Government of Malawi

HEALTH SECTOR RESOURCE MAPPING

FY 2017/18 – FY 2019/20

Acknowledgements

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This report was compiled by a team from the Ministry of Health under the coordination of the Department of Planning and Policy Development. Appreciation for this work should therefore go to all members of the Department of Planning and Policy Development.

Abbreviations

ACT	artemisinin-based combination therapy
AIDS	acquired immune deficiency syndrome
ART	antiretroviral therapy
ARV	antiretroviral
ASAQ	artesunate-amodiaquine
BCC	behavior change communication
BCG	Bacille Calmette Guerin
CHAI	Clinton Health Access Initiative
CHAM	Christian Health Association of Malawi
CIP	Capital Investment Plan
CPT	co-trimoxazole preventive therapy
DDP	District Development Plan
DFID	Department for International Development
DOTS	directly observed treatment, short-course
DP	development partner
DPPD	Department of Planning and Policy Development
EGPAF	Elizabeth Glaser Pediatric AIDS Foundation
EHP	Essential Health Package
FY	fiscal year
GAVI	Global Alliance for Vaccines and Immunization
GDP	gross domestic product
GoM	Government of Malawi
HIS	health information system
HIV	human immunodeficiency virus
HPV	human papillomavirus
HSJF	Health Services Joint Fund
HSS	health systems strengthening
HSSP	Health Sector Strategic Plan
HTC	HIV testing and counseling
I-TECH	International Training and Education Center for Health
IMCI	Integrated Management of Childhood Illnesses
IMF	International Monetary Fund
IPTp	intermittent preventive treatment in pregnancy
IRS	indoor residual spray
ITN	insecticide-treated net
IUCD	intrauterine contraceptive device
IUD	intrauterine device
IVM	integrated vector management
KfW	German Development Cooperation
LA	Lumefantrine-Artemether
LLIN	long lasting insecticidal net
M&E	monitoring and evaluation
MDRTB	multiple drug-resistant tuberculosis

MGDS	Malawi Growth and Development Strategy
MOH	Ministry of Health
MTB/RIF	mycobacterium tuberculosis/resistance to rifampicin
NASA	National AIDS Spending Assessment
NCD	noncommunicable disease
NGO	nongovernmental organization
NHA	National Health Accounts
NSO	National Statistical Office
NTD	neglected tropical disease
PCV	packed cell volume
PMTCT	prevention of mother-to-child transmission
RDT	rapid diagnostic test
RM	resource mapping
RMNCH	reproductive, maternal, newborn, and child health
SDGs	Sustainable Development Goals
STI	sexually transmitted disease
TB	tuberculosis
TT	tetanus toxoid
UNICEF	United Nations Children's Fund
USAID	U.S. Agency for International Development
USD	U.S. dollar
USG	United States Government
VMMC	voluntary medical male circumcision
WEO	World Economic Outlook
WHO	World Health Organization

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Executive Summary

The Government of Malawi (GoM) aims to have the highest possible level of health and quality of life for its citizens. The provision of equitable and quality healthcare is largely dependent on the availability of adequate resources. However, planning and coordination of health activities have been challenging in the country, considering that there is substantial off-budget donor funding. According to resource mapping (RM) projections, in fiscal year (FY) 2017/18, 75 percent of funding for the health sector came from 189 external donors, each with separate budgets, priorities, decision-making processes and implementers; the GoM finances the remaining 25 percent of the health sector.

To address these challenges, the Ministry of Health (MOH) has adopted an annual RM exercise to track health sector resources and to inform planning and budgeting decisions both for the MOH and its development partners (DPs). Health sector RM provides detailed, forward-looking budget data, complementing other surveys like the National Health Accounts (NHA) and the National AIDS Spending Assessment (NASA) that collect historical expenditure data. This report presents the key findings of RM Round 5, which includes health sector budget data collected for FY 2017/18 through FY 2019/20.

In FY 2017/18, the total resource envelope for the sector is estimated at US$639 million, representing 9.5 percent of overall gross domestic product (GDP). Of that total, US$477 million (75%) comes from DPs, while the remaining US$162 million (25%) comes from the government. Compared to the last round of RM data from FY 2015/16, when the sector had a resource envelope of US$607 million, overall resources have nominally increased by US$32 million in nominal US dollar (USD) terms.

In FY 2017/18, the top four financing sources for health include the Global Fund (28%), GoM/MOH (25%), United States (16%), and the Health Sector Joint Fund (6%), which collectively provide 75 percent of all resources. If the subsequent six top financing sources are considered as well, the top 10 financing sources for health account for 92 percent of all health sector resources captured for FY 2017/18. This means that the remaining 181 financing sources contribute to just 8 percent of the overall resource envelope.

Within the US$639 million budgeted for 2017/18, HIV/AIDS is the programmatic area receiving the most funding at US$197 million (31%). This is followed by reproductive, maternal, newborn, and child health (RMNCH) at US$50 million (8%), malaria at US$43 million (7%), nutrition at US$32 million (5%), vaccines at US$19 million (3%), tuberculosis (TB) excluding HIV at US$13 million (2%), and environmental health and diarrheal diseases at US$6 million (1%). Mental health, eye, ear, and skin diseases, and noncommunicable diseases (NCDs) each receive less than US$2 million. On the extreme low end, neglected tropical diseases and respiratory infections receive less than US$0.5 million each. Additionally, a significant portion of funding was considered cross-cutting across disease areas, representing US$275 million (43%).

A separate analysis of all cost categories (which includes parameters such as administration, capital equipment, drugs, infrastructure and technical assistance) reveals that for FY 2017/18, drugs and medical supplies account for the largest area of anticipated spending at US$229 million, of which US$123 million is sourced from the Global Fund, largely for the procurement of antiretroviral (ARV) drugs. Health worker salaries and benefits is the second-largest cost category, at 12 percent of projected funds, followed by construction of infrastructure (8%) and community outreach activities (7%).

Funding within the total resource envelope earmarked for specific districts (as opposed to national-level programs or funding for central hospitals) amounts to US$338 million for FY 2017/18 but varies dramatically across districts. Total funding per district ranges from US$5 million in Likoma to US$44 million in Lilongwe, with a median of US$12 million. Districts also range in their level of donor

dependency; Phalombe has the greatest percentage of health funding from external sources (88%), while Dowa has the lowest (70%). Variations in donor funding across districts are partly due to district-specific projects, which are typically not integrated into the District Development Plans (DDPs). Increased transparency and coordination could lead to better management and execution of district funds.

Of the total funds made available to the health sector in FY 2017/18, 70 percent are dedicated to service delivery costs, while the other 30 percent are budgeted towards non-service delivery costs. Service delivery costs include items such as capital equipment, drugs, and salaries, while non-service delivery costs include items such as administration, research, and technical assistance. While a crude estimate, these figures indicate that, on average for every dollar budgeted, roughly US$0.70 will be given to health care facilities to provide health services. Improved efficiency in non-service delivery costs could dramatically improve facility-level resources.

The ultimate objective of RM is to equip all stakeholders in the health sector with increased knowledge and understanding of the flow of resources in the coming three years. It provides an understanding of the available resources for the sector and indicates the flow of funds from financer to implementer; across different programs, geographic regions, fiscal years, and cost categories. RM can be a powerful tool in resource mobilization; operationalization of strategic plans; coordination of implementation; identification of inefficiencies; and informing policy change.

The complete dataset is available on request from the MOH's Department of Planning and Policy Development (DPPD) and should be adopted and analyzed proactively by stakeholders for their various health financing needs.

For more information and access to the full database, please contact the resource mapping email account at: resourcemappingmalawi@gmail.com.

Section 1: Background and Overview

1.1. Resource Mapping in Malawi

Malawi's health sector programs are financed and implemented by hundreds of organizations. In the past, the Ministry of Health (MOH) has found it challenging to track and coordinate the activities of all partners. To address this challenge, and in the spirit of promoting transparency and aid effectiveness, the MOH, through the DPPD, has adopted and institutionalized an annual RM exercise.

Resource mapping tracks the budgets and expenditures of all health sector organizations, thereby providing valuable information for the national annual budgeting process. It enables organizations to make evidence-based decisions in order to inform their budgeting process and yearly operational plans, as well as improve resource allocation, coordination with other stakeholders, and harmonization with MOH priorities. The first round of the RM exercise began in January 2012 and has continued annually through the fifth round of the RM exercise, which is presented in this report.

All health-related organizations except for private health facilities—including relevant government ministries, departments, and agencies (MDAs), Christian Health Association of Malawi (CHAM) facilities, bilateral and multilateral partners as well as nongovernmental organizations (NGOs)—are asked to submit detailed health budget information for both on-budget and off-budget resources. With its detailed data at the activity level, RM shows the amount of budgeted health funds across districts, disease programs, interventions, and cost categories. **Table 1** below outlines the key questions that are addressed by RM.

Table 1. Key questions addressed by RM

Who is providing resources for health programs and who is implementing them?

- Source of funding
- Financing agents
- Implementing agents

What are available funds being spent on or budgeted for?

- What activities are being funded?
- Which programmatic areas do these activities fall under?
- Which cost categories do these activities cover?

Where are the resources being spent or budgeted for?

- How are funds allocated geographically?
- How are funds allocated across different levels of the health system?
- How are funds allocated across various beneficiary groups?

By attempting to answer the above questions over five consecutive rounds, RM has increased transparency and accountability across stakeholders and strengthened the government's coordination of funding across the health sector.

The Malawi health sector benefits from the data of a number of sector-wide resource-tracking exercises, including RM and NHA. In addition, HIV/AIDS spending has been tracked through the NASA. These exercises complement each other, as they provide different kinds of data that are used for different purposes.

The most interrelated exercises are RM and NHA, but they differ in a number of distinct ways, including (1) the types of data captured, (2) the questions the data sets try to inform, (3) the sources of data, and (4) the level of customization and granularity. RM collects detailed *forward-looking* budget data to inform financial gap analyses, resource mobilization, allocation decisions, and coordination. NHA, on the other hand, collects historical expenditure data to inform health financing policy decisions through assessing the three main health financing functions—resource mobilization, pooling, and purchasing. For future exercises of RM and NHA, Malawi's MOH is exploring ways to harmonize the two processes at the level of data collection, as is the case in other countries such as Zimbabwe. A more detailed comparison of RM and NHA is available in **Annex 1**.

Section 2: Methodology

I.

II.

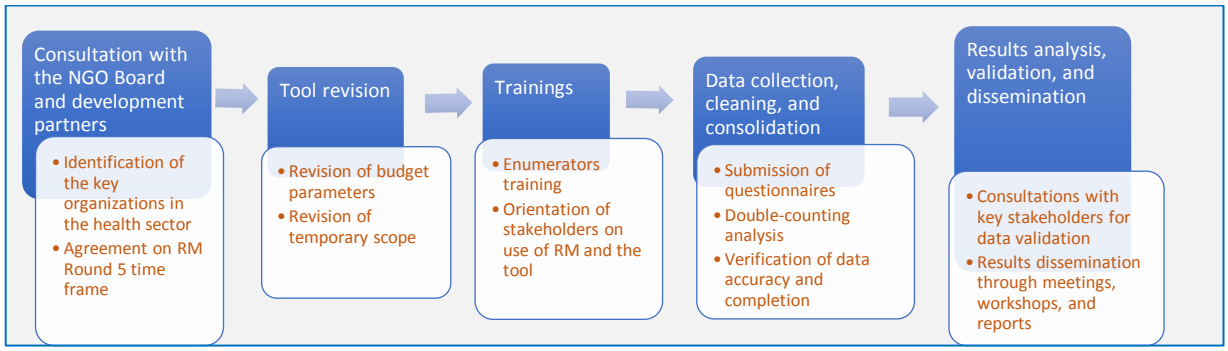
2.1. Overall process

The fifth round of Malawi's Health Sector RM is one of the key analytical studies that was carried out by the MOH to support the operationalization of the Health Sector Strategic Plan II 2017–2022 (HSSP II). The primary objective of these studies is to allow for better aid coordination in order to redirect resources, as necessary, towards more cost-effective interventions as prioritized within the Essential Health Package (EHP) and to develop investment cases for resource mobilization.

As opposed to the four previous RM exercises, which were led by the Clinton Health Access Initiative (CHAI), this round of RM was led by a team from the MOH DPPD, with technical support from CHAI and World Bank. RM data collection, cleaning, and analysis has been institutionalized within the MOH.

Round 5 of the RM exercise commenced in May 2017, and the preliminary report was prepared in April 2018. **Figure 1** below summarizes the key activities undertaken over the 11-month completion period.

Figure 1. RM Round 5 process



Consultations were conducted with DP coordinating bodies to identify relevant sources of information and agree on a realistic timeframe that would take into account stakeholders' budgeting and budget review processes. A total of 376 organizations were identified as potential sources of information for RM Round 5—including government MDAs, multilateral and bilateral partners, NGOs, private companies, and other implementing partners.

2.2. Data Collection Tool

A number of parameters are inputted to RM to provide the level of detail required. An Excel-based data collection template is used to capture these parameters for each organization that submits budgeting information and is broken down by specific activities for each project planned between FY 2017/18 and FY 2019/20.

The budget data is divided into the following five categories: (1) Financiers and Implementers; (2) Programs, Projects, and Activities; (3) Cost Category; (4) Geography; and (5) Currency and Budgeting. A general structure of RM is outlined in **Table 2**.

Table 2. RM general structure

	Type	Parameter	Definition of Parameter	Example
1	Financiers and Implementers	Submitting Organization	Organization that submitted budgeting information	Action Aid
		Financing Source	The organization or entity financing the activity	Global Fund
		Primary Implementing Agent	Primary organization or entity that is carrying out implementation	Action Aid
		Sub-Implementing Agent	Additional organization or entity carrying out the activity, if applicable	Christian Aid
2	Programs, Projects, Activities	Project Name	Specific project that is supported by the activity	Prevention of mother to child transmission (PMTCT)
		Programmatic Function*	Programmatic area, function, or disease supported by the activity	HIV, including sexually transmitted infections (STIs)
		Intervention*	Intervention supported by the activity, dependent on the programmatic function	Prevention – PMTCT
		Target Population*	Subpopulation targeted for HIV and TB interventions only, if applicable	Women of childbearing age
		Activity	Free-form text to describe the specific activity within the intervention	Conduct orientation of mother-to-mother peer educators in PMTCT and antiretroviral therapy (ART) adherence support
3	Cost Category	Cost Category*	Classification of activity costs in administrative categories (e.g., capital infrastructure, trainings, monitoring and evaluation [M&E], etc.)	Community outreach activities
4	Geography	District	Percentage of funding earmarked for specific district(s); if national, can be specified as 100% national	50% Blantyre 50% Thoylo
5	Currency and Budgeting	Currency	Currency of the submitting organization's budget	USD
		Fiscal Year Start Month	Fiscal year start month of the submitting organization	July
		Budget Year	Budget amount per year for the next three FYs	Budgeted amount for FY 2017/18– FY 2019/20

*For a full list of parameter options captured, refer to **Annex 2.**

In order to make the RM exercise relevant for decision making and resource mobilization, the Round 5 Excel-based data collection template was revised from previous years to allow for capturing additional key parameters, such as:

- HSSP II objectives and strategies
- EHP interventions (applicable only to HSSP II Objective 1)
- Health information system (HIS) strategy (applicable only to HSSP II Objective 6)
- Existence of a memorandum of understanding with the government

Additionally, since previous RM exercises revealed a significant drop in accuracy of budget projection beyond the three-year mark, the timeframe for the RM exercise was revised from five to three years.

2.3. Response Rate

The Round 5 Resource Mapping questionnaires were sent to a total of 376 organizations, and responses were received from 232 (62%), representing a significant increase over the 165 responses received in RM Round 4. The organizations from which responses were received are listed in **Annex 3**.

This high response rate can be attributed to the door-to-door approach used in this round, in which enumerators visited all the targeted organizations and assisted them in filling out the data collection templates. Throughout the two-month data collection period, the DPPD conducted repeat follow-ups to improve the rate of submission and undertook targeted data entry trainings with participating stakeholders to familiarize them with the Excel-based data entry tools prior to launching the exercise.

2.4. Data Cleaning and Validation

Once organizations had completed their submissions, the DPPD reviewed the populated templates. DPPD conducted rigorous quality checks on submissions, focusing on accuracy and completeness, before aggregating the submissions into a master database. The master database was reviewed and cleaned further, notably to identify potential duplicative reporting of funds (from financing source and implementing agent), i.e., double counting, thereby preventing the overestimation of planned budgets.

Round 5 data were provided by 232 organizations. However, given that 90 percent of all funding captured in RM Round 5 can be attributed to just eight organizations, the MOH decided to prioritize these organizations for rigorous follow-ups, while using data from all organizations for data cross-check and identification of any new financial sources from all organizations in the health sector. This targeted outreach allowed the team to maintain high quality of data in a time-effective manner.

Upon completion of reviews and quality checks, the Round 5 Health Sector RM database was finalized.

Section 3: Results and Analysis

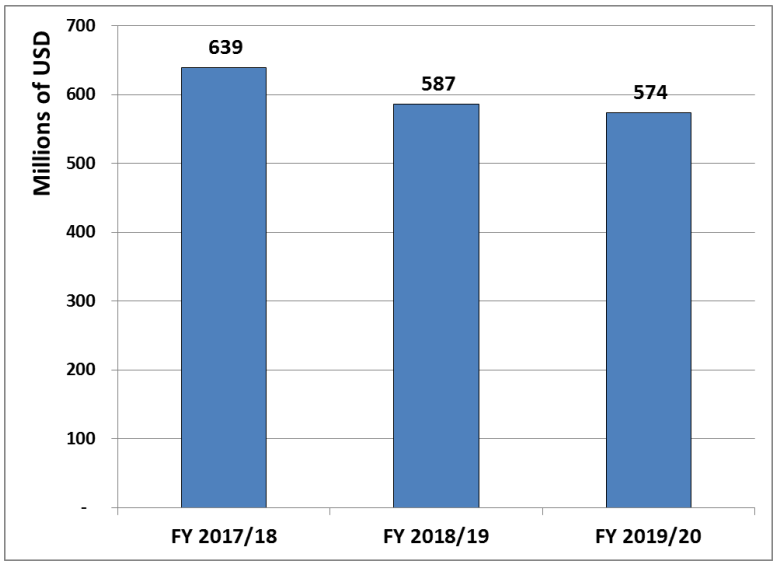
This section presents the projected budgets for the fiscal years 2017/18, 2018/19, and 2019/20.[1]

III.

3.1. Overall Fiscal Projection for the Health Sector from FY 2017/18 to FY 2019/20

Round 5 includes submissions from 232 organizations, including government MDAs, multilateral and bilateral partners, NGOs, foundations, and private companies. Data submitted revealed that the Malawian health sector was supported by 191 financing sources and 261 implementing partners across the three years reported in RM Round 5. It is important to note that household spending on health is excluded from this analysis.[2]

Figure 2. Planned budgets for the health sector (FY 2017/18–2019/20)



A total of US$1.8 billion has been reported as financial projections for the period from FY 2017/18 to FY 2019/20. As shown in **Figure 2**, it is projected that US$639 million will be mobilized for the health sector in FY 2017/18, followed by US$587 million in FY 2018/19 and US$574 million in FY 2019/20.

The estimated annual envelope for RM Round 5 is approximately consistent with figures from the previous round of RM (RM4), where annual projections for FY 2014/15, FY 2015/16, and FY 2016/17 were US$641 million, US$606 million, and US$564 million, respectively.

In terms of total nominal allocations to health, the resource envelope of US$639 million against a GDP estimated at US$6.7 billion[3] for FY 2017/18 equals 9.5 percent of GDP. As a percentage of GDP, this is a 1.5 percentage point decline in health sector resources in comparison to FY 2015/16 (health sector resources: US$607 million/GDP: US$5.5 billion) where health sector budget as a percentage of GDP was 11 percent. In absolute terms, however, the resources in the health sector in Malawi have increased. The total budget for FY 2017/18 was projected to be US$613.5 million in 2015 USD,[4] which is greater than budget of US$607 million in FY 2015/16.

[1] The Malawian fiscal year runs from July to June.
[2] The RM exercise does not include household expenditures on health. Therefore, actual funding for the periods under review might be higher than the RM Round 5 figures.
[3] International Monetary Fund (IMF) World Economic Outlook (WEO) database, April 2018 (Note: for RM data related to FY 2015/16, 2016 GDP was used. For 2017/18, 2018 GDP was used.)
[4] Source of inflation figures: US Department of Labor Statistics.

The per-capita allocation to health in 2017/18 was estimated at US$35.6[5] ($34.2 in 2015 USD). This represents a slight increase in per capita health expenditures during the period between FY 2015/16[6] and FY 2017/18.

Future projections show that health sector resources will decline significantly each year.[7] However, since most stakeholders find it difficult to project budgets beyond two years with accuracy, the magnitude of this decline is unlikely to be an accurate representation of the status of health financing in Malawi.

3.2. Funding by Financing Source

With respect to sources of financing, the results shown in

Figure 3 below indicate that of the available US$639 million in FY 2017/18, US$477 million (75%) comes from external partners, including bilaterals, multilaterals, NGOs/foundations, private companies, and funding from private individuals.

Meanwhile the government's contribution is estimated at US$162 million, or about 25 percent of health sector resources. The estimated government health budget is about $9 per capita,[8] significantly lower than the US$86 in government health expenditure recommended by the World Health Organization (WHO) for an essential package of cost-effective interventions with health systems strengthening components in developing countries.[9]

This split suggests that Malawi is one of the most donor-dependent countries in the world, leaving Malawi's health financing system somewhat unpredictable.

Major funders that account for the bulk of Malawi's resources are shown in **Figure 4** and include the Global Fund (28%), the MOH (25%), the United States (16%), the Health Services Joint Fund (6%), the United Kingdom (5%), the World Bank (4%), Germany (4%), the Global Alliance for Vaccines and Immunization (GAVI) Alliance (2%), Norway (1%), and the Bill and Melinda Gates Foundation (1%).[10]

Compared to FY 2015/16, when the country had US$443 million from partners and US$164 million from the government, Round 5 shows that, in nominal terms, partner support has increased by US$33 million (7%), while the government allocation has approximately flatlined over the same time period. In real terms, partner support still shows an increase of just under US$30 million, whereas government allocation has dropped by just under US$3 million. This represents a drop of 1.6 percentage points in the contribution of the GoM to total health sector resources during FY 2017/18.

[5] This is based off of an estimated population of 17.9 million people in 2018. Source: National Statistics Office (NSO) population projections from 2008. More recent population figures were not available at the time of writing, pending the upcoming census.

[6] The per capita health expenditures were estimated to be US$34 in FY 2015/16.

[7] This estimate is based on nominal USD terms.

[8] This is based off of an estimated population of 17.9 million people in 2018. Source: NSO population projections from 2008. More recent population figures were not available at the time of writing, pending the upcoming census.

[9] Chatham House. 2014. *Shared Responsibilities for Health: A Coherent Global Framework for Health Financing. Final Report of the Centre on Global Health Security Working Group on Health Financing.*

[10] The Health Services Joint Fund is supported by Norway (43.5%), DFID (39.9%), and German Development Cooperation (KfW) (16.6%). The financial projections for these three donors, which are reported above, do not include their contribution to the Health Services Joint Fund (HSJF) and are, therefore, an underestimate.

Figure 3. Budgets by financing source type (FY 2017/18)

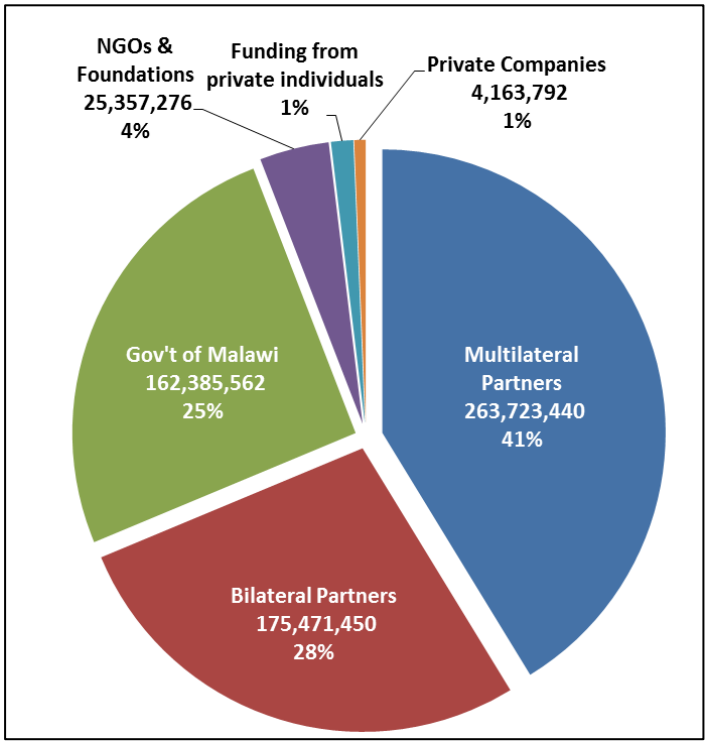
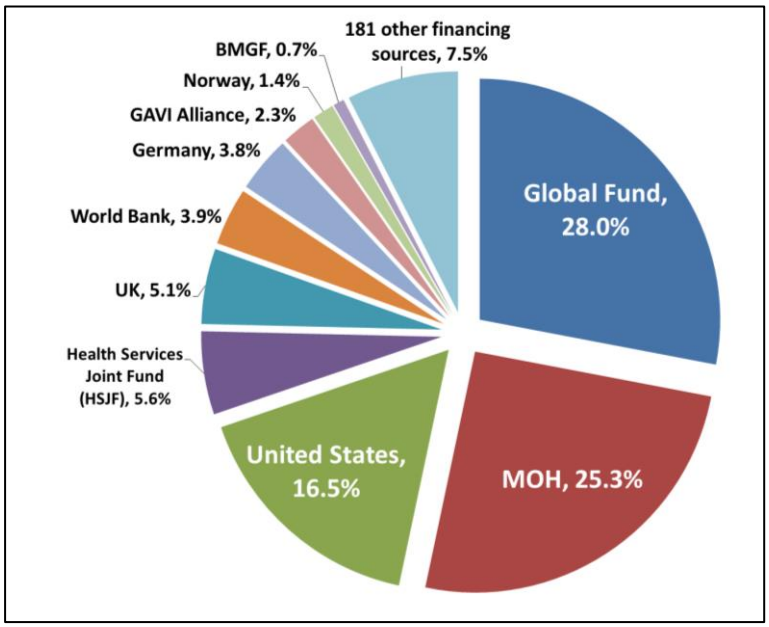


Figure 4. Budgets by financing source (FY 2017/18)



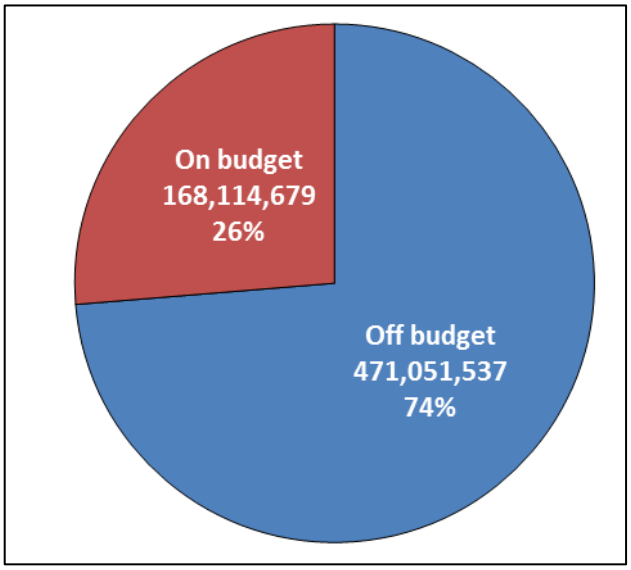
3.3. Funding by Budgeting and Disbursement Mechanisms

3.3.1. Budgeting Mechanisms

Budget support from DPs to the health sector is done through two main mechanisms: on-budget support and off-budget support. On-budget support includes funding channeled directly to the government through the Treasury. In Malawi, this includes both Treasury funding as well as partner

funding channeled through the Development Part I budget. Meanwhile, off-budget or discrete funding is not channeled through government systems, and the donor retains and manages the funds. In FY 2017/18, discrete funding projections totaled US$471 million; this amount is three times the on-budget funding, which is estimated at US$168 million (**Figure 5**).

Figure 5. On-budget vs. off-budget funding for health (FY 2017/18)

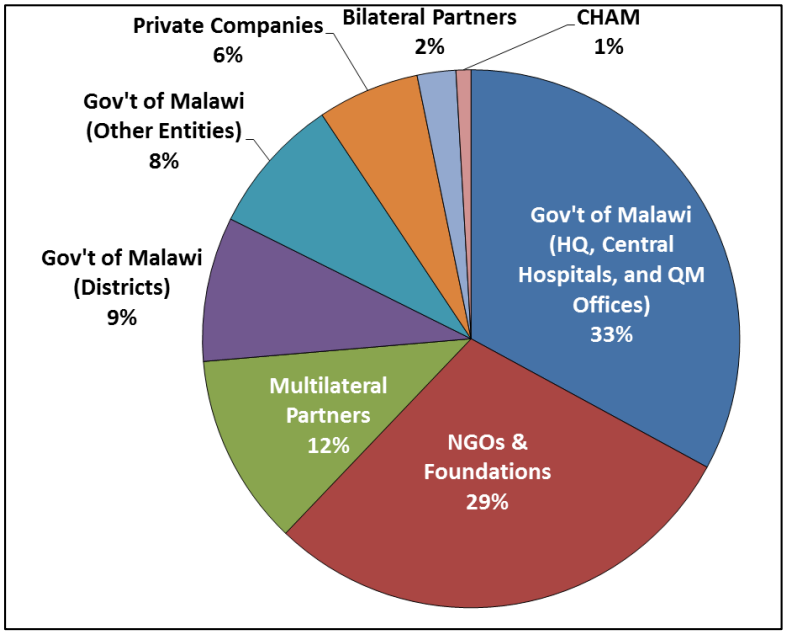


The increasing number of off-budget donors has led to a proliferation of numerous agencies with resources that are often hard to trace and prone to misalignment with health sector priorities. This situation is not in line with health financing policy for universal health coverage, which would require better alignment of donor resources to improve pooling for better access and a more equitable distribution of healthcare.

3.3.2. Implementing Agents

A total of 261 organizations implemented health sector projects in 2017/18. While the GoM funds approximately 25 percent of the health sector, it is the implementing agent for a much larger proportion of funding, representing about 50 percent of all budgets (**Figure 6**). This is followed by NGOs and foundations (29%), multilateral partners (12%), private companies (6%), bilateral partners (2%), and CHAM (1%).

Figure 6. Budgets by primary implementing agent type (FY 2017/18)



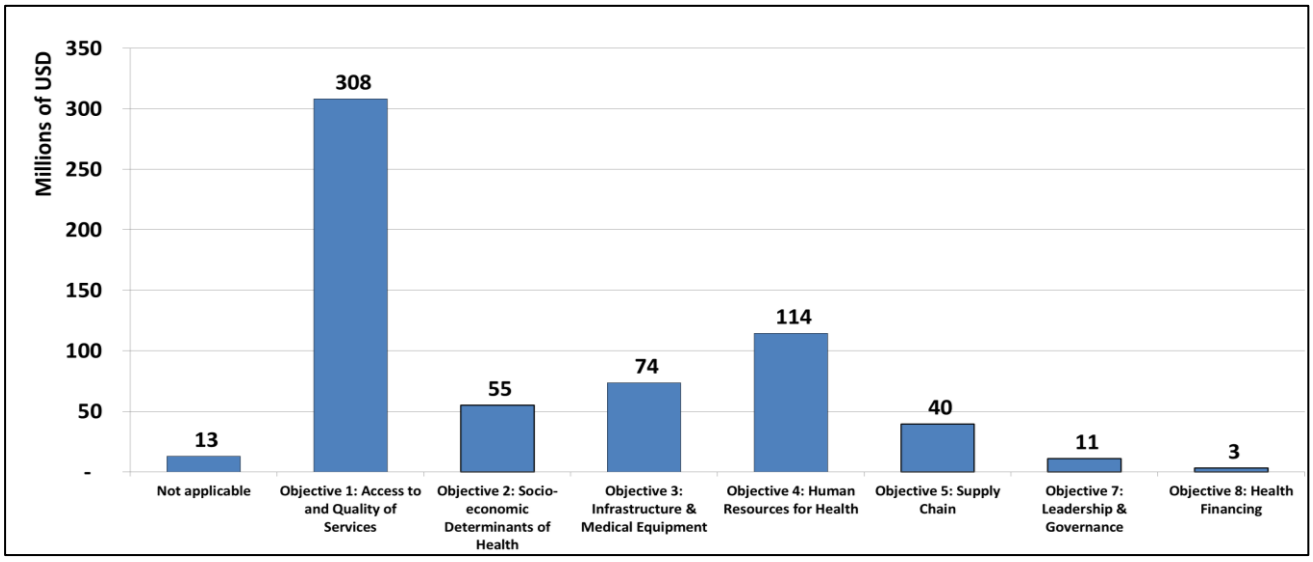
3.4. Funding for the HSSP II

3.4.1. HSSP II Funding by Objective

The HSSP II was developed in 2017 by the MOH to contribute to the achievement of both national priorities such as Vision 2020 and the Malawi Growth and Development Strategy III (MGDS-III), as well as international priorities such as the Sustainable Development Goals (SDGs) in Malawi. Constructed around eight main objectives, the HSSP II aims at strengthening the Malawi health system for the delivery of an essential health package and tackling social determinants of health.

The HSSP II objective with the greatest funding is *Objective 1: Increasing equitable access to and improving quality of health services*, which received US$308 million in funding in FY 2017/18. Other major drivers include *Objective 4: Human Resources for Health* (US$114 million) and *Objective 3: Infrastructure and Medical Equipment* (US$74 million). These are shown below in **Figure 7**.

Figure 7. Budgets by HSSP II objective (FY 2017/18)



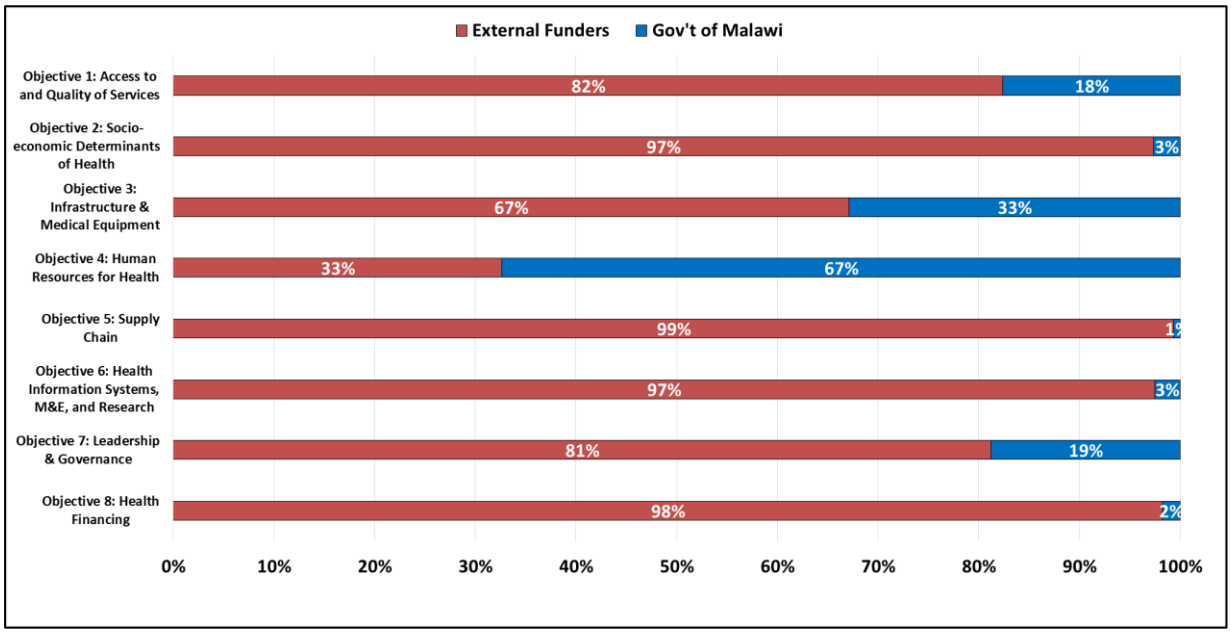
3.4.2. HSSP II Funding by Objective and by Financing Source

As shown in

Figure *8*, the majority of HSSP II objectives are highly dependent on external donor funding. This is particularly true for *Objective 5: Supply Chain* (99% donor-funded), *Objective 8: Health Financing* (98% donor-funded), *Objective 2: Socio-economic Determinants of Health* (97% donor-funded), and *Objective 6: HIS, M&E, and Research* (97% donor-funded).

In contrast, the HSSP II objectives that are the least dependent on external donor resources include *Objective 3: Infrastructure & Medical Equipment* (67% donor-funded) and *Objective 4: Human Resources for Health* (33% donor-funded).

Figure 8. HSSP II objective by financing source (FY 2017/18)



Objective 4: Human Resources for Health is the HSSP II objective with the greatest proportion of government funding. For FY 2017/18, the GoM will disburse US$77 million for human resources in the health sector. Of this amount, US$69 million (90%) is dedicated to the payment of health worker salaries and benefits, including for CHAM. Meanwhile, only 2 percent of government human resources for health expenditure is dedicated to pre-service training, while in-service training is mostly funded by partners. Other important human resource activities that should complement the effective EHP delivery, such as induction and performance management, receive relatively little funding due to constrained resources.

3.4.3. HSSP II Financial Gap Analysis

The cost of implementing the HSSP II during the period under review is estimated at US$1.605 billion, while financial projections for the same period from RM are estimated at US$1.8 billion. Financial projections for HSSP II implementation seem to be slightly above predicted needs for the three-year period under review.[11]

[11] For more information on the costing of the HSSP II, please refer to the HSSP II costing report here: http://www.healthpolicyplus.com/ns/pubs/7186-7327_MalawiCostingofHealthSectorPlan.pdf

However, even though the projected budgets are greater than the estimated cost of implementing the HSSP II, these projected budget figures may not translate to actual spending. Previous studies such as the NHAs estimated that actual expenditures are lower than RM projections.

Furthermore, EHP coverage remains low, despite projected budgets being larger than the costed need. This is largely due to systems constraints that limit EHP coverage. On the demand side, constraints could include lack of transport for patients to reach health facilities, while on the supply side, these could include an inadequate supply of electricity and water, infrastructure, and equipment, as well as a significant deficit of health workers.

Organizations funding the health sector in Malawi should consider redirecting financial resources from health services beyond the EHP towards addressing systems constraints that would facilitate the expansion of quality EHP coverage. The following subsections delve deeper into a few areas of HSSP II priorities.

Drugs and Medical Commodities

The costing of HSSP II Objective 1 included both the cost of drugs and medical commodities to deliver the EHP and the direct program management costs associated with delivering these services.

Fehler! Ungültiger Eigenverweis auf Textmarke. shows the available financial resources going toward drugs and commodities as per the RM data (column 1), compared to the drugs and commodities costs needed to deliver the EHP as per HSSP II costing (column 3). A quick comparison reveals that there are enough resources to meet the coverage targets for the EHP in 2017/18. However, this conclusion could be misleading due to the following reasons:

a. In the RM data, it is not clear which specific health interventions are being funded under each program category and if they fall within the EHP.
b. The prices and quantities of drugs and commodities may differ from the assumptions used in costing the EHP.
c. Some interventions included in the EHP have not been fully costed,[12] due to which the figures in columns 3 and 4 are underestimated.
d. There is a large degree of uncertainty around the programmatic functions in the RM data; for example, US$37 million going towards drug and commodities was categorized as "cross-cutting."[13]

Future rounds of RM will aim to better map activities against EHP interventions. Development partners should prioritize their drug and commodity funding toward interventions included in the EHP. More resources are clearly still needed to scale up EHP coverage to reach 100 percent of the population in need, as indicated by the "100% Coverage" column (column 4) in **Fehler! Ungültiger Eigenverweis auf Textmarke.**.

[12] This is due to data availability issues at the time of EHP costing. Work to improve the evidence base for health interventions in Malawi is ongoing.

[13] Note that a major portion of this cross-cutting drug budget is from the government drug budget projections, since these were not broken down by programatic area.

Table 3. Drug and medical commodity costs by EHP category

EHP Category/Resource Mapping Programmatic Function	RM Projections for Drugs and Commodities by Programmatic Function FY 2017/18 (USD)	RM Projections for Drugs and Commodities by Programmatic Function FY 2017/18 (% of total)	HSSP II Cost Projections for Drugs and Medical Commodities to Reach EHP Coverage Targets[14] (USD)	HSSP II Cost Projections for Drugs and Medical Commodities to Reach Full EHP Coverage[15]
	(1)	(2)	(3)	(4)
Cross-cutting	36,673,451	16.12%	-	-
RMNCH	12,480,907	5.49%	31,686,638	55,198,733
Vaccine Preventive Diseases	10,605,783	4.66%	4,568,734	5,142,930
Malaria	31,795,464	13.97%	12,657,426	24,016,029
Integrated Management of Childhood Illnesses (IMCI)	1,790[a]	0.00%	824,732	1,885,552
Neglected Tropical Diseases (NTDs)	95,399	0.04%	60,482	60,482
TB	7,377,619[a]	3.24%	2,425,430	9,576,065
Noncommunicable Diseases (NCDs) (incl. Mental Health)	254,385	0.11%	3,292,222	37,910,758
Oral Health	-	-	683,999	683,999
HIV and STIs	113,055,434	49.69%	82,945,471	83,037,831
Nutrition	14,168,359	6.23%	5,190,411	6,295,965
Environmental Health and Diarrheal Diseases[c]	190,537	0.08%	-	-
Eye, Ear, and Skin Conditions[d]	822,702	0.36%	-	-
Subtotal	**227,521,830**	100.00%	**144,335,545**	**223,808,344**
Total (Including 20% commodity wastage assumption)			**173,202,654**[b]	**268,570,013**[b]

[a] TB RM data exclude HIV/TB.
[b] These are lower bounds, since a significant number of interventions in the EHP are not fully costed.
[c] Diarrheal diseases are classified under the EHP category for IMCI.

[14] EHP 2017/18 coverage targets are specific for each intervention included in the EHP. These are specified in Annex 2 of the HSSP II.

[15] Full coverage means 100 percent coverage of the estimated population in need in 2017/18.

[d] The eye condition trachoma is classified under the EHP category for NTDs.

Direct Program Management Costs

In the HSSP II, direct program management costs also fall under *Objective 1: Increasing equitable access to and improving quality of health services* and were estimated to cost US$119 million in FY 2017/18. By comparison, RM shows US$81 million in available resources for program management in FY 2017/18.[16] There is a resource gap in this area that could be hindering effective delivery of services.

Infrastructure

The total prioritized cost of infrastructure and equipment in the HSSP II was estimated to be US$58 million in FY 2017/18. This was calculated based on the available resources from previous rounds of RM to make the HSSP II realistic. The current RM data show that about US$74 million aligns with *Objective 3: Infrastructure & Medical Equipment* in the database (**Table 4**).

Table 4. Budgets for infrastructure and equipment (FY 2017/18)

Objective 3 Largest Cost Categories	FY 2017/18 Available $ Resources
Infrastructure — Construction	50,971,028
Capital Medical/Lab Equipment — Purchase	13,477,239
Capital Medical/Lab Equipment — Maintenance	3,653,854
Infrastructure — Facility Operating Costs	1,664,819
Infrastructure — Rehabilitation	1,422,380
Supply Chain Management	1,093,510
Other[17]	1,276,879
TOTAL	**73,559,709**

The HSSP II costing estimated a need of US$261 million for infrastructure and medical equipment over the five years of the plan. The Capital Investment Plan (CIP)[18] total cost will likely be similar to

[16] RM data show that resources classified under Objective 1 total US$308 million; US$227.5 million go to drugs and US$80.7 million to program management.

[17] "Other" consists of Administration and Management — Other; Health Worker Training — Pre-service; Research, M&E, and Supervision; Communication Costs (print, TV, radio); Referrals; Community Outreach Activities; Drugs, Medical Supplies and Other Health Commodities; Planning and Policy Activities; and Technical Assistance.

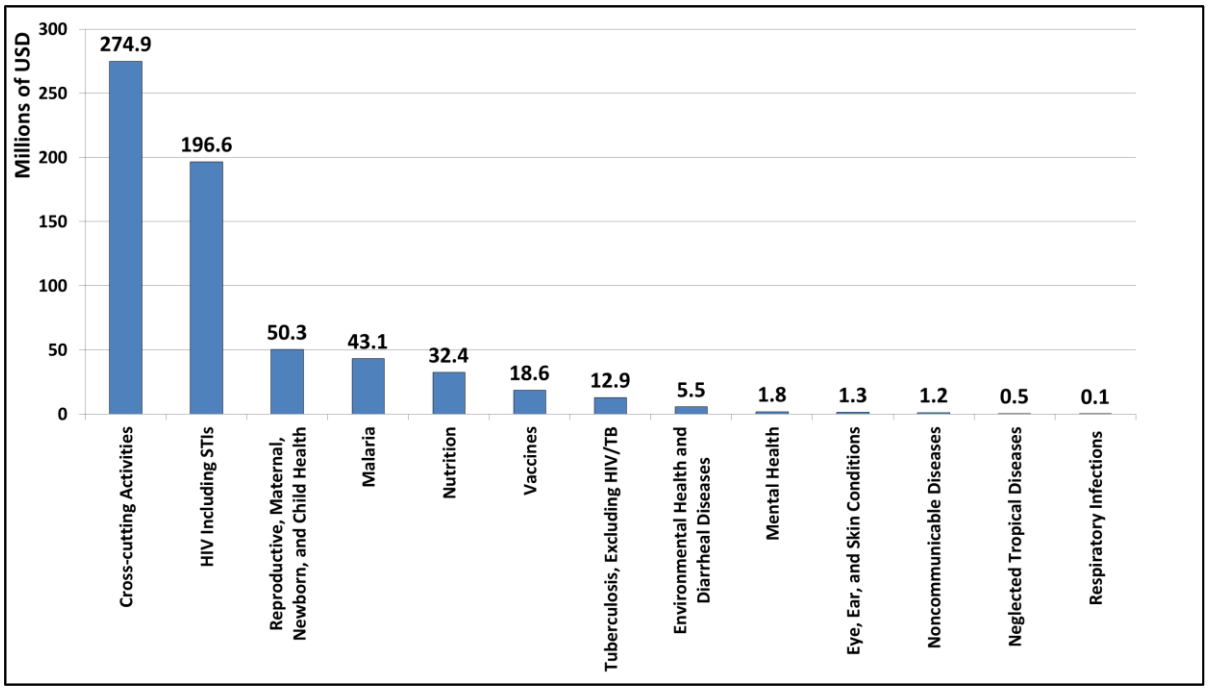
[18] The CIP is the strategy that outlines which projects will be implemented in which jurisdictions in order to achieve Objective 3 of the HSSP II. The CIP, therefore, is the blueprint for investments in infrastructure and equipment in the health sector between 2017 and 2022. Included in the draft are the priorities that government, DPs, and all health stakeholders planning to invest in infrastructure and medical equipment

this figure. However, the CIP modeling estimates that the full need for rehabilitation and expansion of health infrastructure and equipment purchase and maintenance could be above US$1.2 billion. There is significant scope for resource mobilization in this area, especially at the primary care level, in order to achieve 100 percent coverage of the EHP. Without sufficient investment, this will likely be a significant bottleneck for the medium term and will inhibit the delivery of EHP services.

3.5. Funding by Programmatic Function

As shown in **Figure 9**, a significant portion of funding was considered cross-cutting across disease areas, representing US$275 million (43%). This typically includes funding for health systems or general administrative costs that cannot be attributed to a specific disease program, as well as broad programs that fund multiple disease areas but could not be individually disaggregated across each of the disease areas.

Figure 9. Budgets by programmatic function (FY 2017/18)



Compared to other disease control programs, HIV/AIDS, which ranks first on Malawi's burden of disease, receives the largest share of funding at US$197 million (31%). This is followed by RMNCH at US$50 million (8%) and malaria at US$43 million (7%).

Furthermore, each of the disease programs varies in terms of their funding composition (**Figure 10**). Of the 13 disease programs captured in RM, eight were over 90 percent donor-funded. Four programs (malaria, RMNCH, tuberculosis [TB], and HIV including sexually transmitted infections [STIs]) were 99 percent donor-funded, and two programs (nutrition and eye, ear, and skin conditions) were 98 percent donor-funded. By contrast, there is significantly less donor dependence for NCDs (38% donor-funded), cross-cutting activities (44% donor-funded), and mental health (48% donor-funded).

For any given disease area, further deep dive analyses can be conducted upon request. **Annex 4** illustrates one such example for HIV/AIDS funding.

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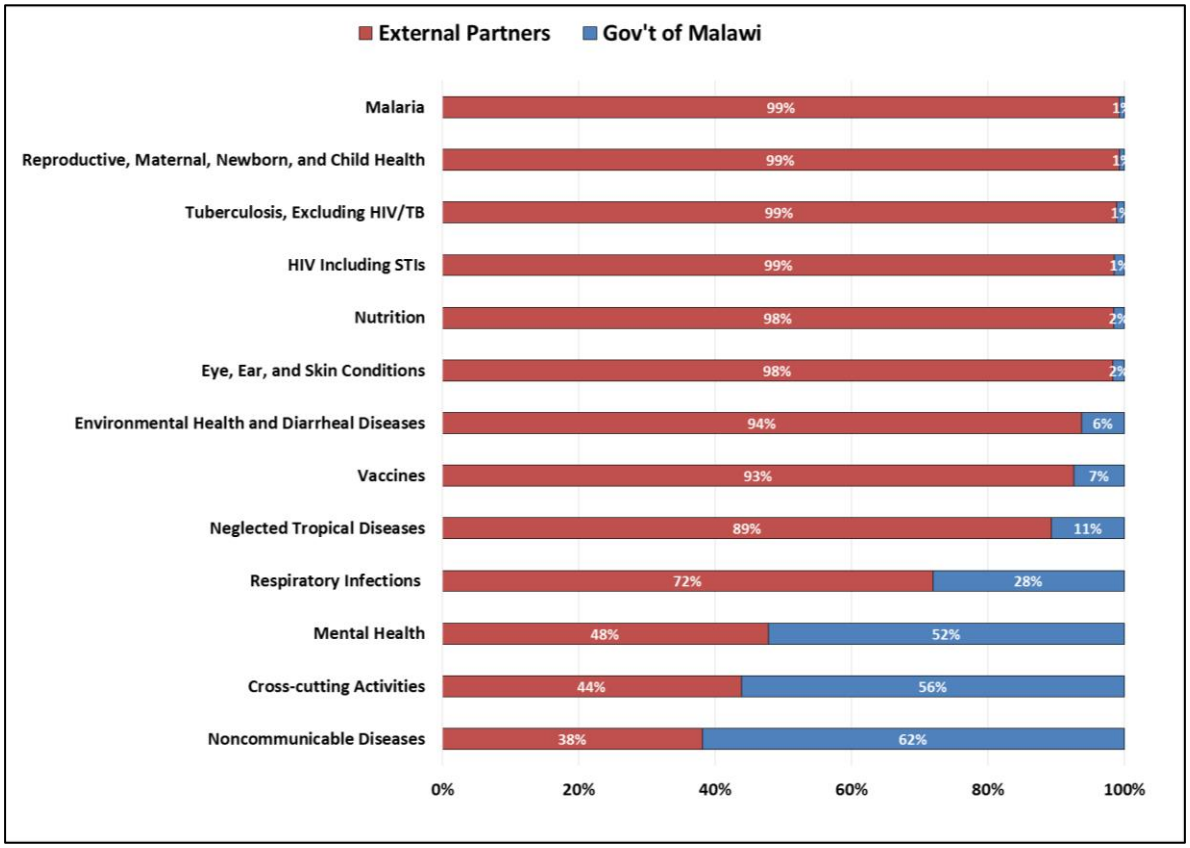
should follow.

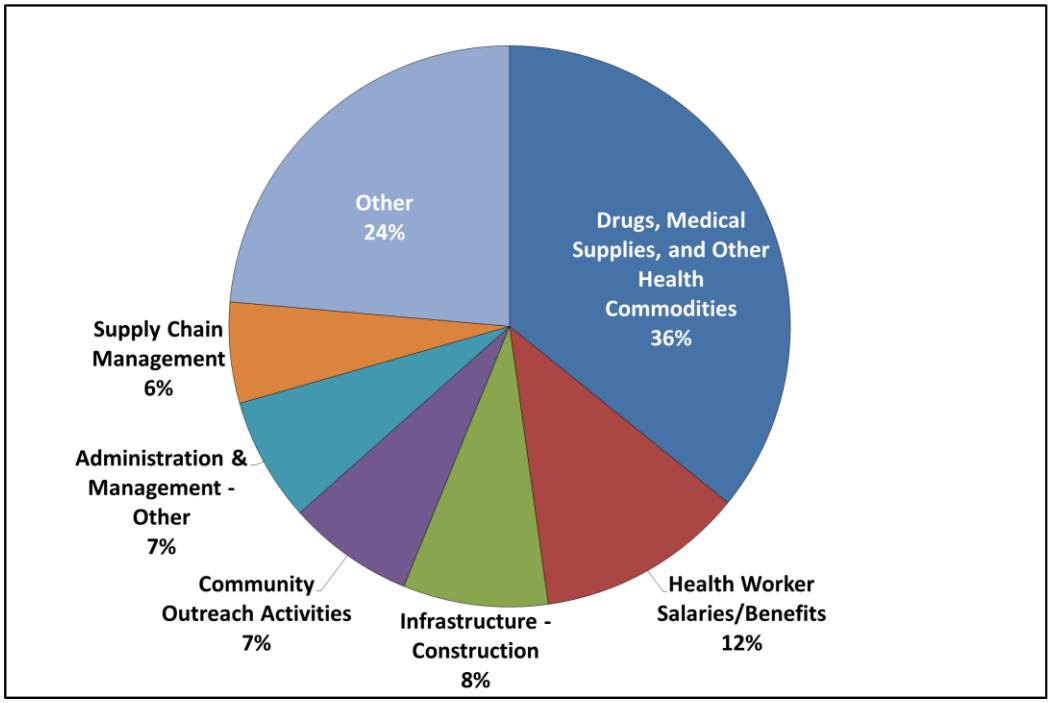
Figure 10. Budgets by programmatic function and by financing source (FY 2017/18)



3.6. Funding by Cost Category

Drugs and medical supplies account for the largest area of anticipated spending by cost category. Of the US$229 million in budgeted funds for drugs and medical supplies, US$123 million is sourced from the Global Fund, largely for the procurement of ARVs; US$29 million from the United States, mainly for HIV and malaria commodities; US$18 million from the Department for International Development (DFID), largely for reproductive health and nutrition commodities; and US$7 million from GAVI for vaccines procurement. The MOH also contributes US$35 million in funds for drugs. Health worker salaries/benefits is the second-largest cost category, representing 12 percent of projected funds, followed by infrastructure construction (8%) and community outreach activities (7%) (**Figure 11**).

Figure 11. Budgets by cost category (FY 2017/18)



3.7. Funding for Health Systems Strengthening vs. Non-Health Systems Strengthening

For an analysis of health systems strengthening (HSS), the cost categories included in the database were split into two groups: HSS and non-HSS, as illustrated in **Table 5**.

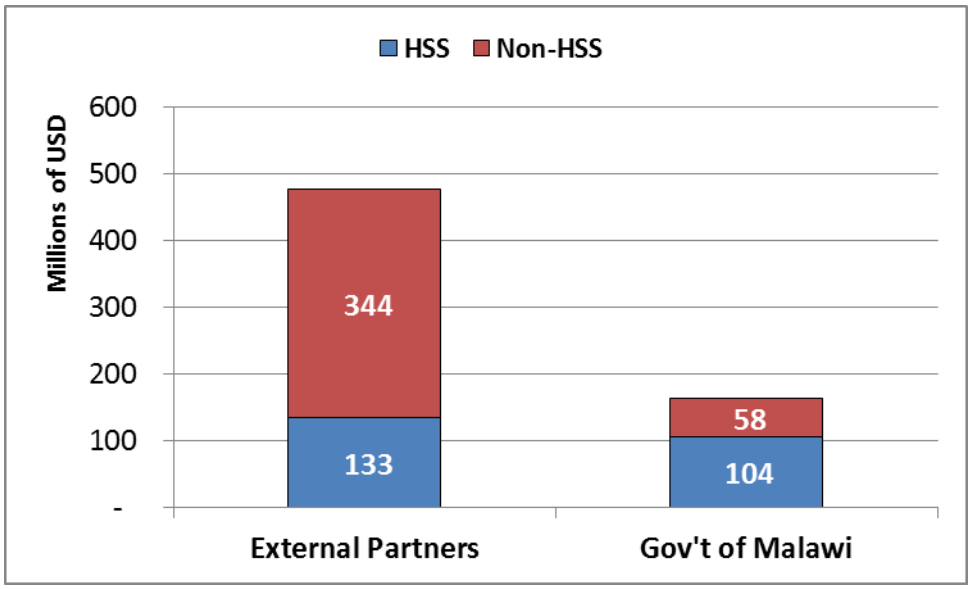
Table 5. Categorization of health systems strengthening costs by cost category

Health Systems Strengthening (37%)	Non-Health Systems Strengthening (63%)
Capital Medical/Lab Equipment	Administration and Management
Health Worker Salaries and Benefits	Auditing
Health Worker Trainings	Communications Costs (Print, TV, Radio)
Infrastructure	Community Outreach Events
Referrals	Drugs, Medical Supplies, and Other Health Commodities
Research, M&E, and Supervision	Living Support – Monetary/Material Support
Service Level Agreements	Planning and Policy Meetings
Supply Chain Management	Resource Mobilization Activities
	Technical Assistance

Of the total funds projected for FY 2017/18, 37 percent (US$237 million) is allocated to HSS, while 63 percent (US$402 million) is allocated to non-HSS. This can be further analyzed according to financing source. While 64 percent of the GoM's health budgets contribute to HSS, largely for health worker salaries/benefits and infrastructure construction, only 28 percent of partner funding contributes to HSS objectives (

Figure 12). Most partner funding for HSS is for infrastructure construction, supply chain management, research/M&E/supervision, and the purchase of medical and lab equipment.

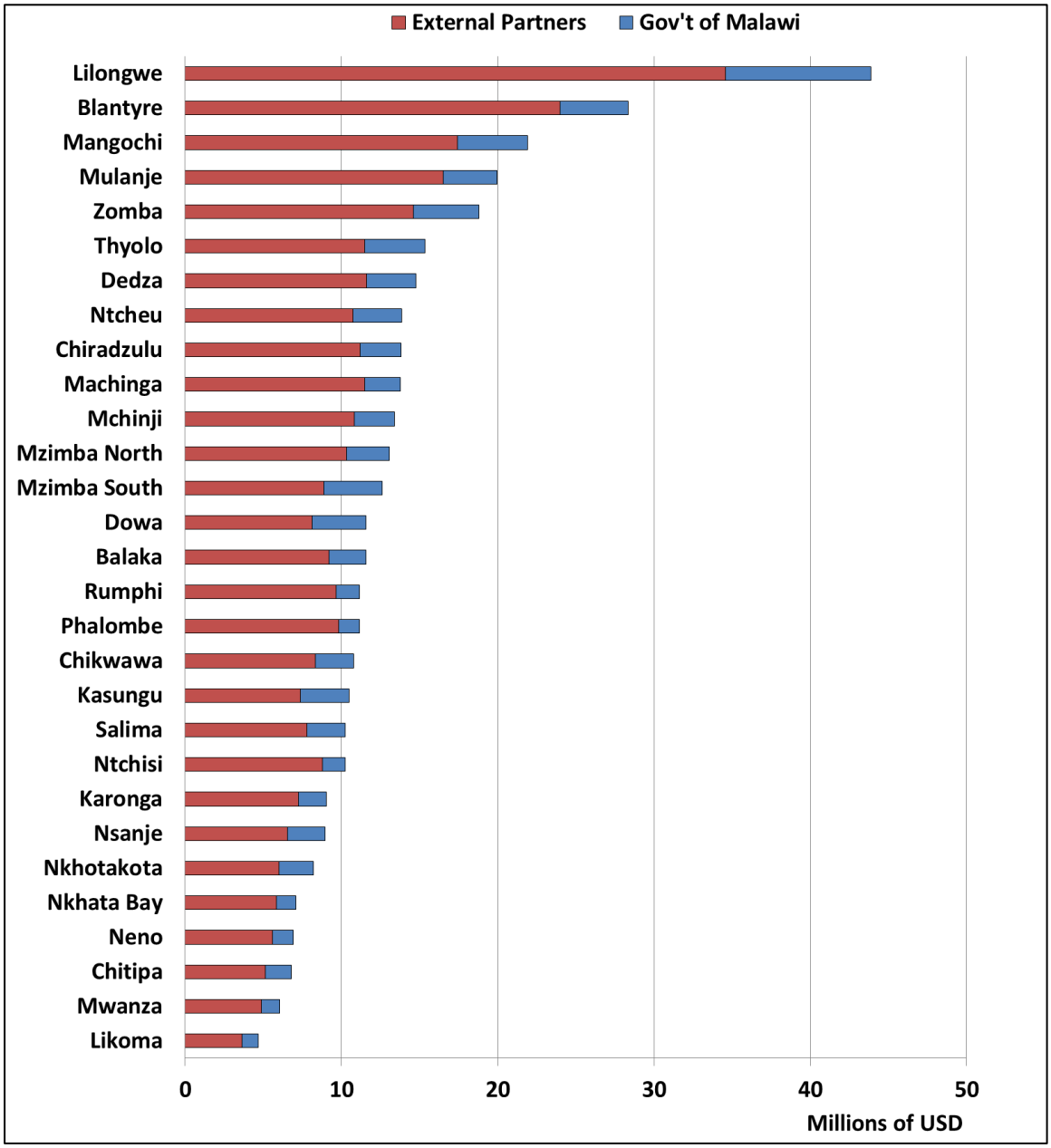
Figure 12. HSS budgets by financing source (FY 2017/18)



3.8. Funding by District

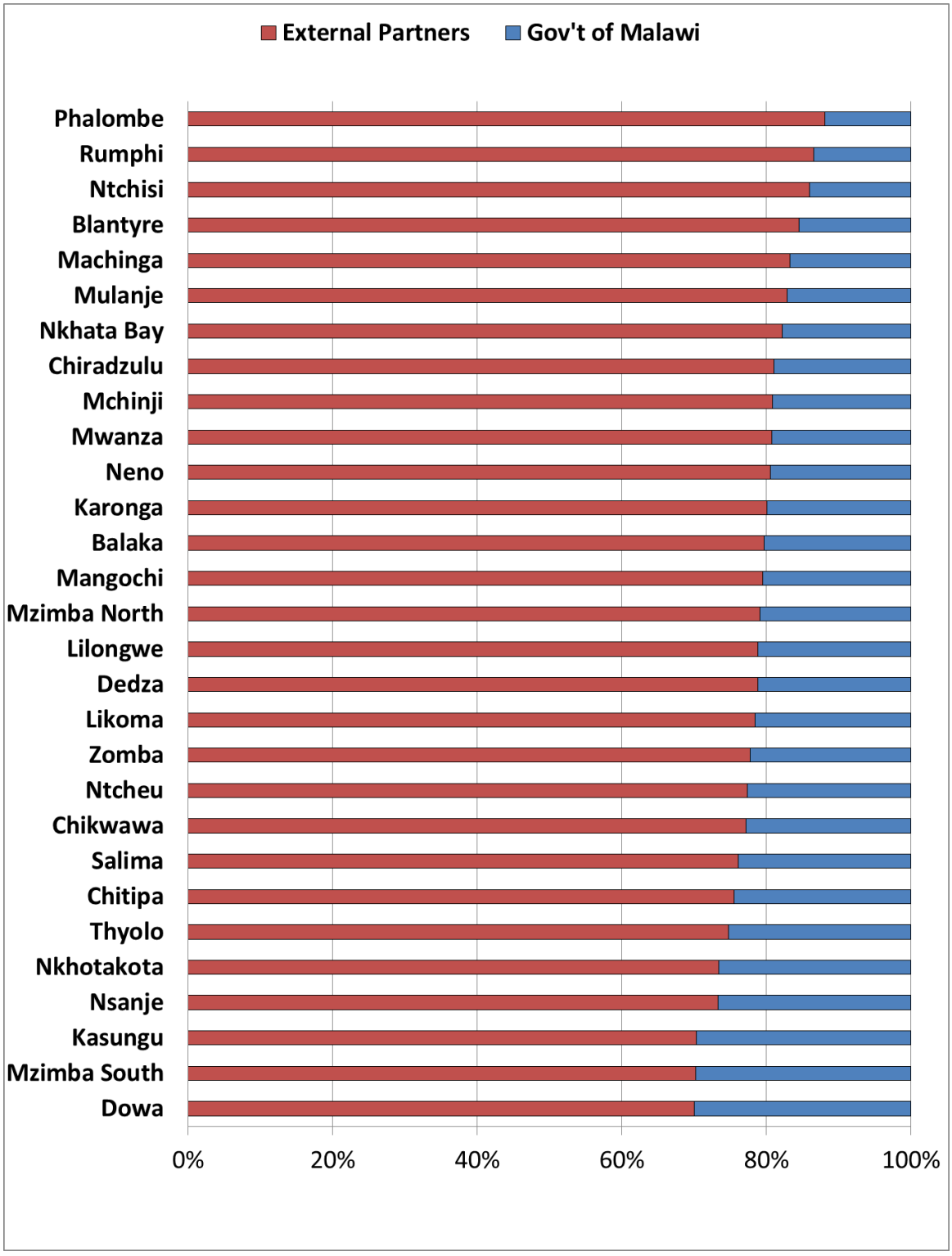
Funding within the total resource envelope earmarked for specific districts (as opposed to national-level programs or funding for central hospitals) amounts to US$388 million for FY 2017/18; this represents 61 percent of overall planned funding. However, there is dramatic variation across districts. Total funding per district ranges from US$5 million in Likoma to US$44 million in Lilongwe, with a median of US$12 million (**Figure 13**).

Figure 13. Total funding earmarked to districts by financing source (FY 2017/18)



Funding for districts is channeled through both government and donor mechanisms, the distribution of which varies significantly between districts. Assessment of districts' donor dependence indicates that Phalombe receives the greatest percentage of its health funding from donors (88%), while Dowa receives the smallest percentage of its health funding from donors (70%), with the median proportion of donor funding at 79 percent across districts (**Figure 14**).

Figure 14. Relative funding earmarked to districts by financing source (FY 2017/18)



3.9. Evaluation of Efficiencies and Value for Money

In addition to cost categories being roughly divided into HSS and non-HSS (**Table 5**), they were also divided into "service delivery" and "non-core service delivery" (**Table 6**) for further analysis.

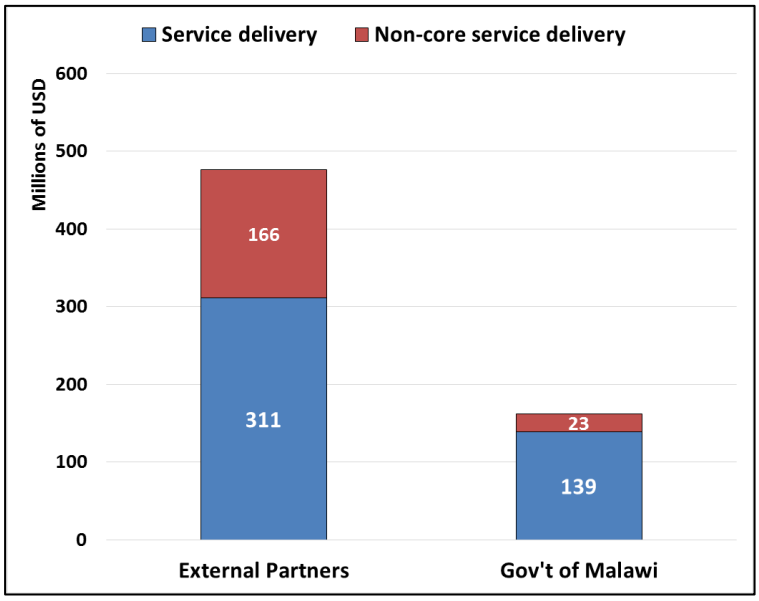
Table 6. Categorization of service delivery costs by cost category

Service Delivery (70%)	Non-Core Service Delivery (30%)
Capital Medical/Lab Equipment	Administration and Management
Drugs, Medical Supplies, and Other Health Commodities	Auditing
Health Worker Salaries and Benefits	Communications Costs (Print, TV, Radio)
Health Worker Trainings	Community Outreach Events
Infrastructure	Planning and Policy Meetings
Living Support—Monetary/Material Support	Research, M&E, and Supervision
Referrals	Resource Mobilization Activities
Service Level Agreements	Technical Assistance
Supply Chain Management	

From this perspective, service delivery accounts for 70 percent of planned spending, while 30 percent of funds are budgeted towards non-core service delivery costs in FY 2017/18. While this is a crude estimate for point-of-care costs, it illustrates that, on average, for every dollar budgeted, about US$0.70 will be given to healthcare facilities to provide health services.

This can be further analyzed according to financing source. While 86 percent of the GoM's health budgets contribute to service delivery, largely for health worker salaries/benefits, drugs and medical supplies, and infrastructure construction, only 65 percent of partner funding contributes to service delivery (**Figure 15**). Over 60 percent of partner funding for service delivery is for drugs and medical supplies.

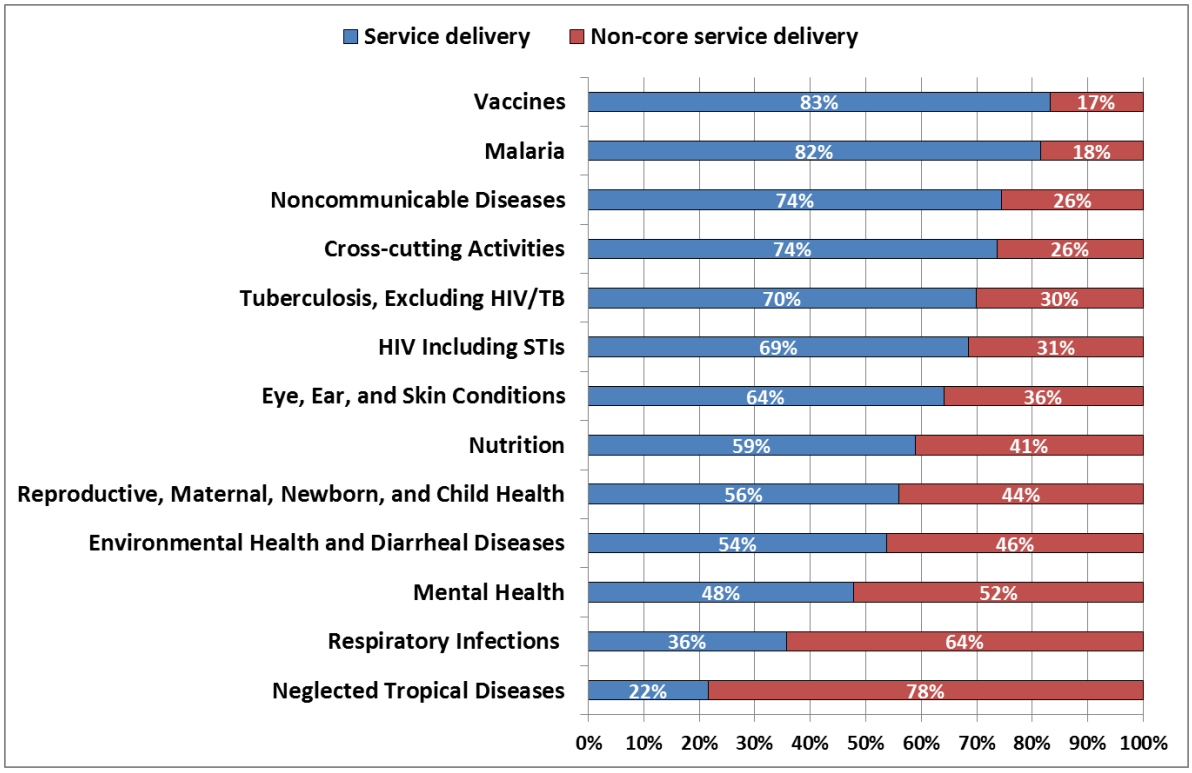
Figure 15. Service delivery budgets by financing source (FY 2017/18)



The cost of non-core service delivery varies across programs. Those with lower non-core service delivery allocations include vaccines (17%), malaria (18%), and NCDs (26%). Conversely, neglected tropical diseases, respiratory infections, and mental health have an especially high proportion of non-service delivery costs, at 78 percent, 64 percent, and 52 percent, respectively (**Figure** 17). The key drivers of these non-service delivery costs are generally administration and management, as well as community outreach events.

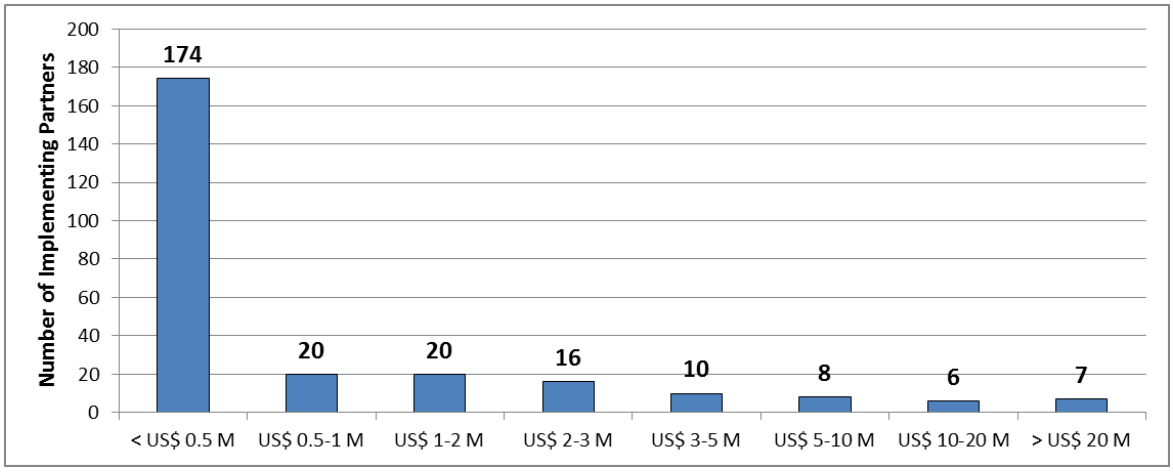
These results, however, should be interpreted with caution. To illustrate, while environmental health and diarrheal diseases, as well as nutrition programs, have relatively high non-service delivery costs, at 46 percent and 41 percent, respectively, the vast majority of those costs are for community outreach events. Given the nature of environmental health and nutrition services, these types of events should likely be considered part of the core service delivery for those particular programs.

Figure 16. Service delivery budgets by programmatic function (FY 2017/18)



An additional area of potential inefficiency is the fragmentation of funding across a large number of implementing and programming agents, two-thirds of which have annual budgets under $500,000 (**Figure** 17). When funding has to be coordinated through multiple parties and/or layers, there could be significant overhead cost accumulated, even when individual overhead is lean.

Figure 17. Number of implementers by budget size (FY 2017/18)



Section 4: Limitations

The following limitations should be considered in the interpretation of RM Round 5 results.

1. Respondents' understanding and interpretation of RM questions — Even though the data collection indicators were well-defined, the accuracy of the data could be affected by potential differences in the subjective interpretation of parameters by submitting organizations. It is possible that the quality checks performed by the RM team were not comprehensive due to the magnitude of the dataset, representing over 22,000 individual lines of financial data from 232 submitting organizations.

2. Incomplete submissions — During the data cleaning process, the RM team filled out some missing information in submissions on account of limited responsiveness of some submitting organizations. For instance, some organizations failed to assign an HSSP II objective and EHP mapping to their planned activities. In such cases, a mapping was performed by the RM team, which might have affected projected expenditures by HSSP II objectives and/or by EHP categories, even though the total budget allocation might not have been affected as a result. For future RM rounds, the DPPD will place more emphasis on mapping activities with the relevant HSSP II strategies as opposed to the broader categories of HSSP II objectives. Simplifying the data collection tool by removing loosely defined or highly specific parameters will also be considered.

3. Absence of donor information for double-counting analysis — Removing double-counting is a key step in any RM exercise. If both a donor and the implementing partner report the same program, the double-counting process ensures that the same program is only counted once within the database, thus preventing overestimation of funding. However, due to limitations in the completeness, granularity, and accuracy of the data, it was not always possible to indicate with 100 percent accuracy that the exact same program was being reported by two organizations and was hence double-counted, though the best effort was made with the existing information available.

4. Mapping donors' and other stakeholders' financial year to the Malawian financial year — Except for the national NGOs and government organizations, most respondents used a different fiscal year from the July–June fiscal year used by the GoM. Because response rates are generally low when the respondents are required to provide their budget projections mapped to the Malawian fiscal year, RM allows organizations to provide information using their own internal fiscal year. This data based on the submitting organization's fiscal year is then aligned to the GoM fiscal year under the assumption that the annual allocation will be evenly distributed throughout the year. This adjusted annual budget might not always reflect stakeholders' exact financial projections for the period of July 1 to June 30.

5. RM estimates do not always translate to actual expenditure. RM is a rich data source that provides an overview of financial projections for the health sector, based on information disclosed by organizations that have participated in the survey. Therefore, the figures presented in this report should be interpreted as estimated budgets rather than actual expenditures, which can only be tracked at the end of the period under consideration.

5. Household expenditures for health are not fully captured. Though funding from user fees was reported on a limited basis by some individual health facilities, the RM exercise did not aim to fully capture household expenditures for health. As such, the funding captured in this report largely represents planned funding by government, DPs, and other institutional stakeholders rather than at the household level.

Despite the limitations listed above, RM provides a robust database as well as insights on the health financing landscape in Malawi, which is useful for the decision-making processes of various stakeholders.

Section 5: Ways to Use RM Data

Since RM data is intended and designed to be used extensively beyond the high-level findings summarized in this report, it is therefore recommended that health stakeholders should independently carry out analyses to inform various activities. The data can easily be accessed from the MOH's DPPD or by contacting the resource mapping email account at: resourcemappingmalawi@gmail.com.

IV.

4.1. Mobilize Additional Resources

With a resource envelope of US$639 million ($35 per capita), government and partners are constantly seeking ways to secure new funding and to reprogram existing funding to high-priority areas. RM data provides evidence to support financial gap analyses for existing or proposed projects, programs, or strategies. By comparing planned resources available (from RM) and costed resource needs (from costing), the resulting financial gap analysis can quantify funding sufficiency, including areas of over- and under-funding. This can be applied to both sector-wide and subsectoral strategies, including specific interventions and systems investments. Gap analysis results can then be used to make investments cases to mobilize additional resources or reprogram existing resources from low-priority to high-priority areas.

4.2. Identify Inefficiencies and Enable Aid Coordination

Aid coordination is now an integral part of the planning process in the MOH, and RM data can be used to identify inefficiencies or overlaps in funding. By providing a central repository of information regarding the budgets and projects of health stakeholders, RM allows stakeholders to identify and quantify inefficiencies in funding. This includes allocative efficiency (is spending targeted to government priorities?) as well as technical efficiency (are we achieving results at the least cost?).

In doing so, RM can provide the tools for better coordination of donor resources at both the national and district levels. For example, while districts annually develop their District Implementation Plans, many District Health Offices do not have information regarding the total funds committed to the districts, nor do they have details on partner activities within the district. RM can isolate data on donors, implementing partners, and funded activities within each district and at the national level. District Health Offices can then use this information to both hold government and donors accountable to their commitments and to improve overall activity coordination.

Thus, it is imperative that not only central-level structures have access to the Resource Mapping dataset, but DHMTs too should have access to both RM databases and RM reports so that they can effectively use it in their planning in the context of decentralization. Thus, there is a need for a district-level dissemination targeting key technical people at the council level, as well as incorporation of RM into the routine district planning process.

4.3. Inform Policy Change

By providing an overview of the health financing landscape in Malawi, RM can be used to inform and influence policy dialogue. For example, summaries of funding gaps for government-prioritized strategies can be used to lobby for additional funding in budget hearings or to external stakeholders.

Section 6: Conclusion

The preceding discussion highlights the key findings of RM Round 5, which includes budget data collected from 232 organizations for Malawi FY 2017/18 through Malawi FY 2019/20.

The high-level results of RM Round 5 covered in this report highlight continued donor dependence and fragmentation of Malawi's health sector. The data from Round 5 should further be analyzed and continuously used to provide transparent information for improving resource efficiency and coordination in Malawi. Given the availability of the database, government and partner stakeholders are invited to continue finding new and innovative ways to leverage RM to make evidence-based decisions around mobilizing, allocating, and maximizing the use of health sector resources in Malawi.

Annex 1: Resource Mapping vs. National Health Accounts

	Resource Mapping	National Health Accounts
Primary Use	To inform annual planning and budget allocation decisions, coordinate partner activities, and provide sufficiently detailed data to enable gap analyses of strategic plans	Inform macro-level policy decisions around health financing sustainability and long-term planning (e.g., social health insurance) as well as provide a granular overview of how funds have been spent
Type of Data Collected	Detailed budget data at the activity level for the public sector only	Expenditure data aggregated at project level for the public and private sectors
Timeframe Captured	2017/18 to 2019/20	2012/2013 to 2014/2015
Methodology	Organizations self-report data in Excel template and submit via email	Team of data collectors collect information from organizations using paper-based and Excel forms
Malawi Customization	Entire data collection template is customized for the Malawi context and MOH priorities; updated annually according to need and capacity	WHO standardized format used, with country deciding which disease sub-accounts to include; useful for cross-country analysis
Frequency	Annual, with data collection completed in 2–3 months	Typically completed every 3–4 years over 6–9 months, though some countries complete NHA annually and many more are moving to annualized NHA
Use in Malawi to Date	MOH uses the RM database to conduct gap analyses of strategic plans, make funding decisions, and mobilize Treasury as well as partner funding	Data on out-of-pocket expenditures and private sector expenditures; informed drafting of 2014 Health Financing Strategy

Annex 2: Key Parameters for Resource Mapping Database

Programmatic Function
Cross-cutting Activities
Environmental Health and Diarrheal Diseases
Eye, Ear, and Skin Conditions
HIV Including STIs
Malaria
Mental Health
Neglected Tropical Diseases
Noncommunicable Diseases
Nutrition
Reproductive, Maternal, and Newborn Health
Respiratory Infections
Tuberculosis, excluding HIV/TB
Vaccines

Programmatic Intervention
Cross-Cutting Activities
No detail required
Environmental Health and Diarrheal Diseases
Prevention and treatment of cholera Testing and inspection of food and water Provision of safe drinking water Treatment of diarrheal diseases, including oral rehydration salts/zinc Behavior change communication/awareness for environmental health Cross-cutting environmental health and diarrheal disease activities
Eye, Ear, and Skin Conditions
Cataract Trachoma Treatment of conjunctivitis Scabies Leprosy Cross-cutting eye activities (includes screening) Cross-cutting ear activities Cross-cutting skin activities
HIV Including STIs
HIV testing and counseling (HTC) Prevention—condoms Prevention—behavior change communication (BCC)/community mobilization Prevention—medical male circumcision Prevention—STI case management (e.g., syphilis) Prevention—PMTCT Prevention—blood safety Prevention—post-exposure prophylaxis Prevention—other Treatment/care—antiretroviral therapy (ART) Treatment/care—opportunistic infections/co-trimoxazole preventive therapy (CPT) Treatment/care—HIV-tuberculosis Treatment/care—nutrition support with ART Treatment/care—community/home-based care Treatment/care—psychosocial support Treatment/care—other Lab services—viral load testing Lab services—CD4 testing Lab services—early infant diagnosis Lab services—cross-cutting HIV Impact mitigation—orphans and vulnerable children Impact mitigation—stigma and discrimination Impact mitigation—socioeconomic support Impact mitigation—other Cross-cutting HIV activities

Programmatic Intervention (continued)
Malaria
Diagnosis—rapid diagnostic test (RDT)
Diagnosis—microscopy
Prevention—BCC/awareness
Prevention—insecticide-treated nets/long lasting insecticidal nets (ITNs/LLIN)
Prevention—indoor residual spray (IRS)
Prevention—malaria in pregnancy (intermittent preventive treatment in pregnancy [IPTp])
Prevention—other integrated vector management (IVM)
Treatment—artemisinin-based combination therapies (ACTs) (Lumefantrine-Artemether [LA] and artesunate-amodiaquine [ASAQ])
Treatment—artesunate
Treatment—quinine
Cross-cutting malaria activities
Mental Health
No detail required
Neglected Tropical Diseases
No detail required
Noncommunicable Diseases
Behavior change communication/awareness for NCDs
Cancer screening/treatment
Cancer—palliative care
Cross-cutting cancer activities
Cardiovascular disease treatment and prevention
Cross-cutting cardiovascular activities
Routine and emergency dental treatment
Cross-cutting dental activities
Case management and rehabilitation of diabetes
Cross-cutting diabetes activities
Prevention of trauma and injuries
Treatment of trauma and injuries
Cross-cutting trauma and injuries activities

Programmatic Intervention (continued)
Nutrition
Prevention of undernutrition
Gender quality, equity, and protection
Treatment of acute malnutrition
Prevention of overnutrition and NCDs
Behavior change communication and social mobilization
Nutrition in emergency
Enabling environment
M&E, research, and surveillance
Other
Reproductive, Maternal, and Newborn Health
Antenatal care
Labor, delivery, and postdelivery
Pregnancy-related complications
Newborn care
Female condom
Implants
Injectable (Depo Provera)
Intrauterine device (IUD)/intrauterine contraceptive device (IUCD)
Male condom
Oral contraceptive pill
Sterilization
Hysterectomy
Cross-cutting maternal and newborn health activities
Cross-cutting reproductive health activities
Cross-cutting child health activities
Respiratory Infections
Acute respiratory infections (excluding pneumonia)
Behavior change communication/awareness for respiratory infections
Chronic respiratory conditions (e.g., asthma)
Pneumonia case management
Cross-cutting respiratory infections activities

Programmatic Intervention (continued)
Tuberculosis, excluding HIV/TB
Screening and diagnosis—TB case finding (including sputum collection points)
Screening and diagnosis —microscopy
Screening and diagnosis —chest X-ray
Screening and diagnosis—TB culture
Screening and diagnosis—GeneXpert mycobacterium tuberculosis/resistance to rifampicin (MTB/RIF)
Screening and diagnosis—Cross-cutting TB labs
Prevention—TB infection control
Prevention—TB contact tracing
Prevention—multiple drug-resistant tuberculosis (MDRTB) prevention
Prevention—BCC/awareness
Treatment—directly observed treatment, short-course (DOTS), first-line treatment
Treatment—second-line treatment, MDRTB
Treatment—patient support: TB nutrition (excluding HIV/TB)
Cross-cutting TB activities
Vaccines
Cold chain
Polio
Rotavirus
Packed cell volume (PCV)
Human papillomavirus (HPV)
Measles
Pentavalent
Bacille Calmette Guerin (BCG)
Tetanus toxoid (TT)
BCC/awareness for vaccines
Cross-cutting vaccines activities

Target Population (for HIV/STIs and Tuberculosis Activities Only)
Adolescents
Exposed infants
Female sex workers
Men who have sex with men
Miners
No specific targeting
Orphan and vulnerable children
Other at-risk groups—prisoners, migrants, teachers
Pediatrics
Pregnant women
Women of childbearing age

Cost Category
Administration and management—salaries
Administration and management—other
Auditing
Capital medical/lab equipment—maintenance
Capital medical/lab equipment—purchase
Communication costs (print, TV, radio)
Community outreach events
Drugs, medical supplies, and other health commodities
Health worker salaries/benefits
Health worker training—in-service
Health worker training—pre-service
Infrastructure—construction
Infrastructure—rehabilitation
Infrastructure—facility operating costs
Living Support—monetary/material support for affected populations
Planning and policy meetings
Referrals
Research, M&E, and supervision
Resource mobilization activities
Service level agreements
Supply chain management
Technical assistance

Annex 3: List of Submitting Organizations

Access Health Africa, INC

Action Against Hunger-Spain

ActionAid

Adventist Development and Relief Agency (ADRA)

Adventist Health Services (AHS)

African Future Foundation

African Institute for Development Policy Research and Dialogue (AFIDEP)

African Institute of Corporate Citizenship (AICC)

African Medical & Research Foundation (AMREF)

AFRICARE

Angaliba Foundation

Anglican Diocese of Lake Malawi

Art & Global Health Centre Africa

Assemblies of God Care

Association of Malawian Midwives (AMAMI)

Banja La Mtsogolo (BLM)

Baobab Health Trust

Baptist Convention of Malawi - Sengabay Medical Clinic

Baylor College

Belgium Red Cross

Blantyre Institute for Community Outreach (BICO)

Blindness Zero (0) Movement

Canadian Physicians for Aid and Relief - CPAR

CARE Malawi

Catholic Health Commission - Mchinji

Catholic Health Commission Mangochi Diocese

Catholic Relief Services

Caudill Website and Construction

CCAP - Livingstonia Synod - Health Department

Government of Malawi Central Hospitals

Central Medical Stores Trust

Centers for Disease Control and Prevention

Chance for Change

Chemonics

Child Legacy International

Children of the Nations

Christian Aid

Christian Blind Mission

Christian Health Association of Malawi Secretariat

Christian Orphan Outreach Mission

Citi Hope International (CHI)

Clinton Health Access Initiative

College of Medicine

Community Against Diabetes & Hypertension

Community of Sant' Egidio-ACAP (DREAM Program)

Community Partnership for Relief and Development (COPRED)

Concern Worldwide

Council of St. John Ambulance

Counterpart Int.

D-Tree international

Determined to Develop

Dignitas International

Diocese of Chikwawa (CADECOM)

Disability HIV and Aids Trust (DHAT)

Disabled Women in Africa (DIWA)

District Health Offices

DMI St John the Baptist University- Mangochi

Drug Fight Malawi

Ekwendeni Hospital Synod of Livingstonia

Elizabeth Glaser Pediatric AIDS Foundation (EGPAF)

Emmanuel International

European Union

Eva Demaya Centre

Evidence Action (Trocaire)

Feed The Children

FHI 360

Foundation for Children's Rights

Foundation for Irrigation and sustainable development (FISD)

Fountain of Life

Freedom from Fistula Foundation

German Development Cooperation (KfW)

Girl-child Education, HIV and Aids (GICEHA)

GIZ - Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH

Global Aids Interfaith Alliance (GAIA) African International Trust

Global Fund

Global Hope Mobilization

Goal Malawi

Good Neighbours International

Gospel in Action Ministries (GIAM)

Grassroots Movement for Health & Development

Health Sector Joint Fund

Heart to Heart Foundation

Henwood Foundation

Holy Family Mission Hospital

International Training and Education Center for Health (I-TECH) Malawi

ICF

Illovo Sugar

Individuell Manniskohjalp (IM) Swedish Development Partner

Innovation's for Poverty Action (IPA)

Integrated Health Initiative

Jesuit Refugee Services

JHPIEGO

Journalists Association Against AIDS (Journ AIDS)

Kamuzu College of Nursing

Kapire Health Centre

Kasalika Community Development Organisation

KNCV TB Foundation

Koche Community Hospital

Ladder for Rural Development

Lighthouse Trust

Likuni Mission Hospital

Little Dresses for Africa-LDFA

LUANAR

Luke International Norway (LIN)

Luwalika (Makanjira) Health Centre

Mai Aisha Trust

Mai Khanda

Malabada Health Centre

Malama Feeding Centre Trust

Malamulo Mission Hospital

Malawi Action Against Physical Disabilities (MAP)

Malawi Aids Counselling Resource Organisation (MACRO)

Malawi Blood Transfusion Service

Malawi Girls Guides Association (MAGGA)

Malawi Health Equity Network

Management Science for Health (MSH) - ONSE Project

Mase Health Centre

Medecins Sans Frontières_France

Ministry of Health

Mlambe Mission Hospital

Ministry of Education, Science & Technology

Mothers 2 Mothers

Mpiri Health Centre

Mponela Aids Information and Counselling Centre - MAICC

MUA Hospital - Dedza Diocese

Namalaka Health Centre

Namandanje Health Centre

Nankhwali Health Centre

National Aids Commission

National Association for People Living with HIV/AIDS in Malawi - NAPHAM

Nayuchi AIDS Network Services

Ndi Moyo Palliative Care Trust

Neno Parish Health Centre

Nkhoma Hospital

Nkhotakota Community Radio

Norwegian Embassy

Nsanama Health Facility

Ntchisi Evangelical Churches Consortium for Social Services

Options (DFID-funded) MHSP

Orant Charities Africa

Outreach Scout Foundation (OSF) (Scout Association of Malawi)

PACT Malawi

Palladium

Parent and Child Health Initiatives (PACHI)

PATH (MalariaCare)

Population Services International/Malawi

Press Trust

Project Concern International

Quadria Muslim Association of Malawi (QMAM)

Red Cross Malawi

Research For Equity and Community Health (REACH) Trust

Results based Financing for Maternal and Neonatal Health (RBF4MNH)

Rice University

Riders for Health

Right to Care Malawi

Rights People Claim (RIPRC)

Rumphi HIV/AIDS and Education Awareness Programme (REAP)

SAFAIDS

Salima AIDS Support Organization (SASO)

Save the Children International

Seventh Day Baptist

SightSavers Malawi Country Office

Small producers Development and Transporters Association (SPRODETA)

Smile Malawi

Social Impact Inc.

Southern African Aids Trust (SAAT)

Special Olympics Malawi

Sr Martha Health Facility

St. Andrews Community Hospital

St. Joseph Hospital

St. Lukes Hospital

St. John of God Centre

Sue Ryder Foundation in Malawi

SWAM (Society for Women and Aids in Malawi)

TearFund

The Hunger Project - Malawi

The Millenium Promise

Thyolo District Health Office

Tubepoka Development Initiative (TDI)

Tufts University

UK's Department for International Development

Ulongwe Health Facility

UNAIDS

UNICEF

United Nations High Commissioner for Refugees (UNHCR)

United Purpose

Utale 1 Health Facility

Utale 2 Health Facility

Visual Hearing Impairment of Membership Association (VIHEMA)

Voluntary Service Overseas (VSO)

Water Aid Malawi

Water Works

World Bank

World Food Programme

World Learning

World Vison

Youth Response for Social Change - YRSC

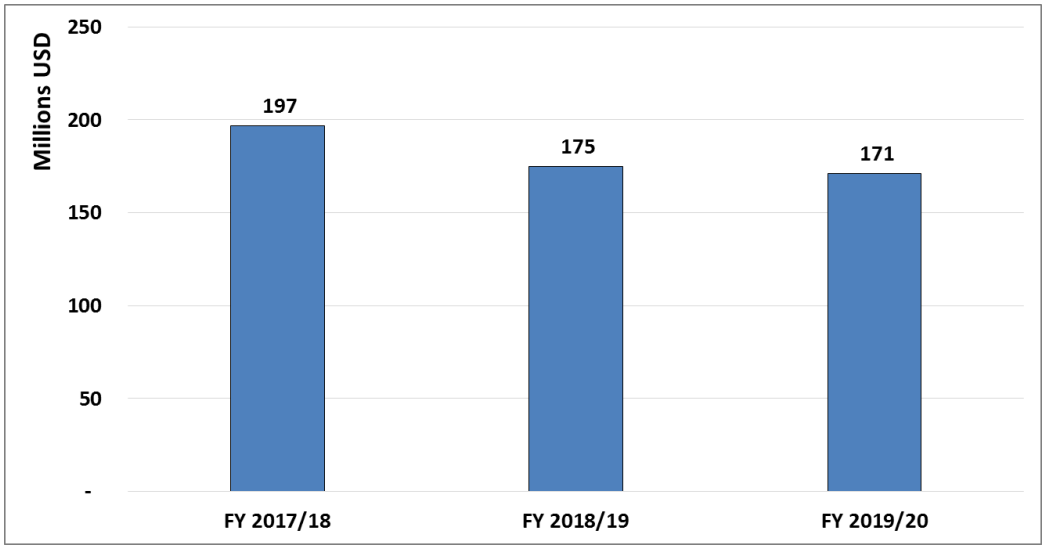
Zam Zam Foundation

Zikomo Yesu Enterprises

Annex 4: Sample Deep Dive by Programmatic Area: HIV/AIDS

HIV/AIDS and other STIs[19] received the highest allocation (31%) among all programmatic areas in Malawi's health sector budget, representing US$197 million in FY 2017/18. However, funding toward HIV/AIDS is projected to drop by 11 percent between FY 2017/18 and FY 2018/19 (**Figure 18**). This drop can be attributed mainly to the withdrawal of World Bank funding amounting to US$10.8 million and the smaller size of the 2018–2020 Global Fund Grant during its first year. As mentioned in Section 3.1, the annual decline in funding should be interpreted with caution because of the decreased accuracy of budget projections for future years.

Figure 18. Planned budgets for HIV/AIDS (FY 2017/18–2019/20)

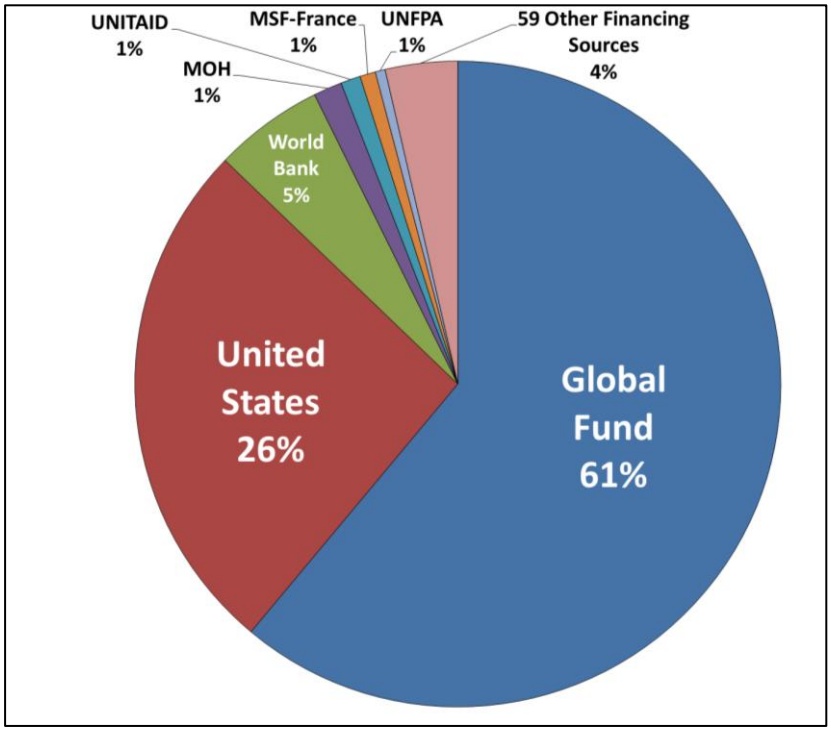


HIV/AIDS is among the most donor-dependent programmatic areas, as shown in **Figure 10**. The largest donors to HIV/AIDS in Malawi are the Global Fund and the United States Government, which finance 61 percent and 26 percent, respectively, of the total HIV/AIDS budget for FY 2017/18 (

[19] Henceforth refered to as "HIV/AIDS"

Figure 19).

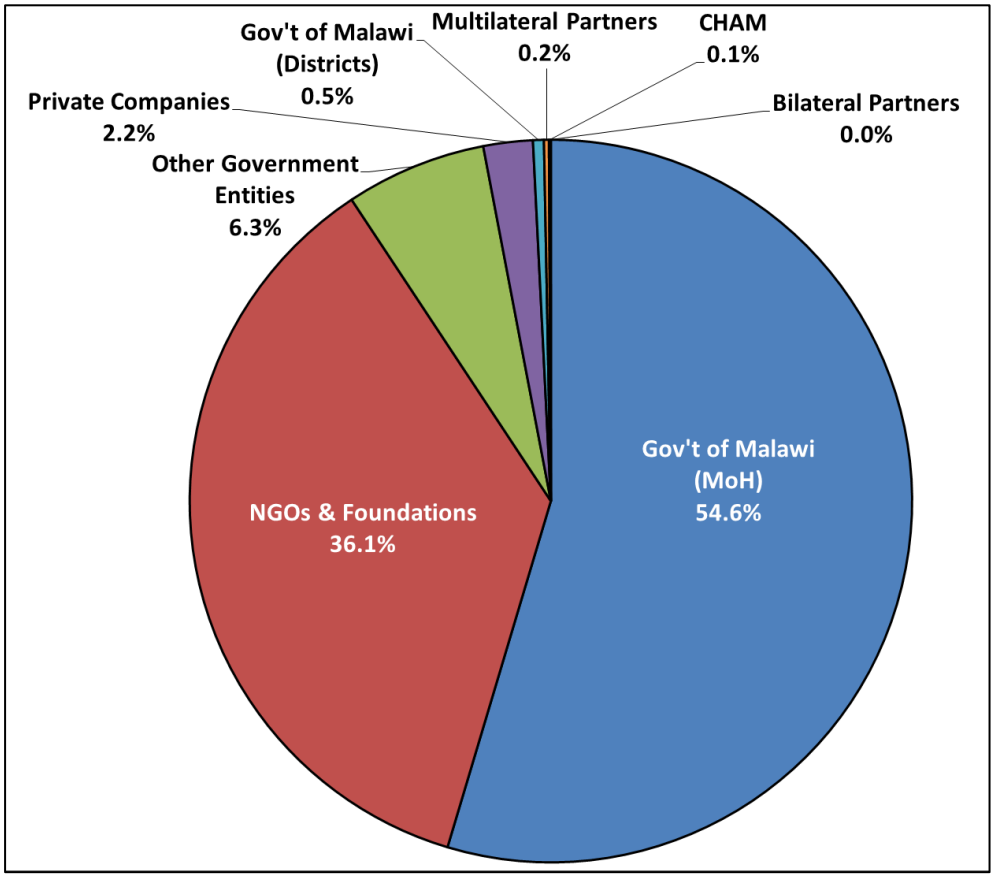
Figure 19. HIV/AIDS budgets by financing source (FY 2017/18)



A total of 128 organizations implemented HIV/AIDS projects in FY 2017/18. While the GoM funds less than 2 percent of the HIV/AIDS programmatic area, it is the implementing agent for a much larger proportion of funding, representing about 61 percent of the total HIV/AIDS budgets (

Figure 20). NGOs and foundations are the second-largest implementing agent, representing about 36 percent of total HIV/AIDS budgets. Among NGOs and foundations, over 75 percent of the budget is accounted for by just six organizations: Population Services International, Action Aid, Right to Care Malawi, Elizabeth Glaser Pediatric AIDS Foundation (EGPAF), International Training and Education Center for Health (I-TECH), and Lighthouse Trust.

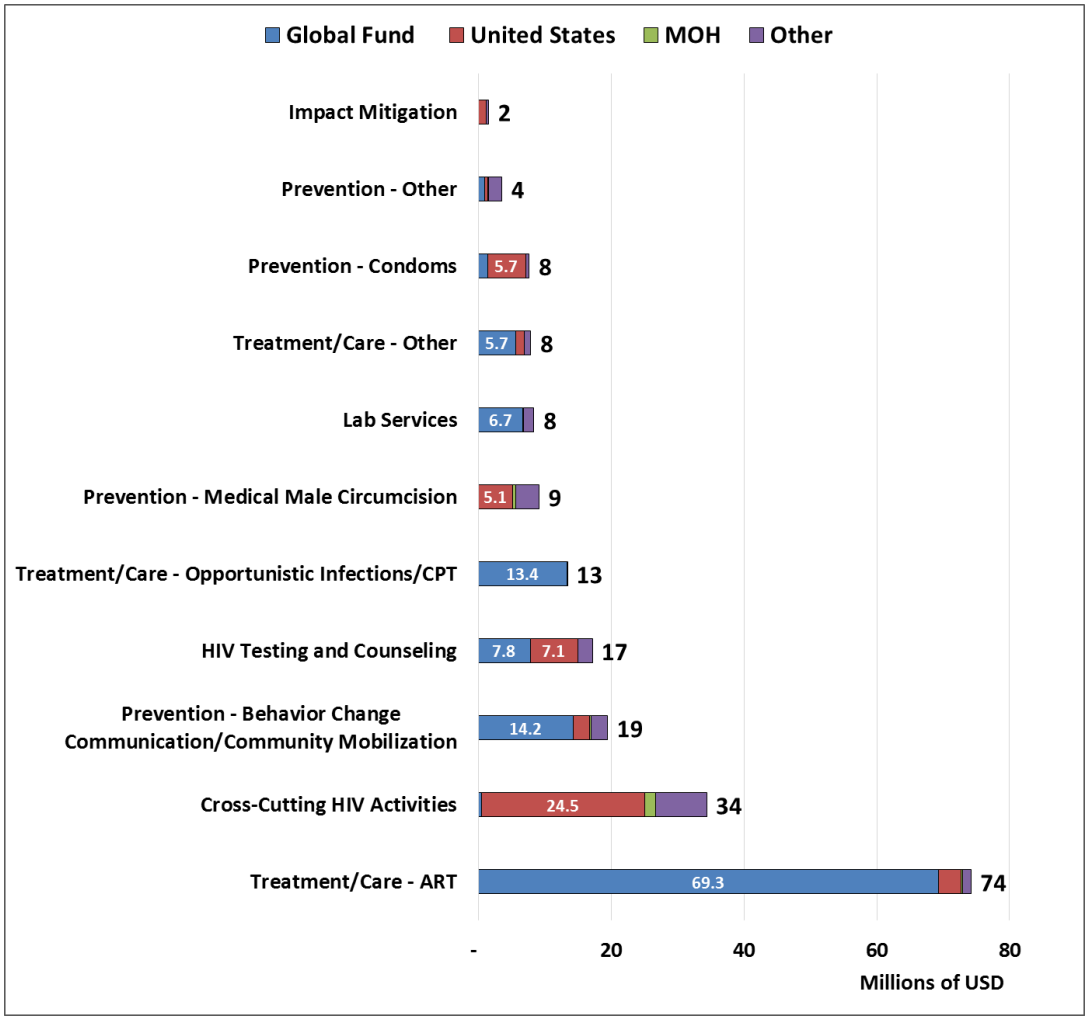
Figure 20. HIV/AIDS budgets by implementing agent (FY 2017/18)



In terms of interventions, ART receives the largest allocation within the total HIV/AIDS budget. During FY 2017/18, US$74 million (38%) out of the total of US$197 million was directed toward ART. The next largest components were behavior change communication (BCC) and community mobilization (10%), HTC (9%), and treatment of opportunistic infections (7%). Meanwhile, 17% of funding went towards cross-cutting activities, which include administrative activities, M&E, supervision, planning and policy, and training activities.

Figure 21 shows funding for HIV interventions by each of the major financing sources, including Global Fund, the United States, and the MOH. In FY 2017/18, Global Fund financed 93 percent of the budget for ART, 80 percent of the budget for lab services, 73 percent of the budget for BCC and community mobilization, and 46 percent of the budget for HTC. Meanwhile, the United States financed 77 percent of the budget for impact mitigation, 75 percent of the budget for condoms, 56 percent of the budget for voluntary medical male circumcision (VMMC), and 42 percent of the budget for HIV testing and counseling. Finally, the GoM contributes mainly towards planning and policy, supervision activities, circumcision, and other preventive interventions. The high cost of ART poses a significant challenge to the GoM, taking on a greater share of the ART budget; however, there is scope for a gradual reduction in donor dependence for prevention and HTC activities.

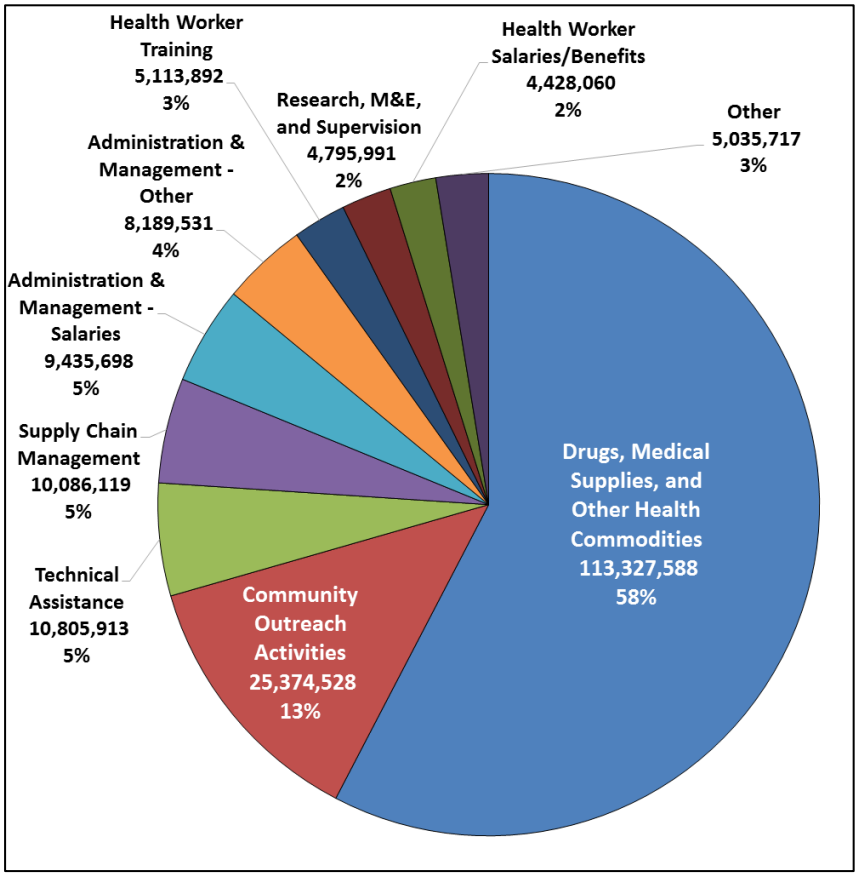
Figure 21. HIV/AIDS budgets by programmatic intervention and financing source (FY 2017/18)



In terms of cost categories, drugs, medical supplies, and health commodities are the largest cost drivers of HIV/AIDS budgets, representing about 58 percent of the total. The second-largest cost driver is community outreach (e.g., advocacy and information campaigns), which constitute 13 percent of the total. Another major cost driver is administration and management (including salaries and other administrative costs), which represent 9 percent of total HIV/AIDS budgets.

Across all HIV/AIDS activities, core service delivery activities (as defined in **Table 6**) account for 69 percent of the budget, whereas non-core service delivery activities account for the remaining 31 percent. This is roughly consistent with the health sector as a whole, where 70 percent of the budget is for core service delivery, compared to 30 percent for non-core service delivery (see Section **3.9**).

Figure 22. HIV/AIDS budgets by cost category (FY 2017/18)



This can be further analyzed according to financing source. While 69 percent of the partner health budgets contribute to service delivery, largely for drugs/commodities and supply chain management, only 13 percent of government funding contributes to service delivery, as it is largely focused on administration and management as well as planning and policy activities.