.3	Rest of the world funds

Source: WHO 2011[13]

Table 2 presents the SHA classification scheme for financing agents. ***Table 3*** presents the classification scheme for health care functions.

Table 2: Classification scheme for malaria financing agents

Code	Description
HF.1.1.1	Central government
HF.1.1.1.1	Ministry of Health (including national malaria control programme)
HF.1.1.1.2	Ministry of Agriculture
HF.1.1.1.3	Other ministries
HF.1.1.2	State/provincial government
HF.1.1.3	Local/municipal government
HF.1.2	Social security funds

[12] WHO. Guide to producing malaria subaccounts within the national health accounts frameworks. 2011. Geneva, Switzerland. www.who.int

[13] WHO. Guide to producing malaria subaccounts within the national health accounts frameworks. 2011. Geneva, Switzerland. www.who.int

HF.2.1.1	Government employee insurance programmes (covering malaria health care)
HF.2.1.2	Private employer insurance programmes
HF.2.2	Private insurance enterprises (other than social insurance)
HF.2.3	Private household OOP payments
HF.2.4	Non-profit institutions serving households (other than social insurance)
HF.2.5.1	Parastatal companies (other than health insurance)
HF.2.5.2	Private nonparastatal firms and corporations (other than health insurance)
HF.3	Rest of the world

Source: WHO 2011

Table 3: Classification scheme for health care functions

Code	Description
HC.1.1	Inpatient curative care (including for severe malaria)
HC.1.3	Outpatient curative care (including consultation and prescription of drugs)
HC.1.4	Services of curative home care for malaria
HC.4.3	Patient transport and emergency rescue (for malaria cases)
HC.5.1	Pharmaceuticals and other medical non-durables
HC.5.1.1+ 5.1.2	Prescribed and over-the-counter medicines (for malaria)
HC.5.1.1.1+ 5.1.2.1	ACTs
HC.5.1.3	Other medical nondurables
HC.5.1.3.1	Rapid diagnostic tests (dipsticks)
HC.5.1.3.2	Mosquito repellants applied to skin (DEET powder, lotion, sprays)
HC.5.1.3.3	Mosquito repellants applied to nets
HC.5.1.3.4	Domestic insecticides and mosquito coils
HC.5.2	Therapeutic appliances and other medical durables
HC.5.2.1	ITNs
HC.5.2.2	Other insecticide-treated materials
HC.6.2	School health services that include malaria awareness programmes
HC.6.3	Prevention of communicable disease (malaria)
HC.6.3.1	Intermittent preventive treatment in pregnant women and infants
HC6.3.2	Insecticide-treated materials/ insecticide-treated net activities
HC.6.3.3	Indoor residual spraying campaigns

Source: WHO 2011

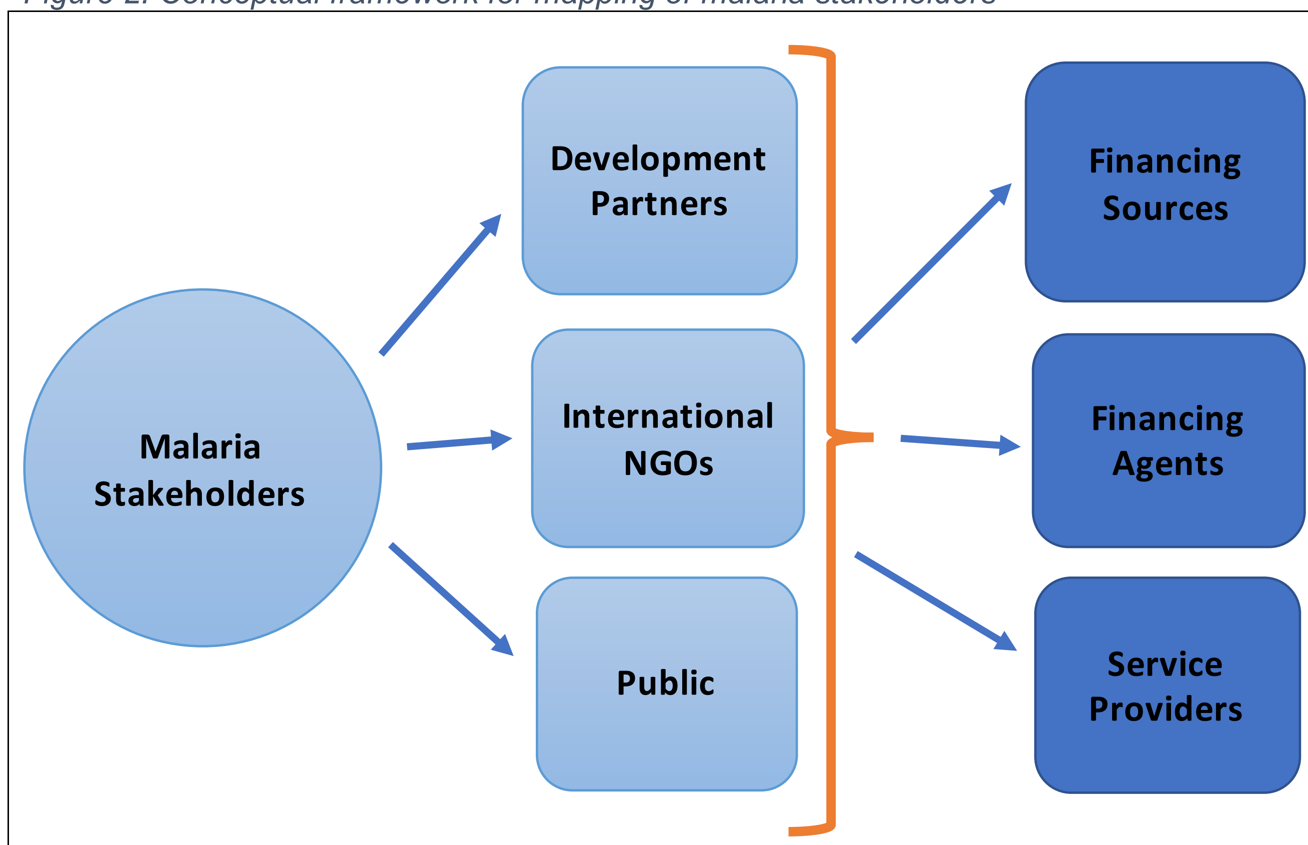
2.4 Conceptual Framework

To identify the key malaria stakeholders in the country, a snowballing technique was used where the study team approached the already known or identified malaria stakeholders and through key informant interviews identified other malaria stakeholders. This snowballing process was continued until an exhaustive list of stakeholders was generated. To estimate the total resource envelope for malaria, we adopted the SHA framework to track malaria resources for three years (2015 – 2017). This study did not conduct a complete malaria sub-account assessment given time and resource constraints. Instead, the SHA framework was used to track malaria resources at national level only A “spider-web” map of flow of funds was generated using the adopted SHA framework.

After the spider web of funding flows was generated, the team then identified the entities from which to collect malaria expenditure data. For purposes of estimating the resource envelope available for malaria, the team collected data on actual expenditure and not budget or cost estimates.

After identifying the key malaria stakeholders in Uganda, they were broadly categorized as; (a) public entities, (b) development partners/donors, and (c) international non-governmental organizations. In line with the SHA framework, the stakeholders were then categorized as either financing sources, financing agents, or providers of services. ***Figure 2*** presents a graphical illustration of the conceptual framework for the resource tracking exercise.

Figure 2: Conceptual framework for mapping of malaria stakeholders



2.5 Summary of methods used to answer each study objective

This study mostly used and adopted the SHA methodology to answer study objectives 1 and 2. For study objectives 3 and 4, the study employed mixed methods (qualitative and quantitative). ***Table 4*** presents a summary of the methods used for each of the study objectives.

Table 4: Summary of the proposed methods for each study objective

Specific Objective	Methodology	Main Outcome
To map out key actors supporting malaria in Uganda.	Used a snowball approach to identify all malaria stakeholders. Applied the SHA framework to classify all the identified stakeholders.	A comprehensive list of malaria stakeholders. Spider web map of the malaria stakeholders.

To estimate the total resource envelope and allocation by key categories for the last three years from 2015 to 2017 for the malaria financing sources.	Adopted the SHA methodology to track and estimate the malaria resource envelope at national level.	Total resource envelope for malaria for the last three years presented in the standard SHA tables i.e. by financing sources, agents, providers as well as by the malaria health care functions.
To estimate the financial commitments from in-country organizations for Malaria for the next three years: 2018 to 2020.	Review of budget documents coupled with key informant interviews with the identified malaria stakeholders	Summary of expected resources for the malaria program for the next 3 years.
To understand the funds flow mechanism and challenges/bottlenecks at national and sub-national levels.	Utilized the SHA framework to conduct an expenditure analysis for malaria in the sampled districts. To document challenges and bottlenecks -- qualitative data was collected from key informants in the sampled districts at the district health office and also from sampled health facilities.	Description of the flow of funds at sub-national level highlighting key challenges and bottlenecks. An expenditure analysis for malaria resources in the sampled districts.

2.5.1 Estimation of GOU's contribution to support malaria activities at sub national level

Estimation of government contribution can be under-estimated if one considers the annual amounts GOU spends on ACTs, LLINs and operational costs alone, and does not take into consideration the huge investment in human resources (responsible for service delivery) and other utility costs for running of health facilities. The estimation of GOU's indirect costs (funding for salaries, utilities, infrastructure, etc.) was outside the scope of this work, given the required level of effort to estimate and apportion staff time to malaria service provision. However, totally ignoring these costs would grossly underestimate the GOU's contribution to the malaria program. We therefore relied on a recently concluded costing study[14] and a set of assumptions to estimate GOU's indirect contribution to the malaria program. Below is a description of how we estimated these costs.

Estimation of expenditure on human resources

The costing study generated a list of health personnel who are involved in the managing of; (a) a mild malaria case and (b) a severe malaria case at the different levels of care. The study also obtained information on the activities that each staff cadre is involved in *per case* of either mild or severe malaria; e.g. clinical diagnosis, medical history, lab diagnosis, dispensing, etc. and how much time (in minutes) it takes to perform these tasks per case. We summed up the total time spent serving a malaria patient by each staff cadre and computed the time spent on malaria as a proportion of each staff cadre's total working time. These proportions (for each staff cadre) were then multiplied by the staff salary and also by the total national malaria cases (both mild and severe cases) for each year under assessment. The HR costs were estimated separately for handling a case of severe malaria and the cost of handling a mild malaria case given that arguably; stuff spend more time on a severe case of malaria as compared to a mild case. Lastly, we summed up the total HR cost spent

[14] Shaping Uganda's path towards sustainable implementation of universal health coverage: Cost of providing health care services in Uganda, December 2017

on mild malaria cases and the total HR cost spent on severe malaria to get a total sum of HR costs on malaria. In other words;

Malaria-specific HR cost = (% of staff time spent per case of mild malaria X Staff salary X Total Annual Number of mild malaria cases handled) + (% of staff time spent per case of severe malaria X Staff salary X Total Annual Number of severe malaria cases handled)

Estimation of expenditure on Utilities

To estimate the proportion of the primary health care (PHC) non-wage that is spent on malaria activities at the health facilities, we considered the total annual number of malaria cases (both outpatient and inpatient) as a proportion of all other cases / diseases (outpatient + inpatient). We then applied this proportion to the total PHC non-wage (for the whole country) for the three years under assessment. In other words;

Malaria-specific utilities = (Total Annual Malaria Cases / Total Annual Cases for all diseases) X Annual PHC non-wage

2.6 Data Collection

For the resource tracking at national level, comprehensive data estimates were assembled from public, private, and donor stakeholders in the health care system. The scope of data collection included all public and external sources of financing or commodities provided for malaria services in Uganda for the last three financial years: 2015/16, 2016/17, and 2017/18. This exercise relied on a combination of face-to-face Key Informant Interviews (KIIs), using structured data collection tools, and review of documents provided by respondents. Three data extraction tools were developed and used for this exercise. The tools used were: (a) the Source of Funds tool, and (b) the Financing Agents tool and (c) the Service Providers tool. The data collection team was trained over a 2-day period on the SHA methodology and in the use of the data collection tools. The data collection team administered the data collection tools and extracted all the data themselves. KIIS were conducted with the stakeholders identified through the mapping exercise.

At sub-national level, six districts were purposively sampled and data on malaria expenditure as well as challenges or bottlenecks in the flow of funds was obtained using structured data collection tools. In each of the sampled districts, the District Health Office (DHO) was studied and three health facilities -- a HCIV, HCIII and HCII. A list of respondents for the KIIs and the health facilities visited at sub-national level is presented in Annex 4.6.

2.7 Data Entry and Analysis

Data was first captured on the hard copies of the data collection tools. The data was then entered into specially designed Excel® spreadsheets that allow for easy aggregation. Thereafter, data was entered into an Excel-based analysis screen and coded using the SHA (2011) codes. For the bottleneck analysis at sub-national level, a qualitative analysis framework was developed where emerging thematic areas were identified and used to present findings from the sampled districts.

Findings - I

Tracking of malaria resources

3.0 Findings

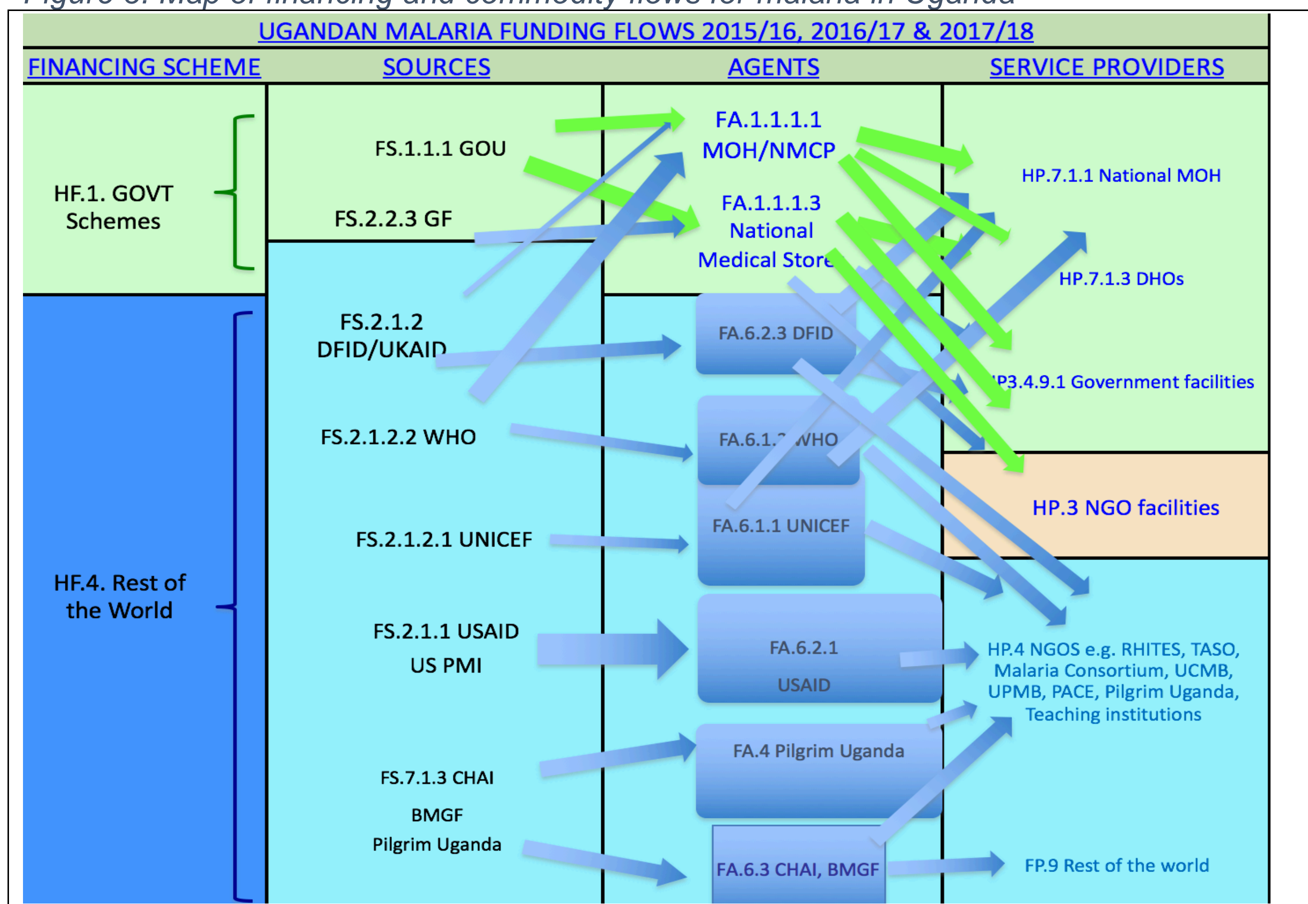
This section presents findings for mapping of malaria stakeholders in section 3.1, section 3.2 presents the findings for resource tracking for malaria, section 3.3 presents malaria financial commitments for the next three years and section 3.4 presents findings on the expenditure analysis and assessment of flow of malaria funds conducted at the sub-national level.

3.1 Overview of financing for malaria in Uganda

Figure 3 shows that there are two financing schemes through which malaria funds are channeled: "*the government*" and "*rest of the world*" schemes. The Government scheme represents public funds that are comprised of Government of Uganda funds and the on-budget donor funds (from Global Fund) targeted to support malaria activities in Uganda. Financing agents for these public funds are MOH / NMCP and NMS. Providers of services funded by public funds are: MOH / NMCP, DHOs, government health facilities, and PNFP health facilities.

With regards to the rest of the world scheme, development partners are the source of funds (including UN agencies, bilateral agencies, and international NGOs). Development partners manage the bulk of their funds and therefore double as financing sources and financing agents. Service providers for donor funds are: NMCP, DHOs, government health facilities, PNFP health facilities and NGOs such as: TASO, PACE, Malaria consortium, etc. In some few cases, the development partners also serve as service providers. Annex 6.5 provides a comprehensive list of all Malaria stakeholders in Uganda.

Figure 3: Map of financing and commodity flows for malaria in Uganda

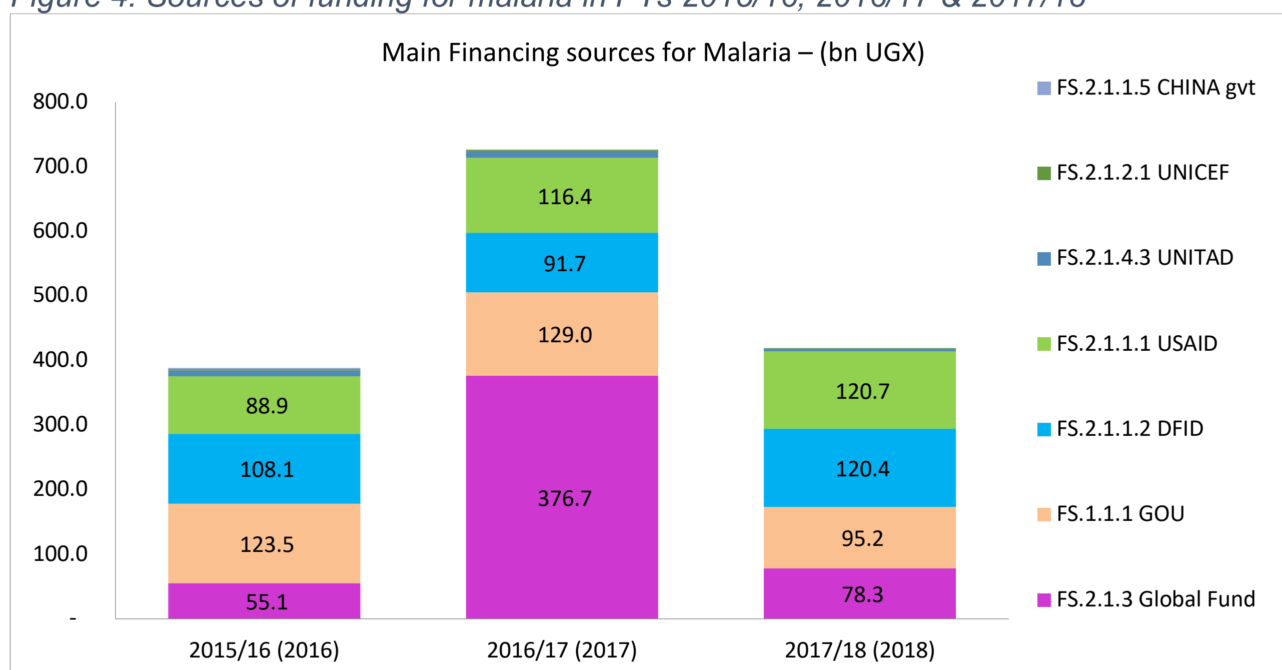


3.2 Tracking of malaria resources

Sources of funding: FY 2015/16, 2016/17 & 2017/18

Figure 4 and ***Table 5*** show the total amount of funds available for malaria activities in Uganda. In FY 2015/16, UGX 388.7 billion (US $112.9 million) was the total resource envelope for malaria activities, in the FY 2016/17, the total resource envelope was UGX 727.2 billion (US $206.1 million) and in FY 2017/18 the total resource envelope was UGX 419.7 billion (US $114.7 million). We note a remarkable 87% increment in the resource envelope in the financial year 2016/17 and this is attributed to the fact that the Global Fund made large procurements of ACTs and artesunate. As a result of these large investments, malaria cases went down by 33%[15] in the FY 2017/18 and this partly explains the 42% decrement in the resource envelope in that year.

Figure 4: Sources of funding for malaria in FYs 2015/16, 2016/17 & 2017/18



Global Fund provided the biggest contribution to the malaria resource envelope for the period under assessment; providing a total of UGX 510.1 billion for the three years i.e. UGX 55.1 billion in 2015/16 (14.4%), UGX 376.7 billion in 2016/17 (52.1%) and 78.3 billion in 2017/18 (18.9%). Looking at the individual years, we note that the partner's proportional contribution every single year varies for instance in FY 2015/16, the largest financial contributor to the malaria program was GOU providing 31.0% of the resource envelope. In 2016/17, Global Fund was the leading contributor providing 52.1% of the available resources that year. In 2017/18, USAID was the biggest contributor to the malaria program providing 28.8% of the resource envelope.

From ***Table 5*** we also that GOU has made significant contributions to the malaria program; providing UGX 123.5 billion (31.8%) in 2015/16, UGX 129.0 billion (17.7%) in 2016/17, and 95.2 billion (22.7%) in 2017/18. It is important to note that this contribution includes the indirect costs that GOU invests in HR and utilities to support the malaria program at the sub-national level. DFID also made significant contributions to the malaria program; providing UGX 108.14 billion in 2015/16, UGX 91.7 billion in 2016/17, and 120.4 billion in 2017/18. The remaining 3% of the total resource envelope in the three years under assessment was contributed by UNITAD, UNICEF and the China government.

[15] National Malaria Control Program: Mid-Term Review of the National Malaria Strategic Plan 2018

Table 5: Sources of funding for malaria in FYs 2015/16, 2016/17 & 2017/18

Main Financing sources for Malaria – (bn UGX)	2015/16	As a % of total funds in 2015/16	2016/17	As a % of total funds in 2016/17	2017/18	As a % of total funds in 2017/18
FS.2.1.3 Global Fund	55.1	14.2%	376.7	51.8%	78.3	18.7%
FS.1.1.1 GOU	123.5	31.8%	129.0	17.7%	95.2	22.7%
FS.2.1.1.2 DFID	108.1	27.8%	91.7	12.6%	120.4	28.7%
FS.2.1.1.1 USAID	88.9	22.9%	116.4	16.0%	120.7	28.8%
FS.2.1.4.3 UNITAD	8.8	2.3%	9.0	1.2%	3.3	0.8%
FS.2.1.2.1 UNICEF	2.6	0.7%	2.6	0.4%	1.7	0.4%
FS.2.1.1.5 CHINA gvt	1.7	0.4%	1.7	0.2%	-	0.0%
Grand Total	**388.7**	**100%**	**727.2**	**100%**	**419.7**	**100%**

*Includes the GOU's indirect costs towards salaried labor and utilities at health facilities

Regarding GOU's contribution; ***Table 6*** highlights that once the indirect costs are removed, GOU's contribution shrinks to 10% of the total resource envelope in 2015/16, 5.2% in 2016/17 and 9.2% of the total resource envelope in 2017/18. ***Table 6*** also shows that operational malaria activities over the last three years have heavily relied on support from development partners. The contributions of development partners therefore play a very critical role in the delivery of malaria services in Uganda. This finding raises sustainability concerns as well all the other challenges (such as unpredictability, misalignment, displacement effects etc.) that are associated with over dependency on foreign funding to support a critical and essential national program such as malaria.

Table 6: Sources of funding for malaria excl. GOU's indirect costs

Main Financing sources for Malaria – (bn UGX)	2015/16	As a % of total funds in 2015/16	2016/17	As a % of total funds in 2016/17	2017/18	As a % of total funds in 2017/18
FS.2.1.3 Global Fund	55.13	19%	376.7	59.7%	78.3	21.9%
FS.1.1.1 GOU	29.15	10%	32.8	5.2%	32.8	9.2%
FS.2.1.1.2 DFID	108.14	37%	91.7	14.5%	120.4	33.7%
FS.2.1.1.1 USAID	88.92	30%	116.4	18.5%	120.7	33.8%
FS.2.1.4.3 UNITAD	8.79	3%	9.0	1.4%	3.3	0.9%
FS.2.1.2.1 UNICEF	2.56	1%	2.6	0.4%	1.7	0.5%
FS.2.1.1.5 CHINA gvt	1.68	1%	1.7	0.3%	-	0.0%
Grand Total	**294.4**	**100%**	**631.0**	**100%**	**357.2**	**100%**

Financing Agents for malaria in FY 2015/16, 2016/17 & 2017/18

In this section, we present findings on who manages funds for malaria. ***Figure 5*** and ***Table 7*** show that the bulk of the resources are managed by development partners and this in effect implies that development partners (managers of funds) make decisions on how the available resources should be utilized. Global Fund managed the biggest proportion of malaria resources, having managed 14.2% of the total funds in 2015/16, 51.8% in 2016/17 and 18.7% in 2017/18. USAID was the second biggest manager of the malaria funds in the three years under assessment as they managed 22.9%, 16.0% and 28.8% of the total resource envelope in 2015/16, 2016/17 and 2017/18 respectively. DFID also managed a substantial amount of funds; they managed 27.2%, 12.4%, and 23.7% of the total resources in FY 2015/16, 2016/17 and 2017/18 respectively.

With regards to national entities; MOH managed a significant amount of the funds as they managed 24.8%, 13.5%, and 15.4% of the total resources in FY 2015/16, 2016/17 and 2017/18 respectively.

This percentage however reduces significantly when GOU's indirect costs on HR and utilities at sub-national level are not included in the total resource envelope.

National Medical Stores (NMS) managed 6.7%, 4.0%, and 7.1% of the total resources in FY 2015/16, 2016/17 and 2017/18 respectively for their role they play in procurement, storage and distribution of malaria drugs and commodities. On the other hand, we note that the National Malaria Control Program (NMCP) which is the unit that drives the malaria agenda within the MOH manages a very small proportion of the available resources for the program over the period under assessment i.e. about 0.3% of the resource envelope in each of the years. The finding that development partners manage and make decisions on how available resources should be utilized raises ownership concerns for the program as well sustainability and alignment concerns to the national priorities.

Figure 5: Financing Agents of funding for malaria in FYs 2015/16, 2016/17 & 2017/18

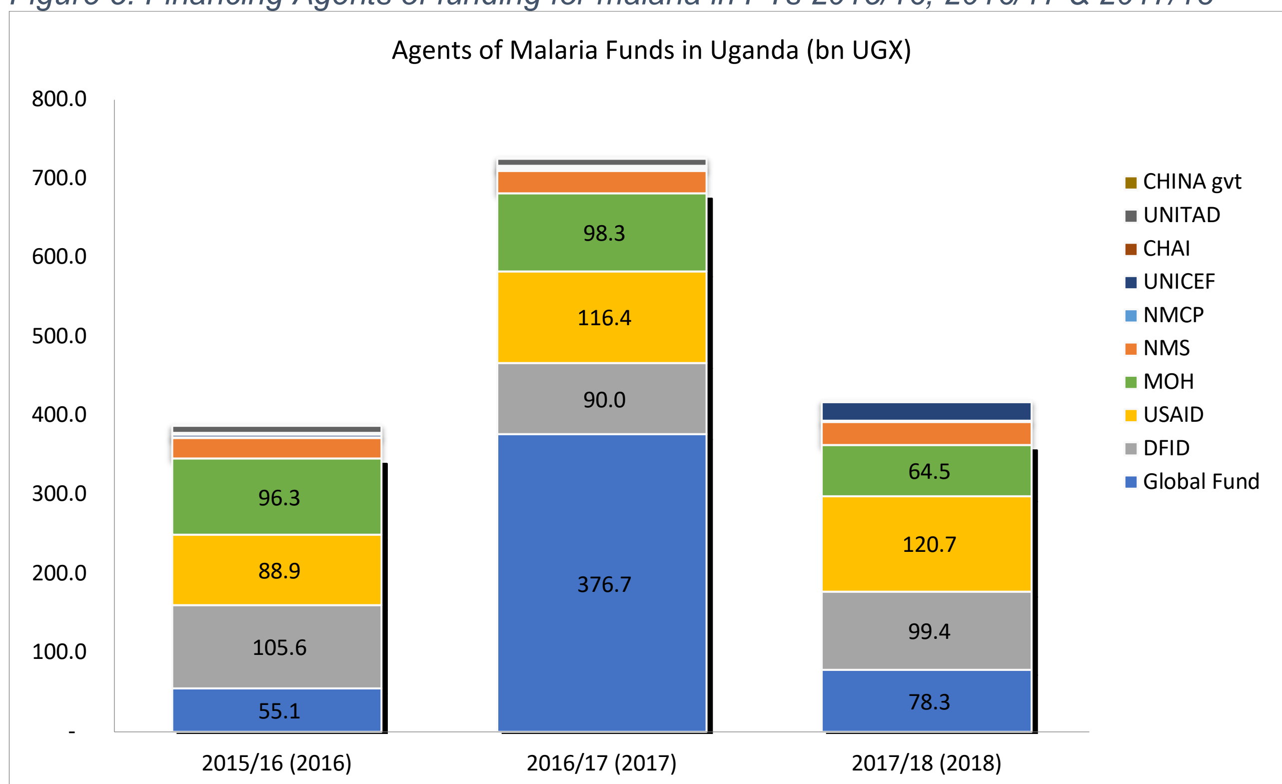


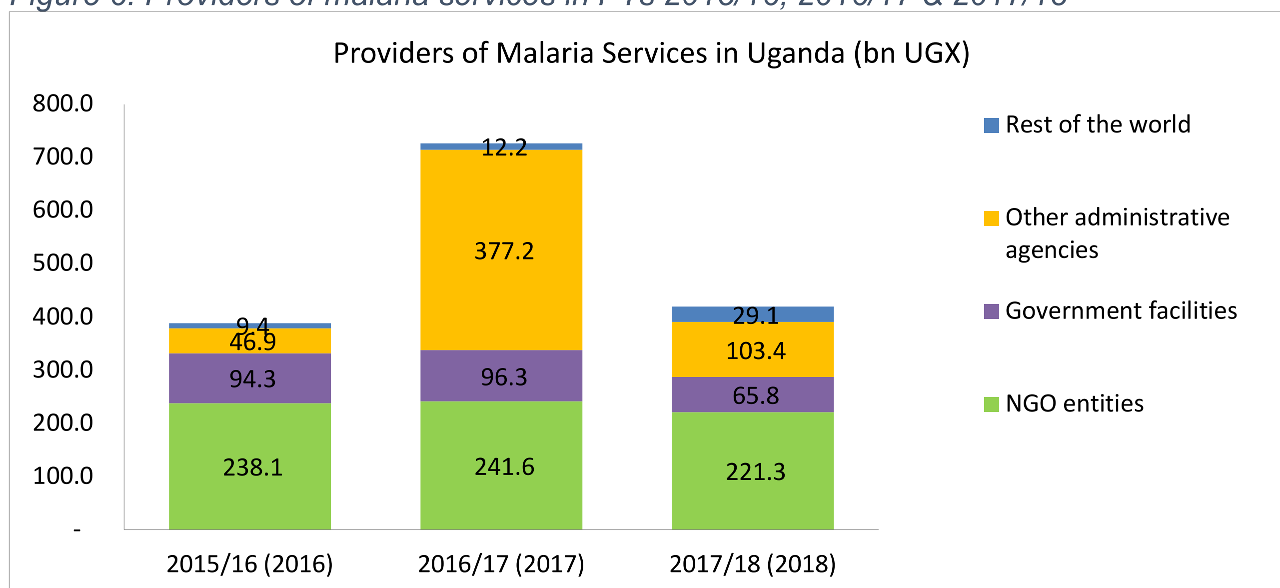
Table 7: Financing Agents of funding for malaria in FYs 2015/16, 2016/17 & 2017/18

Agents of Malaria Funds in Uganda (bn UGX)	2015/16	As a % of total funds in 2015/16	2016/17	As a % of total funds in 2016/17	2017/18	As a % of total funds in 2017/18
Global Fund	55.1	14.2%	376.7	51.8%	78.3	18.7%
DFID	105.6	27.2%	90.0	12.4%	99.4	23.7%
USAID	88.9	22.9%	116.4	16.0%	120.7	28.8%
MOH	96.3	24.8%	98.3	13.5%	64.5	15.4%
NMS	26.1	6.7%	28.8	4.0%	29.7	7.1%
NMCP	1.0	0.3%	2.0	0.3%	1.1	0.3%
UNICEF	2.6	0.7%	2.6	0.4%	23.5	5.6%
CHAI	2.6	0.7%	1.8	0.2%	2.6	0.6%
UNITAD	8.8	2.3%	9.0	1.2%	-	0.0%
CHINA gvt	1.7	0.4%	1.7		-	0.0%
Grand Total	**388.7**	**100%**	**727.2**	**100%**	**419.7**	**100%**

Providers of malaria services in 2015/16, 2016/17 and 2017/18

Results showing the allocation of the resource envelope to the malaria service providers are presented in ***Figure 6*** and ***Table 8***. Organizations categorized as "NGO entities" provide the majority of malaria activities that comprise 61.3%, 33.2%, and 52.7% of total resource envelop in 2015/16, 2016/17 and 2017/18, respectively. These NGO entities include: Malaria consortium, TASO (which is a Global fund principal recipient), MAPD, CHAI, Abt Associates, Pilgrim, etc (full list is attached as Annex 4.5). It is important to highlight that NGO entities are mostly situated at national level and they do not directly deliver clinical services to the malaria patients. Some of the activities performed by the NGO entities include: program management, training, research & development, monitoring & evaluation, awareness raising & advocacy, and health systems strengthening and capacity building.

Figure 6: Providers of malaria services in FYs 2015/16, 2016/17 & 2017/18



For this study, "government facilities" refer to the health facilities at different levels of care (including hospitals) for both public and private not for profit facilities. Government facilities utilized a substantive amount of funds accounting for 24.3%, 13.2% and 15.7% of total resource envelope in 2015/16, 2016/17 and 2017/18, respectively.

Other administrative agencies which include: National Medical Stores (NMS), Joint Medical Stores (JMS), and Ministry of Health (MOH) provided services that utilized 12%, 52% and 25% of total malaria funding in 2015/16, 2016/17 and 2017/18, respectively. The increased proportion of the services provided by these agencies in 2016/17 is due to an increased amount of services provided by NMS and JMS because of the large procurement of ACTs (by the Global Fund) and Long Lasting Insecticide Nets (LLINs) for the mass campaign.

Table 8: Providers of malaria services in FYs 2015/16, 2016/17 & 2017/18

Providers of Malaria Services in Uganda (bn UGX)	2015/16	As a % of total funds in 2015/16	2016/17	As a % of total funds in 2016/17	2017/18	As a % of total funds in 2017/18
Rest of the world	9.4	2.4%	12.2	1.7%	29.1	6.9%
NGO entities	238.1	61.3%	241.6	33.2%	221.3	52.7%
Government facilities	94.3	24.3%	96.3	13.2%	65.8	15.7%
Other administrative agencies	46.9	12.1%	377.2	51.9%	103.4	24.6%
Grand total	**388.7**	**100%**	**727.2**	**100%**	**419.7**	**100%**

Interestingly, we observed that Government facilities and agencies and NGO entities provide the largest proportions of malaria activities yet they do not manage an equally large proportion of the funds as seen under the financing agent section above. This implies that decision making on how funds should be used is done by the financing agents (mainly at the national level) while the actual service providers implement service delivery without much stake in deciding how resources should be utilized.

Health Care Functions / malaria activities in 2015/16, 2016/17 and 2017/18

Figure 7 and ***Table 9*** show that the biggest proportion of the resources is spent on malaria treatment (accounting for 16%, 45% and 24% of total malaria funding in 2015/16, 2016/17 and 2017/18, respectively) and this is expected due to the large investment in the procurement of ACTs. Program management also accounts for a substantial amount of the resources (accounting for 28%, 15% and 20% of total malaria funding in 2015/16, 2016/17 and 2017/18, respectively) and this is largely because this program area includes GOU's indirect cost on HR and utilities costs. Malaria services that have not been disaggregated also accounts for a large amount of resources (accounting for 19%, 14% and 24% of total malaria funding in 2015/16, 2016/17 and 2017/18, respectively). This is because some stakeholders didn't provide us disaggregated data to the program area detail for instance: UNICEF, WHO and DFID. The findings in this section also highlight the fact that the bulk of the resources from development partners (for which we were able to get disaggregated data) are spent on procurement of drugs and supplies, procurement of insecticide treated nests (ITNs) as well as on IRS activities. Health systems activities such as M&E, Training & capacity building, and research and development receive limited resources.

Figure 7: Funding flows to malaria activities in FYs 2015/16, 2016/17 & 2017/18

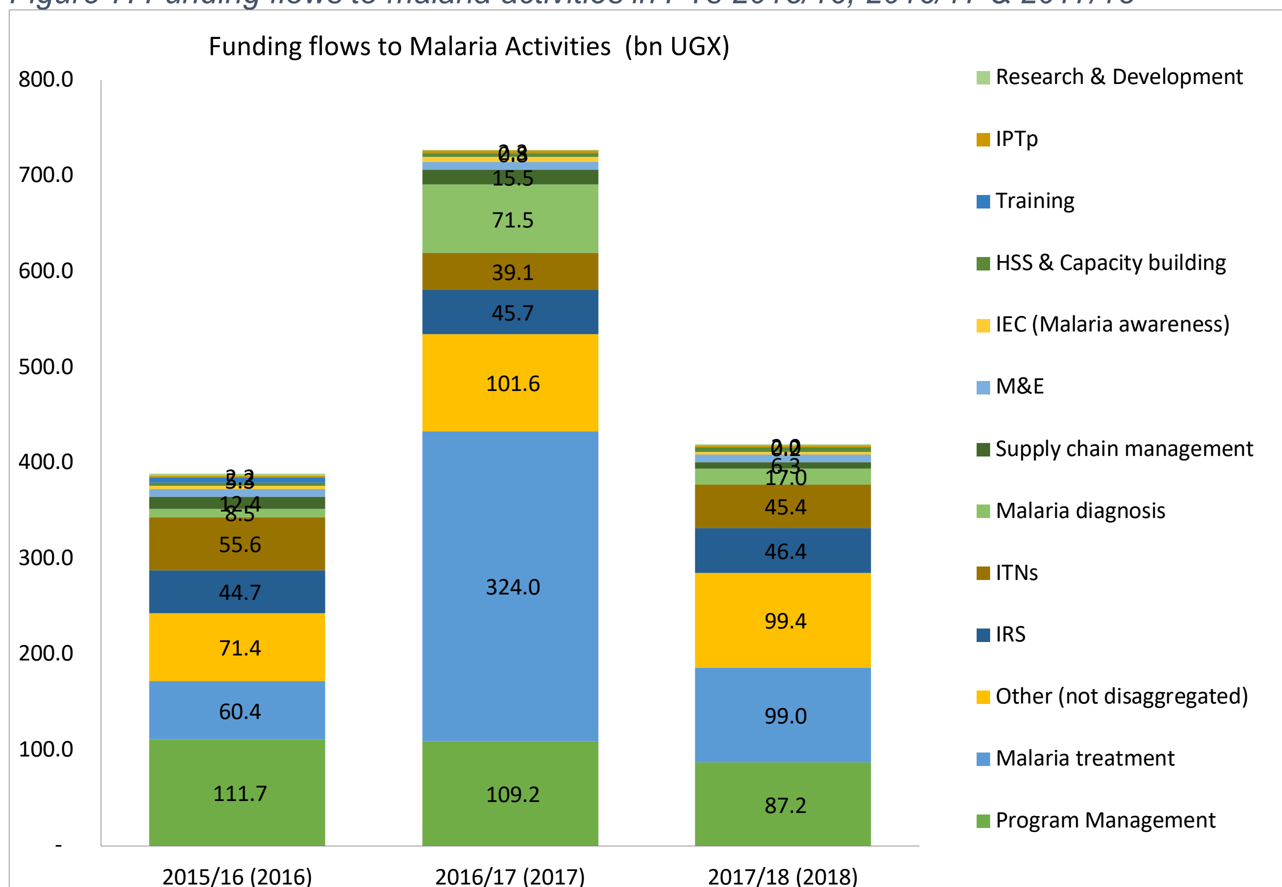


Table 9: Funding flows to malaria activities in FYs 2015/16, 2016/17 & 2017/18

Funding flows to Malaria Activities (bn UGX)	2015/16	As a % of total funds in 2015/16	2016/17	As a % of total funds in 2016/17	2017/18	As a % of total funds in 2017/18
Program Management	111.7	28.7%	109.2	15.0%	87.2	20.8%
Malaria treatment	60.4	15.5%	324.0	44.5%	99.0	23.6%
Other (not disaggregated)	71.4	18.4%	101.6	14.0%	99.4	23.7%
IRS	44.7	11.5%	45.7	6.3%	46.4	11.1%
ITNs	55.6	14.3%	39.1	5.4%	45.4	10.8%
Malaria diagnosis	8.5	2.2%	71.5	9.8%	17.0	4.1%
Supply chain management	12.4	3.2%	15.5	2.1%	6.3	1.5%
M&E	8.2	2.1%	7.7	1.1%	8.2	2.0%
IEC (Malaria awareness)	3.7	1.0%	5.4	0.7%	3.0	0.7%
HSS & Capacity building	3.0	0.8%	3.5	0.5%	4.5	1.1%
Training	5.3	1.4%	0.8	0.1%	0.2	0.0%
IPTp	2.2	0.6%	2.3	0.3%	2.0	0.5%
Research & Development	1.7	0.4%	1.0	0.1%	1.1	0.3%
Grand Total	**388.7**	**100%**	**727.2**	**100%**	**419.7**	**100%**

3.3 Financial commitments for malaria activities

Table 10 presents a summary of the financial commitments for malaria activities for the FYs 2018/19, 2019/20 and 2020/21. Over the 3-year period, approximately UGX 381 billion (USD 104.1 million) has been committed for FY 2018/19, UGX 615.9 billion (USD 168.3 million) for FY 2019/20 and UGX 302.1 billion (USD 82.6 million) for FY 2020/21 for malaria activities in Uganda.

The financial commitments increased in 2019/20 by 62% and the reason for this increase is mostly due to an increase in Global Fund's anticipated commitment in that financial year as it will be the beginning of a new grant cycle. Additionally, activities for a planned LLINs mass campaign are expected to take place in the same year.

When the financial commitments for the next three years are compared with the available resources for the previous three years, we note that a similar but slightly nuanced trend is maintained in terms of the quantity of the resource envelope as well as the proportional distribution of the envelope.

Table 10: Financial commitments for malaria FYs 2018/19, 2019/20 & 2020/21

Financial commitment	2018/19 (USD)	2018/19 (UGX)	2019/20 (USD)	2019/20 (UGX)	2020/21 (USD)	2020/21 (UGX)
GOU	8,054,129	29,467,641,360	8,005,613	29,290,137,096	8,005,613	29,290,137,096
DFID	19,280,187	70,540,420,177	19,280,187	70,540,420,177	19,280,187	70,540,420,177
Global Fund	42,990,083	157,287,816,672	107,259,333	392,429,721,647	21,474,797	78,569,839,784
UNICEF	743,791	2,721,308,132	743,791	2,721,308,132	743,791	2,721,308,132
USAID	33,000,000	120,737,100,000	33,000,000	120,737,100,000	33,000,000	120,737,100,000
CHAI	72,000	263,426,400	72,000	263,426,400	72,000	263,426,400
Total	**104,140,190**	**381,017,712,741**	**168,360,924**	**615,982,113,452**	**82,576,388**	**302,122,231,589**

Findings - II

Assessment of Flow of Funds at **Sub-national level**

Case study from 6 districts and 24 health facilities

3.4 Assessment of flow of malaria funds at sub-national level

This section presents the flow of funds from national to sub national level, as well as the results from the expenditure analysis conducted at the sub-national level.

Six districts were selected for case studies. The following districts were sampled according to the different regions (a) north: Gulu (b) west: Sheema, (c) central: Luweero and Rakai, (d) east: Iganga and Mbale. In each sampled district, the **district health office** (DHO) was studied in addition to **three health facilities** - a HCIV, HCIII and HCII which were randomly selected. Both public and PNFP facilities were considered in the sample. A total of 24 sites were visited.

3.4.1 Description of flow of funds at sub-national level in Uganda

Malaria activities at the sub-national level are funded by two key players: (a) Government of Uganda, through the Primary Health Care non-wage fund and (b) Development partners, who include: UNICEF, Global Fund, and Malaria Consortium. The primary service providers of malaria services at sub national level are the public health facilities, the district health office (DHO), as well as Private Not for Profit (PNFP) health facilities.

At the sub-national level; ***Public funds**, which is the GOU resources* (PHC non-wage grant) are released on a quarterly basis from Ministry of Finance Planning and Economic Development (MOFPED) to (a) district local governments (for DHOs and for hospitals) and to (b) individual health facilities. Funds sent through the district local governments for the DHOs and hospitals are allocated based on an econometric resource allocation formula. The formula considers most of the components of a needs-based resource allocation formula: population size, indicator of need (as a weighting factor for the population), a factor to consider differential costs of service provision (e.g. remoteness, terrain etc.), and the presence of other funding sources (e.g. if some districts receive direct funding from donors). The Chief Administrative Officer and the Chief Financial Officer in each district approve requisitions submitted by the DHO and the general hospitals. Once the requisitions have been approved, transfer of funds is made to these two entities (DHO and general hospital). Funds sent to the hospitals are to facilitate activities at the hospital level only unless a unique arrangement is in a position at a district for example when the general hospital doubles as a health sub-district. Funds for lower level health facilities are sent directly from MOFPED to the bank accounts of individual health facilities. However, the health facilities have to obtain approval from sub-county chiefs through the Health Sub Districts before they can access the funds.

Regarding funds from development partners at the sub-national level, different partners have different mechanisms in place to transfer funds. For the ***Global Fund (GF***); funds come through MOH and are routed to the district general collection account. The finance department at the district notifies the District Health office of the availability of funds. DHO submits a requisition and funds are transferred to the health committee account. The requirements to access funds include a clear work-plan and proof of accountability for previously received funds. After receipt of funds, guidelines on how the funds should be used are sent by GF to the DHO. For ***UNICEF***; funds are sent from the UNIECF office at national level to a UNICEF specific bank account opened in the district. There is a UNICEF accountant placed in each of supported districts and the accountant manages the funds. These funds can be accessed by the District Health Team who work closely with a UNICEF technical person in the district. It is important to highlight that unlike public funds which are further disbursed from the District Health Office to the lower health facilities, funds from development partners are not

further disbursed to lower level health facilities. But rather, these funds are kept at the District Health Office and health workers from HFs have to travel to the DHO in order to receive any payment or reimbursement for any activity funded by development partners in the district.

3.4.2 Assessing flow of funds and financing bottlenecks at subnational level

The financial flow assessment draws from responses obtained through key informant interviews conducted at 24 sites (18 health facilities and 6 District Health Offices) in the six districts, as well as observations made by the research team. Section 3.4.2.1 presents an assessment of flow of funds from *national level to district level* (for both public and donor funding). In section 3.4.2.2, we discuss challenges in the flow of funds *within the districts* i.e. from the DHO level to health facilities. Please note that this sub-section (3.4.2.2) describes the flow of GOU (public) funds only, because funds from development partners are not further disbursed to health facilities.

3.4.2.1 National level to DHO and general hospitals

Public GOU funds

As aforementioned, funds are released from national level to local governments (i.e. districts) which then transfer the funds to (a) District Health Office and (b) General hospitals. When funds are received by the district, a circular is sent by the Chief Administrative Officer to all the self-accounting entities in the district (DHO and Hospitals included) stipulating the quarterly release and how much funds each of the entities will be receiving based on their annual work plans. The DHO and hospital then prepare their quarterly requisitions, which are reviewed and approved by the CFO and CAO. Funds are then wired to the bank accounts of these entities.

In turn is a description of the bottlenecks that were highlighted through an assessment of the flow of at this level.

1. *No funds specifically earmarked for malaria*

Out of the 6 DHOs that were visited for this assessment, we found that none of the DHOs reported to have malaria-specific PUBLIC resources ring marked to support malaria activities only. Instead, we found that PHC funds are used to support integrated support supervision (which includes malaria activities). This finding is irreconcilable with the fact that malaria is the number one killer disease in Uganda. This has serious implications for priority setting for malaria activities at the DHO.

2. *Not able to tease out malaria-specific expenditure*

As a result of not having malaria-specific resources earmarked; we found that it is very difficult to tease out malaria expenditures (for public funds) at the DHOs. This therefore makes it impossible to track malaria expenditures at sub-national level for public funds. Furthermore, we found that the district health teams in all the sampled districts did not have prior knowledge of what resources to expect specifically to support malaria activities at the beginning of a year or quarter; this makes effective planning of activities difficult.

3. *Timeliness in the release of funds*

Delays were noted in the flow of funds from national level to district level. All the 6 districts reported that delays range from 1 to 2 months. We found that usually, funds arrive in a district in the second or last month of a quarter. This challenge is exuberated in quarter four where funds are usually received towards the end of the financial year. We also found that these delays were quite

pronounced in the first quarter and at times the funds would only be accessed in the second quarter. These kinds of delays highlight some of the major challenges that delay implementation of activities in a specific quarter. In addition to delays from national to district level, there are further internal delays at the district level. We found that even after funds have been transferred to the district, 80% (5 out of 6 districts) reported that it takes between 1 to 2 weeks to access the transferred funds. These delays are exacerbated when one of the signatories to the health account such as DHO, CAO or CFO is not available to approve the request to withdraw funds.

4. *Insufficient funds*

All of the sampled districts reported to have inadequate PHC funding to support malaria activities. This challenge is further exacerbated by the fact that there are no malaria-specific public funds available in the districts. The districts therefore relied on donor support to facilitate malaria-specific activities at the DHO.

<u>Donor funds</u>

Donor agencies like GF and UNICEF provide funding to support malaria activities at the sub-national level. As mentioned earlier, these funds are managed and utilized at the DHO level. Drawing on the key informant interviews at DHO level, the following observations were made:

1. *Unpredictability of funds*

Respondents in the sampled districts noted that they were not aware of future financial commitments from development partners. They only had information about funds currently available in a given financial quarter. This finding emphasizes the fact that financial support from development partners is unpredictable and implicitly unsustainable in nature. Furthermore, we noted that all the sampled districts do not plan or budget for development partner funds as part of their annual planning cycle. Funds are only planned for once they have been received in the district. Development partners also provide guidance on how the disbursed funds should be spent and on which specific activities. This has the potential to encourage misalignment of resources to malaria priorities in a given district. The guidelines are usually inflexible meaning that districts have to spend the resources on activities stipulated in the guidelines without considering the key malaria priorities that vary in different contexts.

2. *Communication on the release of funds*

Communication on the disbursement of funds from development partners (especially GF) is usually delayed or not sent to the districts from the national level. As a result, implementation of activities is delayed.

3. *Reporting requirements*

Districts reported that there are different expenditure recording and reporting requirements for the different development partners before the release of the new cycle of funds. Because of these differences in reporting, respondents noted that the reporting for development funds can be quite tedious and time consuming.

<u>3.4.2.2 National level to lower level health units through the Health sub district</u>

1. *No funds specifically earmarked for malaria*

As was the case with the DHO, all the sampled health facilities reported to have **<u>NO</u>** malaria-specific PUBLIC resources earmarked to support malaria activities only. Instead, we found that PHC funds are used to fund immunization outreaches and during these outreaches, malaria health education is

given. The respondents were not able to tease out how much of these funds would specifically support the health education component of the outreach visit.

2. *Not able to tease out malaria-specific expenditure*

As a result of the integrated nature of service delivery described above (malaria activities imbedded within the immunization outreach); we found that it is very difficult to tease out malaria expenditures at the DHO. This therefore makes it impossible to track malaria expenditures at the health facility level.

3. *Delays in the release of funds*

We also found that 95% of the health facilities studied reported delays in the receipt of PHC funds as a bottleneck. On average PHC funds were received between the second to third month of the quarter. The delay in receiving funds is due to late release of funds from national level as well the long bureaucratic requisitioning process required to access PHC funds. A respondent at one of the health centers said, "*… even after money is in the bank… it takes about 3 weeks before the money is available for use*". Sometimes the funds are in the bank but the health facility is not aware. In some other cases, the signatories are not readily available to approve the funds. Other times, the signatories are changed and the bank requires formal introduction of the new signatories.

4. *Insufficient funds*

Responses from the 6 selected districts indicate that 18 out of the 18 health facilities reported inadequate levels of funding to support malaria activities at their respective health units. This challenge is further exacerbated by high bank charges on PHC funds.

3.4.3 Expenditure analysis for malaria activities at sub national level

Due to the integrated nature of service delivery at the sub-national and the lack of earmarked malaria-specific resources, it was not possible to conduct a meaningful expenditure analysis at the sub-national level. The team was only able to get PHC non-wage disbursements made to the districts as well as to the health facilities, however, it was impossible to tease out how much of these funds were spent on malaria specific activities.

Conclusions and Recommendations

3.5 Conclusions and Recommendations

3.5.1 Conclusions and recommendations on the resource tracking at national level

Total malaria resource envelope is 388.7 for 2015/16, 727.2 for 2016/17 and 419.7 for 2017/18. The findings from the resource tracking at national level show that for the cumulative three-year period under assessment; Global Fund was the largest funder for malaria activities providing a total of UGX 510.1 billion for the three years i.e. UGX 55.1 billion in 2015/16 (14.4%), UGX 376.7 billion in 2016/17 (52.2%) and 78.3 billion in 2017/18 (19.0%). Other significant contributors to the program included: GOU which provided the largest share of resources in FY 2015/16 accounting for 30% of the total resource envelope, USAID and DFID also provided significant resources to the malaria program with each providing 28% of the total resource envelope in FY 2017/18. With regards to GOU's contribution, it's important to highlight that the bulk of GOU's contribution is towards salaried labour and therefore, operational malaria activities over the last three years have heavily relied on support from development partners. The contributions of development partners therefore play a very critical role in the delivery of malaria services in Uganda. This raises sustainability concerns as well all the other challenges (such as unpredictability, misalignment, displacement effects etc.) that come with heavy dependency on foreign aid to support a critical and essential national program such as the Malaria program.

The findings of this resource tracking exercise bear similarity with previous assessments. The most recent National Health Accounts report for Uganda (2015/16) reported that the malaria program accounted for 7.1% of the total Current Health Expenditure (CHE) in the country for FY 2015/16[16]. The findings from this resource tracking show that the total resource envelop for FY 2015/16 accounts for 7.3% of the total CHE in 2015/16 and this finding is very similar to the NHA results. Furthermore, the WHO world report on Malaria in 2012 noted that there was an 18-fold increase globally in financing of malaria mainly driven by development partners[17] and especially the Global Fund. This corroborates the main finding of this resource tracking that the leading contributors of resources to the malaria program are external partners with Global Fund being the biggest contributor to the program.

Additionally, similar to the findings from this tracking exercise; literature from other countries has shown that often times, external resources are largely spent on the procurement of LLINS, antimalarials as well as to support IRS activities. The most recent National Health Accounts report for Uganda (2015/16) also notes that development partners tie their support mostly to the purchase of drugs and other supplies as opposed to important components of the health system like human resources and infrastructure. However, for attainment of malaria elimination, it is important that resources from development partners are directed to supporting health systems improvements especially in the areas of human resources, surveillance and program management.

The findings of this resource tracking exercise raise some policy concerns especially with regard to the financial sustainability of the malaria program in Uganda. Below are some of the broad recommendations.

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[16] GOU. MOH. Uganda Health Accounts Report for 2014/15 and 2015/16. Kampala, Uganda.
[17] WHO.2012. World Malaria Report 2012. World Health Organization, Geneva, Switzerland. https://www.who.int/malaria/publications/world_malaria_report_2012/en/

Suggested recommendations

1. Fiscal space permitting; GOU should consider to increase its financial commitment to the malaria program. This is because of the program's very high dependency on support from development partners. Given the volatile nature of development partner support as well as Global Fund's transition policy, this over dependency on external support raises pertinent financial sustainability concerns that need to be addressed.
2. Relatedly, a malaria financial sustainability analysis and plan is recommended. The sustainability plan should clearly highlight the actions or strategies that are necessary to achieve financial sustainability for the malaria program. Additionally, the plan should highlight which agencies will be responsible for the execution of each strategy / action as well as the envisaged timeline for completion of the assigned task / action.
3. Further financial mappings will be very crucial in coming years. Funding needs, flows and gaps are likely to be larger with the growing population and inflation. Programme efficiency and sustainability could be compromised without robust resource mobilization and tracking. Ideally, a resource tracking exercise should be conducted biennially.
4. Development partners should consider diversifying their investment or increasing their allocation of resources to health systems strengthening activities. This reallocation of resources however should be aligned to government's work plans and priorities for the malaria program.
5. The current study was unable to perform a gap analysis as the estimation of need was out of the study's scope. A financial gap analysis is therefore recommended in the future. This analysis would allow for comparisons to be made between the required costs to implement malaria activities (based on need) and the available resources. This analysis would show if the gap is narrowing or widening in light of epidemiological and demographic factors.
6. The malaria program would also greatly benefit from a detailed cost analysis study. The cost analysis study will ensure that GOU's indirect contribution to the malaria program is accurately estimated. The current resource tracking relied on a previous study that wasn't methodologically exhaustive. This implies that GOU's indirect contribution for this resource tracking has been underestimated. The recommended cost analysis should therefore include the malaria-specific costs to: infrastructure / building use, equipment, vehicles, and a more accurate estimation of personnel costs.

4.2 Conclusions and recommendations on the flow of funds and expenditure analysis at subnational

From the 6 district case studies, the three most important bottlenecks were:

(a) no funds specifically earmarked for malaria
(b) Inability to tease out malaria-specific expenditures
(c) delays in the release of funds.

With regards to support from development partners, the most common bottlenecks highlighted were:
(a) unpredictability of the funds and therefore these funds are usually not budgeted or planned for.
(b) late communication to alert recipients of the release of funds and this delays implementation of activities.

There are are no similar studies in the existing literature, known to the author, against which direct comparisons can be made for the results from sun-national level. However, when we compare these results to a similar assessment conducted for the immunization program[18], we note that similar findings were obtained. This similarity might imply that very similar bottlenecks in the flow of funds are noted and cut across different disease programs. The plausible explanation for this similarity is that essentially the same financing mechanism or system is used transfer resources from the national to the sub-national level for all disease programs.

Suggested recommendations

1. Priority setting for malaria at sub-national level is recommended. This could include putting in place a guideline which ensures that a specific amount of the PHC non-wage fund is allocated to supporting the malaria program.
2. Furthermore, a mechanism that protects malaria-specific resources for malaria from reallocation at sub-national level should be put in place.
3. An increase in the resources to support malaria activities at the DHO and health facilities level is recommended. This can be achieved through innovative approaches to mobilize and increase resources for the malaria program.

[18] IDRC 2017. Resource tracking for immunization in Uganda for FYs 2014/15 and 2015/16. Gavi Evaluation.

4.0 Annexes

4.1 Financing Source Data Collection Tool

AMAPPING OF FUNDING FOR MALARIA IN UGANDA
FOR ALL SOURCES OF FUNDING FOR MALARIA

<table>
<tr><td colspan="3">Years of the expenditure estimate: FY 2015/16, 2016/17 & 2017/18</td></tr>
<tr><td colspan="3">Objectives of the form:
To identify the origin of the funds used or managed by your institution during the years under study.
To identify the recipients of those funds.</td></tr>
<tr><td colspan="3">Name of your Institution (Source of MALARIA funds):</td></tr>
<tr><td colspan="3">Your organisation's Financial Year:</td></tr>
<tr><td colspan="3">Person to Contact (Name and Title):</td></tr>
<tr><td rowspan="2">Address:</td><td colspan="2">E-mail:</td></tr>
<tr><td colspan="2">Phone (landline & cell)</td></tr>
<tr><td rowspan="5">Type of institution: Select category of institution with an "X"</td><td colspan="2">Mark X for the appropriate type of organisation</td></tr>
<tr><td>International NGO (e.g. Gates Foundation, Save the Children)</td><td></td></tr>
<tr><td>Bilateral Agency (e.g. USAID, DFID): Govt:</td><td></td></tr>
<tr><td>Multilateral Agency (e.g. UNICEF, GF)</td><td></td></tr>
<tr><td>Public (e.g. MOH, MOFPED)</td><td></td></tr>
</table>

Who completed this form (data collector's name)?

____

Date: ________________________

Time of starting: _______________ Time of ending interview: ________________

Qualitative Information – funding activities & mechanisms

1) Please describe the MALARIA activities that you fund, support or deliver.

2) Please describe how institutions apply and access funds from your organisation.

- Probe Qn: Please describe the funding flow mechanisms.

3) Are there conditionalities that organizations must meet before financial transfers are made by your institution?

4) What are the reporting requirements for organizations receiving funds from your institution?

5) Are there any key difficulties faced by recipient organizations in efficiently spending the funds transferred to them by your institution?

6) What are the key causes of bottlenecks in the flow of funds from your institution to implementing organizations?
In terms of planning, budgeting, disbursements, expenditure, and reporting.

7) What are the other issues/ challenges related to funding for MALARIA services?

8) How do you propose that these challenges could be addressed?

9) Any other comments, suggestions etc?

Now we move to the specific quantitative information of expenditure for MALARIA activities.

To whom did your Institution give / send funds for MALARIA services in Uganda in 2015/16:

List the organizations to which funds were transferred during the year under study.

Quantify the transferred funds.

Quantify the transferred funds *reported as spent* during the period under study. If no information is available regarding the amount spent, state "No Data" in the cell.

Destination of the funds (Name of the Institution and Person to Contact) **2015/16.**	Total Funds transferred (indicate currency & amount) in 2015/16	Funds spent per Malaria Activity (eg. Distribution of ITNs / Drugs & supplies / malaria M&E etc). Provide name of activity, and amount spent per activity (if this is known by the funding source - If not known, indicate 'not disaggregated' and the amount spent in total).				
Institution: Contact Person:						
Institution: Contact:						
Institution: Contact:						
Institution: Contact:						
TOTAL:						

To whom did your Institution give / send funds for MALARIA services in Uganda in 2016/17:

List the organizations to which funds were transferred during the year under study.

Quantify the transferred funds.

Quantify the transferred funds *reported as spent* during the period under study. If no information is available regarding the amount spent, state "No Data" in the cell.

Destination of the funds (Name of the Institution and Person to Contact) **2016/17.**	Total Funds transferred (indicate currency & amount) in 2016/17	Funds spent per Malaria Activity (eg. Distribution of ITNs / Drugs & supplies / malaria M&E etc). Provide name of activity, and amount spent per activity (if this is known by the funding source - If not known, indicate 'not disaggregated' and the amount spent in total).				
Institution:						

Contact Person:						
Institution: Contact:						
Institution: Contact:						
Institution: Contact:						
TOTAL:						

To whom did your Institution give / send funds for MALARIA services in Uganda in 2017/18:
List the organizations to which funds were transferred during the year under study.
Quantify the transferred funds.
Quantify the transferred funds *reported as spent* during the period under study. If no information is available regarding the amount spent, state "No Data" in the cell.

Destination of the funds (Name of the Institution and Person to Contact) **2017/18.**	Total Funds transferred (indicate currency & amount) in 2017/18	Funds spent per Malaria Activity (eg. Distribution of ITNs / Drugs & supplies / malaria M&E etc). Provide name of activity, and amount spent per activity (if this is known by the funding source - If not known, indicate 'not disaggregated' and the amount spent in total).				
Institution: Contact Person:						
Institution: Contact:						
Institution: Contact:						
Institution: Contact:						
TOTAL:						

10) Please indicate the reasons for any under- or over-spending of the amounts transferred, if identified in the tables above. *Indicate the specific source where this occurred.*

Non-financial resources

Recipients of non-financial resources (donated goods): List the institutions to which your agency donated non-financial resources for malaria, during **2015/16.**

Recipients of the non financial resources (Name of the Institution and Person to Contact) **2015/16.**	Type of Goods donated & Quantity Received	Monetary Value of One Unit in Year of Assessment (& Currency)	TOTAL Monetary Value in Year Assessment (& Currency)
Institution: Contact Person:			
Institution: Contact:			
Institution: Contact:			
Institution: Contact:			
Institution: Contact:			
Institution: Contact:			
TOTAL VALUE:			

Recipients of non-financial resources (donated goods): List the institutions to which your agency donated non-financial resources for malaria, during **2016/17.**

Recipients of the non financial resources (Name of the Institution and Person to Contact) **2016/17.**	Type of Goods donated & Quantity Received	Monetary Value of One Unit in Year of Assessment (& Currency)	TOTAL Monetary Value in Year Assessment (& Currency)
Institution: Contact Person:			
Institution: Contact:			
Institution: Contact:			

Institution: Contact:			
Institution: Contact:			
Institution: Contact:			
TOTAL VALUE:			

Recipients of non-financial resources (donated goods): List the institutions to which your agency donated non-financial resources for malaria, during **2017/18.**

Recipients of the non financial resources (Name of the Institution and Person to Contact) **2017/18.**	Type of Goods donated & Quantity Received	Monetary Value of One Unit in Year of Assessment (& Currency)	TOTAL Monetary Value in Year Assessment (& Currency)
Institution: Contact Person:			
Institution: Contact:			
Institution: Contact:			
Institution: Contact:			
Institution: Contact:			
Institution: Contact:			
TOTAL VALUE:			

11) Any other comments, additional information, insights, or suggestions you wish to make?

4.2 Financing Agents Data Collection Tool

MALARIA SPENDING ASSESSMENT IN UGANDA
FOR ALL AGENTS OF FUNDING FOR MALARIA
(Entities which receive funds and transfer them to other service providers)

<table>
<tr><td colspan="3">Years of the expenditure estimate: FY 2015/16, 2016/17 & 2017/18</td></tr>
<tr><td colspan="3">Objectives of the form:
To identify the origin of the funds used or managed by your institution during the years under study.
To identify the recipients of those funds.</td></tr>
<tr><td colspan="3">Name of your Institution (Agent for MALARIA funds):</td></tr>
<tr><td colspan="3">Your organisation's Financial Year:</td></tr>
<tr><td colspan="3">Person to Contact (Name and Title):</td></tr>
<tr><td rowspan="2">Address:</td><td colspan="2">E-mail:</td></tr>
<tr><td colspan="2">Phone (landline & cell):</td></tr>
<tr><td rowspan="9">Type of institution: Select category of institution with an "X"</td><td>Ministry of Health</td><td></td></tr>
<tr><td>Other government office (Specify_____________________________)</td><td></td></tr>
<tr><td>District government office (local government or district)</td><td></td></tr>
<tr><td>Private-for-profit national / business / insurance scheme</td><td></td></tr>
<tr><td>Private-for-profit international</td><td></td></tr>
<tr><td>National / local NGO/ CBO/ FBO (e.g. Churches)</td><td></td></tr>
<tr><td>International NGO (e.g. Gates Foundation)</td><td></td></tr>
<tr><td>Bilateral Agency (eg. USAID, DFID)</td><td></td></tr>
<tr><td>Multilateral Agency (eg. UNICEF, GF)</td><td></td></tr>
</table>

Who completed this form (data collector's name)?

____

Date: ___________________________
Time of starting: ________________ Time of ending interview: _________________

Funding activities and financial mechanisms - Qualitative Information

1) Please describe the kinds of MALARIA activities in Uganda that you fund, support or deliver.

2) Please describe how institutions apply and access funds from your institution. Please describe the funding flow mechanisms.

3) What are the conditionalities that your institution insists upon in transferring funds to organizations?

4) What are the reporting requirements for organizations receiving funds from your institution?

5) What are the key difficulties faced by recipient organizations in efficiently spending the funds transferred to them by your institution?

6) What are the key causes of bottlenecks in the funding mechanisms?

7) What are the other issues/ challenges related to funding for MALARIA services?

8) Do you have any other comments regarding financing of malaria services?

Origin and Destination of the funds transferred to other orgs in 2015/16: List the institutions from which your agency received funds during the year under study, and the organization to whom you transferred those funds.						
ORIGIN OF FUNDS (2015/16) **(If more sources than rows provided please use another form, labelled clearly)**		**DESTINATION OF FUNDS (2015/16)** **(If there were more than 2 Recipients for a Particular Source, please move to next row)**				
Origins of the funds (Name of the Institution and Person to Contact)	Funds received (Indicate currency, local or US$ or Euros)	Organizations to Whom these Funds were Sent	Amount transferred (Indicate Currency)	Funds spent per Malaria Activity (eg. Distribution of ITNs / Drugs & supplies / malaria M&E etc). Provide name of activity, and amount spent per activity (if this is known by the funding agent - If not known, indicate 'not disaggregated' and the amount spent in total).		
Institution: Contact:						
Institution: Contact:						
Institution: Contact:						
Institution: Contact:						
TOTAL:						

Origin and Destination of the funds transferred to other orgs in 2016/17: List the institutions from which your agency received funds during the year under study, and the organization to whom you transferred those funds.	
ORIGIN OF FUNDS (2016/17) **(If more sources than rows provided please use another form, labelled clearly)**	**DESTINATION OF FUNDS (2016/17)** **(If there were more than 2 Recipients for a Particular Source, please move to next row)**

Origins of the funds (Name of the Institution and Person to Contact)	Funds received (Indicate currency, local or US$ or Euros)	Organizations to Whom these Funds were Sent	Amount transferred (Indicate Currency)	Funds spent per Malaria Activity (eg. Distribution of ITNs / Drugs & supplies / malaria M&E etc). Provide name of activity, and amount spent per activity (if this is known by the funding agent - If not known, indicate 'not disaggregated' and the amount spent in total).		
Institution: Contact:						
Institution: Contact:						
Institution: Contact:						
Institution: Contact:						
TOTAL:						

Origin and Destination of the funds transferred to other orgs **in 2017/18**: List the institutions from which your agency received funds during the year under study, and the organization to whom you transferred those funds.						
ORIGIN OF FUNDS (2017/18) **(If more sources than rows provided please use another form, labelled clearly)**		**DESTINATION OF FUNDS (2017/18)** **(If there were more than 2 Recipients for a Particular Source, please move to next row)**				
Origins of the funds (Name of the Institution and Person to Contact)	Funds received (Indicate currency, local or US$ or Euros)	Organizations to Whom these Funds were Sent	Amount transferred (Indicate Currency)	Funds spent per Malaria Activity (eg. Distribution of ITNs / Drugs & supplies / malaria M&E etc). Provide name of activity, and amount spent per activity (if this is known by the funding agent - If not known, indicate 'not disaggregated' and the amount spent in total).		
Institution: Contact:						

Institution: Contact:						
Institution: Contact:						
Institution: Contact:						
TOTAL:						

Non-financial resources

Origins and Destinations of non-financial resources (donated goods) in 2015/16: List the institutions from which your agency received non-financial resources, during 2015/2016.

Origins of the non financial resources (Name of the Institution and Person to Contact)	Type of Resource provided & Quantity	Total Monetary Value of Items Provided (& Currency)	**Destination of the Non-Financial Goods** (Name of the Institution and Person to Contact)	
Institution:				
Institution:				
Institution:				
TOTAL:				

Origins and Destinations of non-financial resources (donated goods) in 2016/17: List the institutions from which your agency received non-financial resources, during 2016/2017.

Origins of the non financial resources (Name of the Institution and Person to Contact)	Type of Resource provided & Quantity	Total Monetary Value of Items Provided (& Currency)	**Destination of the Non-Financial Goods** (Name of the Institution and Person to Contact)	
Institution:				
Institution:				
Institution:				
TOTAL:				

Origins and Destinations of non-financial resources (donated goods) in 2017/18: List the institutions from which your agency received non-financial resources, during 2017/2018.				
Origins of the non financial resources (Name of the Institution and Person to Contact)	Type of Resource provided & Quantity	Total Monetary Value of Items Provided (& Currency)	**Destination of the Non-Financial Goods** (Name of the Institution and Person to Contact)	
Institution:				
Institution:				
Institution:				
TOTAL:				

9) Any other comments, additional information, insights, or suggestions you wish to make?

____

____

____

____

____

Thank you.

4.3 Data collection tools for sub-national resource tracking exercise

DHO QUESTIONNAIRE

EXPENDITURE ANALYSIS FOR MALARIA SERVICES AT SUB-NATIONAL LEVEL
DHO QUESTIONNAIRE

Year of the exercise focus: FY 2016/17 and 2017/18
DISTRICT:
Objectives of this rapid assessment: To conduct an expenditure analysis for MALARIA in Uganda at sub national level. To identify any bottlenecks to the flow of funds from national to sub-national levels (facility levels).
Person/s Interviewed (Name and Title):
E-mail:
Phone (landline & cell):

Who completed this form (data collector's name)?

____

Date: ___________________________
Time of starting: ________________ Time of ending interview: _________________

A. General Questions

1) Please describe the MALARIA activities that this DHO **gets specific funds to deliver**: (i.e. not general health support funds)

Mode of delivery	**Brief description of how funds are used**
E.g. support supervision	e.g. monthly visits to HFs

B. Sources of Funding for Malaria

2) Where did this DHO get **its** funds; what amounts were allocated to support malaria service provision; and on what basis (e.g. what was the criteria for deciding how much to spend on malaria)? ***Make sure you get a copy of the expenditure and budget recording format.***

(A) Major Sources for malaria	(B) Total DHO Budget (UGX) in 2016/17	(C) Amount budgeted for malaria	(B) Total DHO Budget (UGX) in 2017/18	(C) Amount budgeted for malaria	(D) Criteria for Allocation to malaria
Government (PHC)					
Devt Partner 1 (Specify__________)					
Devt Partner 2 (Specify__________)					
Devt Partner 3 (Specify__________)					
Devt Partner 4 (Specify__________)					
Other (specify):					
Other (specify):					

Other (specify):					

C. Government Funds for Malaria

3) Regarding the government funds for malaria mentioned above, please provide details for the budgets, disbursements and actual expenditures in FY 2016/17 & 2017/18 for malaria.

FY 2016/17

Source	Amount budgeted (UGX)	Amount Received (UGX)	Actual expenditure (UGX)	Reasons for over-/under-spending
GOU – PHC				
Other (Specify)				

FY 2017/18

Source	Amount budgeted (UGX)	Amount Received (UGX)	Actual expenditure (UGX)	Reasons for over-/under-spending
GOU – PHC				
Other (Specify)				

4) How are the government funds split between the various malaria programme activities?

FY 2016/17

Activities	Amount budgeted (UGX)	Amount Received	Actual expenditure (UGX)	Reasons for over-/under-expenditure / reallocation
Outreaches				
Training				
Social mobilisation				
Other				

FY 2017/18

Activities	Amount budgeted (UGX)	Amount Received	Actual expenditure (UGX)	Reasons for over-/under-expenditure / reallocation
Outreaches				
Training				
Social mobilisation				
Other				

5) Using the table below, show how govt. funds (PHC) for malaria are split by line-item in 2016/17 & 2017/18
    a. Of the PHC fund amount originally budgeted for MALARIA (B), what was the actual expenditure (C) for MALARIA by the DHO. For any items that the DHO is unable to track actual expenditures, mark: UNKNOWN in Column "C"

FY 2016/17

(A) PHC fund	(B) Amount budgeted for malaria (UGX)	(C) Actual expenditure (UGX)	(D) Reasons for over-/under expenditure OR for any reallocation
Fuel for vehicles			
Vehicle maintenance			
Per diems			
Other (Specify__________)			

FY 2017/18

(A) PHC fund	(B) Amount budgeted for malaria (UGX)	(C) Actual expenditure (UGX)	(D) Reasons for over-/under expenditure OR for any reallocation
Fuel for vehicles			
Vehicle maintenance			
Per diems			
Other (Specify__________)			

D. Development Partner / NGO Funds

6) Regarding the MALARIA funds from development partners mentioned above, please provide details for the budgets, disbursements and actual expenditures in FY 2016/17 & 2017/18. Please use data from ***the same year*** for all rows/columns.

FY 2016/17

Development Partner	Amount budgeted (UGX)	Amount Received (UXG)	Actual expenditure (UGX)	Reasons for over-/under-spending
Devt Partner 1 (Specify____________)				
Devt Partner 2 (Specify____________)				
Devt Partner 3 (Specify____________)				
Devt Partner 4 (Specify____________)				
Others (specify):				

FY 2017/18

Development Partner	Amount budgeted (UGX)	Amount Received (UXG)	Actual expenditure (UGX)	Reasons for over-/under-spending
Devt Partner 1 (Specify____________)				
Devt Partner 2 (Specify____________)				
Devt Partner 3 (Specify____________)				
Devt Partner 4 (Specify____________)				
Others (specify):				

7) How are the development partners funds split between the various malaria programme activities?

Development partner 1: FY 2016/17

Activities	Amount budgeted (UGX)	Amount Received	Actual expenditure (UGX)	Reasons for over-/under-expenditure / reallocation
Outreaches				
Training				
Social mobilisation				
Other				

Development partner 1: FY 2017/18

Activities	Amount budgeted (UGX)	Amount Received	Actual expenditure (UGX)	Reasons for over-/under-expenditure / reallocation
Outreaches				
Training				
Social mobilisation				
Other				

Development partner 2: FY 2016/17

Activities	Amount budgeted (UGX)	Amount Received	Actual expenditure (UGX)	Reasons for over-/under-expenditure / reallocation
Outreaches				
Training				
Social mobilisation				
Other				

Development partner 2: FY 2017/18

Activities	Amount budgeted (UGX)	Amount Received	Actual expenditure (UGX)	Reasons for over-/under-expenditure / reallocation
Outreaches				
Training				
Social mobilisation				
Other				

Use extra sheets if more than 2 development partners exist

8) Using the table below, show how funds from development partners for malaria split by line-item in 2016/17 & 2017/18.
    b. Of the development partners fund amount originally budgeted for malaria (B), what was the actual expenditure (C) for malaria by the DHO. For any items that the DHO is unable to track actual expenditures, mark: UNKNOWN in Column "C"

Development partner 1: FY 2016/17

(A) Development partners fund	(B) Amount budgeted for malaria (UGX)	(C) Actual expenditure (UGX)	(D) Reasons for over-/under expenditure OR for any reallocation
Fuel for vehicles			
Vehicle maintenance			
Per diems			
Other (Specify__________)			

Development partner 1: FY 2017/18

(A) Development partners fund	(B) Amount budgeted for malaria (UGX)	(C) Actual expenditure (UGX)	(D) Reasons for over-/under expenditure OR for any reallocation
Fuel for vehicles			
Vehicle maintenance			
Per diems			
Other (Specify_________)			

Use extra sheets if more than 2 development partners exist

Development partner 2: FY 2016/17

(A) Development partners fund	(B) Amount budgeted for malaria (UGX)	(C) Actual expenditure (UGX)	(D) Reasons for over-/under expenditure OR for any reallocation
Fuel for vehicles			
Vehicle maintenance			
Per diems			
Other (Specify_________)			

Development partner 2: FY 2017/18

(A) Development partners fund	(B) Amount budgeted for malaria (UGX)	(C) Actual expenditure (UGX)	(D) Reasons for over-/under expenditure OR for any reallocation
Fuel for vehicles			
Vehicle maintenance			
Per diems			
Other (Specify_________)			

Use extra sheets if more than 2 development partners exist

E. Bottlenecks Questions

9) When funding is released from the national level, how and when is the DHO informed? Describe any problems with this process?

Government funds:

Development partner funds:

10) After being informed, how long does it take, on average, before the funds are available for use by the DHO? Describe any problems with this process?

For Government funds only

Quarter	Date when District received the PHC Funds (***Get this info from the CAO***)	Date when DHO was Informed of PHC Funds availability	Date when PHC reflected in DHO account	Date when DHO Accessed/Spent PHC funds	Reasons for delays (district or facility level)
Q1					
Q2					
Q3					
Q4					

For Government funds only: **USE THIS TABLE IF THE DHO sends funds to the HFs**

Quarter	Date when DHO transferred PHC funds to the facility	Date when Facility was Informed of PHC Funds availability	Date when PHC reflected in facility account	Date when Facility Accessed/Spent PHC funds	Reasons for delays (district or facility level)
Q1					
Q2					
Q3					
Q4					

For development partners funds only

Devt. Partners	Disbursement Due Date (according to MoU)	Actual Disbursement Date	Received Date	1-2 main reasons for any MAJOR (i.e. programmatically significant) delays
D1				
D2				
D3				
D4				

11) Looking only at financing, funding flows, financial reporting, or accountability for tracking/using funds, are there any other major challenges that significantly constrain the DHO's capacity to support Health Facilities to meet malaria outputs and outcome targets in the annual plan?

12) What do you propose should be done or put in place to mitigate the challenges mentioned in Qn.11 above?

D. Questions for the CAO at the District

13) When funding is released from the national level, how and when is the district informed? Describe any problems with this process?

Government funds:

14) After being informed, how long does it take, on average, before the funds are transferred to the DHO? Describe any problems with this process?

For Government funds only

Quarter	Date when District received the PHC Funds	Date when the district Informed the DHO of PHC Funds availability	Date when PHC reflected in DHO account	Date when DHO Accessed/Spent PHC funds	Reasons for Delays (district or facility level)
Q1					
Q2					
Q3					
Q4					

Health Facilities Questionnaire

EXPENDITURE ANALYSIS FOR MALARIA AT SUB-NATIONAL LEVEL IN UGANDA
FACILITY QUESTIONNAIRE

<table>
<tr><td colspan="3">Year of the exercise focus: FY 2016/17 & 2017/18</td></tr>
<tr><td colspan="3">DISTRICT:</td></tr>
<tr><td colspan="3">Objectives of the form:
To conduct an expenditure analysis for MALARIA in Uganda at sub national level.
To identify any bottlenecks to the flow of funds from national to sub-national levels (facility levels).</td></tr>
<tr><td colspan="3">Name of Health Facility:</td></tr>
<tr><td colspan="3">Person to Contact (Name and Title):</td></tr>
<tr><td colspan="2" rowspan="2">Address:</td><td>E-mail:</td></tr>
<tr><td>Phone (landline & cell)</td></tr>
<tr><td rowspan="5"></td><td colspan="2">Write the appropriate type of health facility</td></tr>
<tr><td>General Hospital, Regional Referral Hosp</td><td></td></tr>
<tr><td>HC IV, HC III, HC II</td><td></td></tr>
<tr><td colspan="2">Indicate the Ownership of the Facility:</td></tr>
<tr><td>Government facility or PNFP</td><td></td></tr>
</table>

Who completed this form (data collector's name)?
____

Date: __________________________
Time of starting: ________________ Time of ending interview: _________________

F. General Questions

15) Please describe the malaria services that this health facility delivers.

16) Please describe the process of receiving and accessing PHC funds. When PHC funds are released, how is the facility informed? *Probe for process in previous two years and the current process.*

17) After being informed, how long does it take, on average, before the funds are available for use by the health facility? Please describe any problems with this process.

Request actual financial records and complete the following:

Quarter	Date when Facility was Informed of PHC Funds availability	Date when PHC fund reflected in facility account	Date when Facility Accessed PHC funds	Reasons for delays (district or facility level)
Q1				
Q2				
Q3				
Q4				

G. Sources of Funds and Budgets for MALARIA

18) Where does this health facility get funds to support the provision of malaria services, and what amounts were allocated to malaria, and on what basis (criteria for allocation)?

FY 2016/17

Sources	Total Facility Budget (UGX)	Amount budgeted for malaria	Criteria for budget allocation to malaria
Government (PHC)			
Development partners			
Others (Please specify)			
Total Budget			

FY 2017/18

Sources	Total Facility Budget (UGX)	Amount budgeted for malaria	Criteria for budget allocation to malaria
Government (PHC)			
Development partners			
Others (Please specify)			
Total Budget			

19) Are any of the above sources of funds for malaria protected against re-allocations due to competing demands from other services offered by this facility?

H. Government Funds for Malaria

20) How much of the PHC was budgeted, received, and spent for malaria in 2016/17 & 2017/18?

FY 2016/17

PHC fund	Amount budgeted (UGX)	Total Amount Received (UGX)	Actual expenditure (UGX)
Total PHC			
Malaria			

FY 2017/18

PHC fund	Amount budgeted (UGX)	Total Amount Received (UGX)	Actual expenditure (UGX)
Total PHC			
Malaria			

21) How is the PHC fund split between the various malaria programme activities?

Activity	Actual expenditure 2016/17	Actual expenditure 2017/18
Outreaches		
Training		
Social mobilisation		
Other (Specify_______________)		

22) How were the PHC funds for malaria split by line-item?

PHC fund	Actual expenditure 2016/17	Actual expenditure 2017/18
Fuel/ transport costs		
Per diems/ outreach allowances		

Social mobilisation		
Other (Specify_____________)		

I. Development Partner / NGO Funds

23) What malaria activities are being funded by development partners /International NGOs/other local NGOs mentioned in question 4 above?

24) Provide details for disbursements and actual expenditures in FY 2016/17 & 2017/18 for malaria specific activities.

Devt. Partner	Amount Received in 2016/17	Actual expenditure in 2016/17	Amount Received in 2016/17	Actual expenditure in 2017/18

25) How are the funds from development partners split between the various malaria programme activities?

Activities	Actual expenditure in 2016/17	Actual expenditure in 2017/18
Outreaches		
Training		
Social mobilisation		
Other (Specify_____________)		

26) How were the funds from development partners for malaria split by line-item in 2016/17 & 2017/18?

PHC fund	Actual expenditure in 2016/17	Actual expenditure (UGX) in 2017/18
Fuel/ transport costs		
Per diems/ outreach allowances		
Social mobilisation		
Other (Specify_____________)		

Finally,

27) Are there any challenges you face in providing / supporting malaria services at your facility?

28) How do you propose that these challenges could be addressed?

29) Any other comments, suggestions?

4.4 Stakeholder's mapping tool

MAPPING OF MALARIA ACTORS IN UGANDA

<table>
<tr><td colspan="3">Objectives of the form:
To map out key actors supporting malaria control and prevention activities in Uganda.</td></tr>
<tr><td colspan="3">Name of your Institution:</td></tr>
<tr><td colspan="3">Person to Contact (Name and Title):</td></tr>
<tr><td rowspan="2" colspan="2">Address:</td><td>E-mail:</td></tr>
<tr><td>Phone (landline & cell)</td></tr>
<tr><td rowspan="4">Type of institution: Select category of institution with an "X"</td><td colspan="2">Mark X for the appropriate type of organisation</td></tr>
<tr><td>International NGO (eg Save the Children)</td><td></td></tr>
<tr><td>Bilateral Agency (eg. USAID, DFID, PMI): Govt:</td><td></td></tr>
<tr><td>Multilateral Agency (eg. UNICEF, GF)</td><td></td></tr>
</table>

Who completed this form (data collector's name)?

____

Date: _________________________

Time of starting: _______________ Time of ending interview: ________________

1) Please describe your role/mandate with regards to malaria control and prevention in Uganda

2) Which of these best summarises your role in malaria control and prevention in Uganda (tick the most appropriate)

   a. Financing source
   b. Financing agent
   c. Service provider

3) At what level of the health system does your organisation perform the roles? (National or sub-national/district)

4) What specific activities is your organisation involved in?
   Please list the activities the organisation is involved in currently. Also list the activities the organisation was involved in 2015 to 2017

5) Which other organisations are involved in similar activities?

6) Is there a coordinating entity for organisation like yours involved in the activities you are implementing?

7) Who would you recommend that we contact to identify other actors involved in support of malaria activities?

8) Any other comments, additional information, insights, or suggestions you wish to make?

4.5 List of malaria stakeholders in Uganda

#	Classification	Organisation name
1	Dev't Partner	UK Department for International Development (DFID) Uganda
2	Dev't Partner	United Nations Children's Fund (UNICEF)
3	Dev't Partner	United States Agency for International Development (USAID)
4	Dev't Partner	United States President's Malaria Initiative (PMI)
5	Dev't Partner	World Health Organisation (WHO) Uganda Country Office
6	Dev't Partner	The World Bank
7	Regulatory body	National Drug Authority (NDA)
8	Regulatory body	Uganda Medical Association (UMA)
9	Regulatory body	Pharmaceutical Society of Uganda
10	Regulatory body	Uganda Allied Health Council
11	Regulatory body	Uganda Medical and Dental Practitioneers Council
12	Regulatory body	Uganda National Bureau of Standards (UNBS)
13	Regulatory body	Uganda Nurses and Midewives Council
14	Private Sector	Healthy Entrepreneurs
15	Private Sector	ONES ENTERPRISES
16	Private Sector	Vestergaard Uganda
17	Private Sector	First Pharmacy Uganda
18	NGO	Against Malaria Foundation (AMF) Uganda
19	NGO	BRAC Uganda
20	NGO	HEPS Uganda
21	NGO	Joint Medical Stores (JMS)
22	NGO	Programme for Accessible Health Communication and Education (PACE)
23	NGO	Uganda Episcopial Conference (UEC)/Uganda Catholic Medical Bureau (UCMB)
24	NGO	Church of Uganda Planning, Development and Relief Department (CoU-PDR)
25	NGO	Clinton Health Access Initiative (CHAI)
26	NGO	JHPIEGO Uganda
27	NGO	Malaria and Childhod Illiness NGO Secretariat (MACIS)
28	NGO	Malaria Consortium Uganda
29	NGO	Pilgrim Uganda
30	NGO	Rakai Health Sciences Project
31	NGO	Uganda Health Marketting Group (UHMG)
32	NGO	Uganda Muslim Medical Bureau (UMMB)
33	NGO	Uganda Orthodox Medical Bureau (UOMB)
34	NGO	Uganda Protestant Medical Bureau (UPMB)
35	NGO	Uganda Protestant Medical Bureau (UPMB)

36	Implementing partner	USAID Communications for Health Communities Project (CHC)
37	Implementing partner	USAID Defeat TB project
38	Implementing partner	USAID Malaria Action Program for Districs (MAP-D)
39	Implementing partner	USAID Regional Health Integration to Enhance Services in South Western Uganda Activity (RHITES-SW)
40	Implementing partner	USAID Strengthening Uganda's Systems for Treating AIDS Nationally (SUSTAIN)
41	Implementing partner	USAID Global Health Supply Chain Project
42	Implementing partner	USAID In-door Residual Spraying (IRS) Project [Abt Associates)
43	Implementing partner	USAID Regional Health Integration to Enhance Services in Acholi Region of Uganda Activity (RHITES-Acholi)
44	Implementing partner	USAID Regional Health Integration to Enhance Services in East Central Uganda Activity (RHITES-EC)
45	Implementing partner	USAID Regional Health Integration to Enhance Services in East Uganda Activity (RHITES-E)
46	Implementing partner	USAID Regional Health Integration to Enhance Services in Lango Region of Uganda Activity (RHITES-Lango)
47	Implementing partner	USAID Uganda Health Initiatives for the Private Sector (HIPS) project
48	Implementing partner	USAID Uganda Health Supply Chain Project
49	Government Agency	National Medical Stores (NMS)
50	Funding mechanism	The AIDS Support Organisation (TASO)
51	Coordination Mechanism	Uganda Global Fund Country Coordinating Mechanism (CCM)
53	Academia & Research	Infectious Diseases Research Collaboration (IDRC)
54	Academia & Research	Medicines for Malaria Venture (MMV)
55	Academia & Research	Department of Pharmacy, Mbarara University of Science and Technology
56	Academia & Research	Faculty of Medicine, Mbarara University of Science and Technology
57	Academia & Research	Gulu University Faculty of Medicine
58	Academia & Research	Infectious Diseases Institute (IDI)
59	Academia & Research	Makerere University College of Health Sciences
60	Academia & Research	Makerere University Department of Pharmacy
61	Academia & Research	Makerere University School of Public Health

4.6 List of KIIs and Health Facilities visited

List of key informants at National Level

Name	Organisation	Position
Dr. Jimmy Opigo	Ministry of Health	Programme Manager NMCP
Dr. Henry Katamba	Global Fund	M&E Specialist
Mr. Mulyazaawo Mathias	Global Fund	M&E Specialist
Mr. Alex Ogwal	Clinton Health Aceess Initiative	Malaria Program Manager
Dr. Fred Kagwire	UNICEF	Health Specialist
Ms. Robinah Lukwago	Department for International Development	Health Advisor
Mr. Dick Muhwezi	The AIDS Support Organisation	Project Cordinator
Mr. Anthony Nuwa	Malaria Consortium	Malaria Program Manager
Dr. Charles Katurebe	World Health Organisation	Malaria Focal Person
Mr Gerald Mwima	Uganda Catholic Medical Bureau (UCMB)	Malaria Focal Person
Mr. Dennis Kibira	HEPS	Executive Director

List of facilities visited at Sub-National Level

District	Facility	Person interviewed
Gulu	District Health Office	Malaria Focal Person
Gulu	Awach Health Centre IV	Health Facility Incharge
Gulu	Patiko Heakth Centre III	Health Facility Incharge
Gulu	Gwendiya Health Centre II	Health Facility Incharge
Iganga	District Health Office	District Health Officer
Iganga	Bugono Health Centre IV	Health Facility Incharge
Iganga	Namungalwe Health Centre III	Health Facility Incharge
Iganga	Namunsala Health Centre II	Health Facility Incharge
Luwero	District Health Office	Malaria Focal Person
Luwero	Luwero Health Centre IV	Health Facility Incharge
Luwero	Katikamu Health Centre III	Health Facility Incharge
Luwero	Kikuube Health Centre II	Health Facility Incharge
Mbale	District Health Office	Malaria Focal Person
Mbale	Busiu Health Centre IV	Health Facility Incharge
Mbale	Namanyonyi Health Centre III	Health Facility Incharge
Mbale	Nankusi Health Centre II	Health Facility Incharge
Rakai	District Health Office	District Health Officer
Rakai	Lwanda Health Centre III	Health Facility Incharge
Rakai	Lwamaggwa Health Centre III	Health Facility Incharge
Rakai	Kyabigondo Health Centre II	Health Facility Incharge
Sheema	District Health Office	District Health Officer
Sheema	Kabwohe Health Centre IV	Health Facility Incharge
Sheema	Kigarama Health Centre III	Health Facility Incharge
Sheema	Kyeibanga Health Centre II	Health Facility Incharge