



REPORT

Achieving Sustainable Health Financing in Zambia: Prospects and Advocacy Opportunities for Domestic Resource Mobilization

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Abbreviations and Acronyms

AIDS	acquired immunodeficiency syndrome
ART	antiretroviral therapy
DHO	district health offices
FY	fiscal year
GDP	gross domestic product
Global Fund	Global Fund to Fight AIDS, Tuberculosis, and Malaria
HIV	human immunodeficiency virus
IFMIS	Integrated Financial Management System
K	Zambia kwacha
MOF	Ministry of Finance
MOH	Ministry of Health
MPSA	ministry, province, and other spending agency
MTEF	Medium Term Expenditure Framework
NHA	National Health Accounts
NHI	National Health Insurance
NHSP	National Health Strategic Plan
PHO	provisional health offices
TB	tuberculosis
WHO	World Health Organization

Executive Summary

Zambia has demonstrated significant commitment to increasing domestic expenditure on health. From 2003 to 2014, government health expenditure increased from US\$67 million to US\$514 million. However, beginning in 2013, the country's economic growth slowed substantially, from an average of almost 8% annually to 3.4% in 2016. As a result, government revenues fell well below projections. Coupled with a steep depreciation of the Zambia kwacha, the slowed economic growth was largely tied to a 30% decrease in the price of copper, on which Zambia's economy is heavily dependent, which decreased revenues from US\$4.5 billion in 2013 to US\$3.7 billion in 2016.

The health sector has been hit particularly hard by these reductions. From 2014 to 2016, government health expenditure fell as a share of general government expenditure from 8.2% to 7.1%. Due to slow recovery of economic growth, the share of the budget designated for health increased to 9.3% by 2019. The country's Medium Term Expenditure Framework projects a sharp increase in the allocation to health in the national budget to 14.8% by 2021. This potential increase is almost in line with the government health expenditure goal of Zambia's *National Health Strategic Plan 2017–2021*, which calls for an increase in the share of the budget for health to 15%—matching the Abuja target—by 2021. Palladium estimates that achieving this target would mobilize US\$2.5 billion over 2019–2021, compared to US\$1.8 billion in a baseline scenario with no increase in the health budget share. However, even this ambitious target fails to come close to the National Health Strategic Plan's estimated resource requirement of US\$9 billion for 2019–2021.

With these factors in mind, the plan's requirements seem largely unattainable and highlight the need to not only mobilize additional resources but also improve the prioritization and efficiency of the delivery of interventions. The recently developed national *Health Financing Strategy, 2017–2027* specifies a number of strategies for domestic resource mobilization,

which include the establishment of a social health insurance scheme, greater advocacy for increased health budget share, and lobbying the Ministry of Finance for the introduction of innovative financing strategies, such as “sin taxes” on cigarette, alcohol, and sugar-sweetened beverages.

Interviews with key informants have highlighted other possible strategies, such as earmarking funds from third-party motor vehicle insurance contributions and allocating a proportion of resources from infrastructure projects to HIV. Despite the range of innovative ideas, most financing strategies have either not been implemented or have been implemented at rates too low to raise significant resources, such as the tax on nonalcoholic sugar-sweetened beverages. The recently approved National Health Insurance Act and the current plans to implement a national health insurance scheme within 2019 are considered the key solutions to the country's health financing problems. However, the limited formal sector (15%) of the labor force, low payroll contribution rates, and minimal incentive for voluntary enrollment of informal sector workers, due to a limited benefits package, severely limits the scheme's potential for resource mobilization.

Given the country's current macrofiscal context and challenges to implementing effective health financing reforms in the short and medium term, it will likely be difficult to generate substantial new domestic resources for health. While these reforms should continue to be pursued, an increased focus should be placed on freeing up resources within the existing resource envelope by eliminating inefficiencies in health spending. This may include improving the timeliness of budget disbursements, which leads to poor health budget execution; reducing leakages and misuse of funds, including the procurement of commodities services at above-market prices; addressing frequent absenteeism and tardiness; and more effectively prioritizing programs, interventions, and levels of service delivery that are cost-effective and can produce high-impact results.

Introduction

Over the past three decades, the way in which healthcare services in Zambia have been financed has changed. In the early 1990s, the country introduced user fees for public sector services during a series of healthcare reforms, which increased the contribution of out-of-pocket expenditure to total health spending. In the 2000s, Zambia was the beneficiary of a surge in development assistance for health. This additional financing led to a rapid scale-up of key health interventions and significant improvements in health indicators. At the same time, rapid economic growth created increasing domestic fiscal space for health and the government committed an increasing share of government expenditure to health. Additionally, an increasing emphasis was placed on increasing health equity and reducing financial barriers to access, which led to the removal of user fees between 2006 and 2012.

Despite these investments, Zambia continues to face a high burden of disease, particularly for communicable diseases such as HIV, tuberculosis (TB), and malaria. The country has among the highest prevalence rates for HIV and TB in sub-Saharan Africa, with HIV, TB, and malaria being the first, sixth, and seventh leading causes of burden of disease in Zambia, respectively, as measured by disability-adjusted life years lost (IHME, 2017). In order to increase coverage of priority interventions to address these diseases and address the country's high rate of population growth, which drives a still-growing need for funding for health, Zambia's *National Health Strategic Plan 2017–2021* set ambitious targets for the scale-up of essential health services aligned with the country's commitment to achieve universal health coverage (MOH, 2017d).

However, achieving these targets may be challenging, given the country's weakening macrofiscal situation. In 2013, after a decade of economic growth that averaged nearly 8% annually, measured by gross domestic product (GDP), the economy began to stall. Since then, the average annual GDP growth has been just 4%.

Furthermore, government revenues, measured as a percentage of GDP, have declined from a peak of 18.9% in 2014 and to just 17.3% in 2017 (IMF, 2017). As a result, Zambia has faced lower than predicted revenues and a growing cost of debt servicing resulting from uncontrolled deficit financing (IMF, 2017). This reduced fiscal space has had severe implications on the health sector, which has had nearly flat domestic government funding in recent years. This trend, coupled with a flattening of external financing since the late 2000s, has led to a growing gap to meet resource needs for health.

Cognizant of this, Zambia recently completed the *Health Financing Strategic Plan: 2017–2027*, which lays out strategies to raise additional domestic revenue for health. Key among these has been the introduction of the National Health Insurance (NHI) scheme. Recent studies and data have shown that there is an opportunity for the country to free up resources by improving efficiency in service delivery. However, significant support will be required to translate this evidence into actionable strategies.

This report, funded by the Global Fund to Fight AIDS, Tuberculosis, and Malaria (Global Fund), provides findings from an assessment of the health financing landscape in Zambia. It serves as an evidence base for effective engagement and advocacy for increased domestic resource mobilization for health, specifically for HIV, TB, and malaria. The report explores how the health sector is financed, the status of various health financing mechanisms, the potential for increased resource mobilization, potential areas that could be targeted to increase efficiency, and the budget process as an entry point to advocacy. The assessment was conducted by Palladium and included a review of secondary data sources and 12 key informant interviews with organizations including departments within the Ministry of (MOH), National HIV/AIDS/STI/TB Commission, Ministry of Finance (MOF), U.S. Agency for International Development, the World Bank, and World Health Organization (WHO).

Health Financing in Zambia: The Current Context

SOURCES OF HEALTH FINANCING

Zambia has a hybrid health financing system that incorporates public, external, and private financing. Public financing (government health expenditure) comes from taxes collected by the central government and executed by the Ministry of Health (MOH) and other government agencies. External financing comes from bilateral and multilateral development partners that provide resources to the government as grants or loans or to nongovernmental organizations as funded implementing partners. The majority of health-focused grant assistance to the government by development partners is off-budget and earmarked directly for certain ministries, provinces, and other spending agencies (MPSAs) or for certain activities and programs. Private financing is primarily in the form of direct health expenditure by households (out-of-pocket expenditure) and by private employers and private third-party insurers.

Between 2003 and 2012, total health expenditure increased three-fold from \$284 million¹ to \$851 million (MOH and UNZA, 2006; MOH et al., 2009; MOH, 2013) (Figure 1). Of the \$567 million increase in annual total health expenditure over this period, \$273 million (48%) came from domestically generated government resources

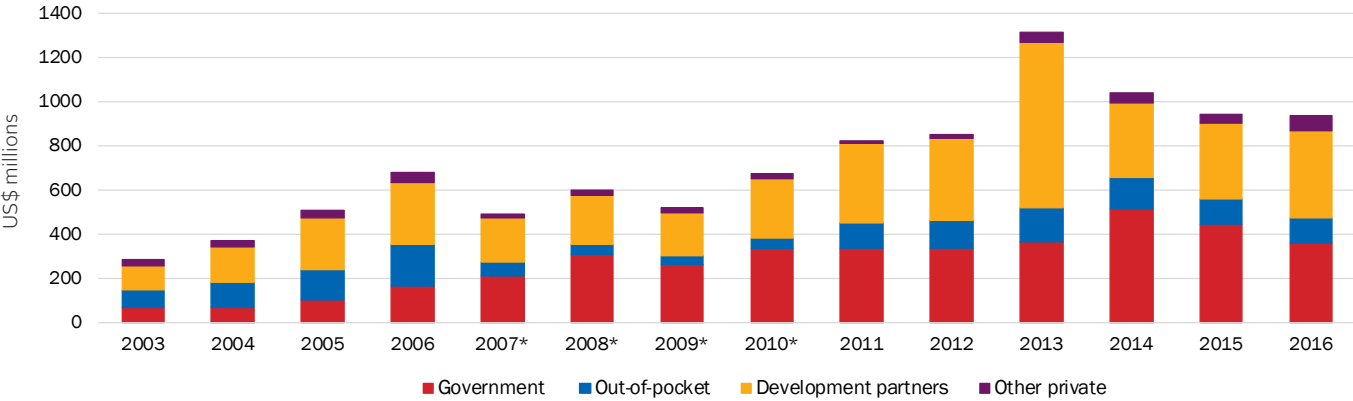
BOX 1.
KEY DATA GAP

Quality and Comparability of Health Expenditure Data

There are concerns about the consistency and comparability of health expenditure data across years and NHA rounds. In particular, the 2007–2010 NHA may not be consistent with other NHA methodologies and may not accurately reflect health spending trends across those periods. Additionally, the sharp rise in external resources in 2013 by the 2013–2016 NHA is not in line with figures reported by other sources and may be due to an error in estimation (MOH, 2013, Unpublished).

and \$265 million (47%) came from new external resources. After 2013, external financing declined to \$339 million in 2014 and \$345 million in 2015 before increasing by 16% in 2016 to \$399 million (MOH, Unpublished). Although the National Health Accounts (NHA) noted a sharp rise in external resources in 2013, this may have been due, in part, to an error in estimation and was not noted to the same extent in other sources (Box 1). In contrast,

Figure 1. Health Financing in Zambia, by Source



Sources: MOH and UNZA, 2006; MOH et al, 2009; MOH, 2013, Unpublished.
 *Data from the 2007–2010 National Health Accounts may be subject to differences in methodology and not be comparable with other years (MOH, 2013).

1 All currency is provided in U.S. dollars, unless otherwise specified.

domestic government spending increased by 40% in 2014, from \$368 million to \$514 million, which may have been in response to a decline in external financing. However, domestic government health expenditure declined thereafter, reaching only \$359 million in 2016—lower than the \$367 million per year in 2011 and 2012. As of 2016, domestic government financing accounted for 38% and external financing for 43% of total health expenditure (MOH, Unpublished).

Health expenditure by households (out-of-pocket) and other private sources have increased in both relative and absolute terms since 2003, peaking at \$184 million and \$46 million, respectively, in 2006 (MOH et al., 2009). Although their levels have fluctuated significantly since 2006, the general trend has been a decline. Between 2011 and 2016, out-of-pocket expenditure averaged just \$128 million and other private expenditure just \$37 million—with the exception of \$66 million in other private spending in 2016 (MOH, Unpublished). This relatively flat private spending on health may be, in part, due to the removal of user fees in primary healthcare facilities in rural areas in 2006, peri-urban areas in 2007, and countrywide in 2012.

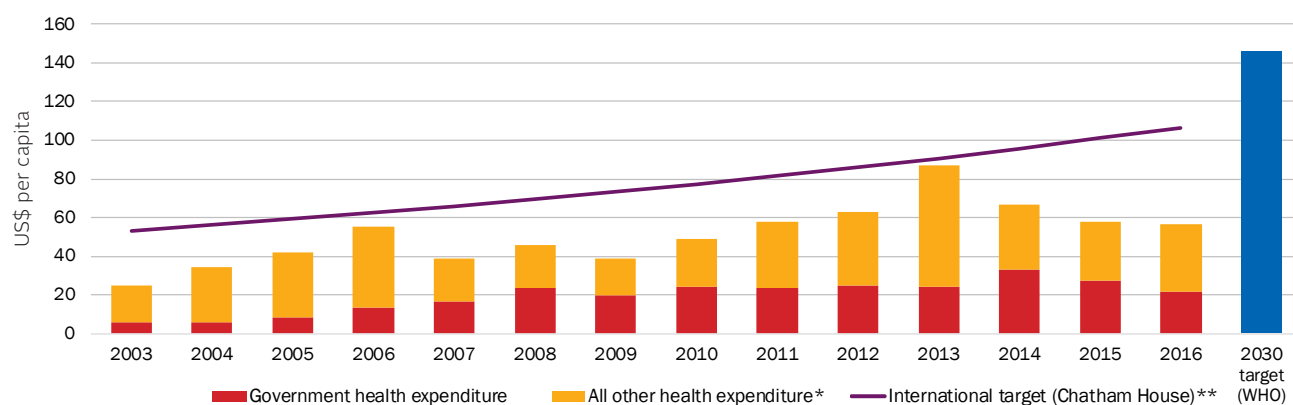
Per capita total health expenditure has also fluctuated since 2003. Total per capita expenditure more than doubled from \$27 in 2003 to \$58 in 2006 (current U.S. dollars) before

plateauing in 2007–2012 (Figure 2). It peaked at \$90 in 2013, surpassing the Chatham House target of \$86 per capita (2012 dollars) in health spending to provide “a minimum level of key health services in low-income countries” before falling back to \$59 in 2016 (McIntyre and Meheus, 2014). The \$59 equaled just over half of the inflation-adjusted Chatham House target (\$107) and fell far below the World Health Organization (WHO) estimate of the level of total health expenditure per capita (\$146) required to meet the Sustainable Development Goals health targets in low- and middle-income countries (Stenberg et al., 2017). Government health expenditure per capita peaked at \$34 in 2014 but then declined to \$23 in 2016 (Figure 2).

FINANCING BY DISEASE AREA

In 2016, infectious diseases, including malaria, tuberculosis, and HIV/AIDS and other sexually transmitted diseases accounted for 59% of total health expenditure, with HIV and other sexually transmitted diseases and malaria alone accounting for 48% of total health expenditure (MOH, Unpublished) (Figure 3). Although high, the percentage of infectious disease, as a share of total health spending, actually declined from 68% in 2013, with HIV and other sexually transmitted diseases falling from 43% (2013) to 34% (2016) of total health expenditure.

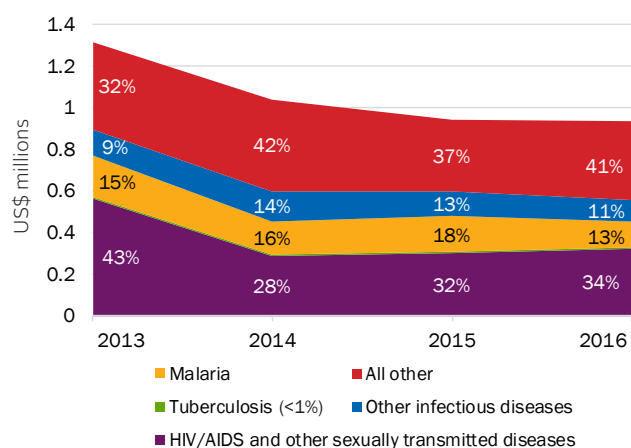
Figure 2. Per Capita Health Expenditure, Historical and Targets



Sources: MOH and UNZA, 2006; MOH et al., 2009; MOH, 2013, Unpublished; McIntyre and Meheus, 2014; Stenberg et al., 2017.

*Full height of bars represents total health expenditure.

**The Chatham House target for health spending is adjusted annually (from 2012 levels) using an assumed inflation rate of 5.5%.

Figure 3. Total Health Expenditure by Disease Area, 2013–2016

Expenditure shares of various diseases and conditions have to some extent reflected Zambia's historical burden of disease. For example, HIV and other sexually transmitted infections account for both the largest expenditure share (34%) and the largest share of disability-adjusted life years lost (18%, see Table 1) (IHME, 2017). However, the changing epidemiological profile and national priorities have contributed to reduced prioritization of some health programs. For example, spending on noncommunicable diseases increased as a share of health spending from 8% in 2013 to 10% in 2016. Key informants indicated that noncommunicable disease is an area of increased policy interest and highlighted the challenge of competing priorities that HIV and other traditionally donor-funded programs face during the ongoing epidemiological transition.

HIV

From 2013 to 2016, spending for HIV and AIDS fluctuated marginally, decreasing between 2013 and 2014—both in absolute terms and as share of total health expenditure—but then increasing marginally from \$294 million in 2015 to \$316 million in 2016 (MOH, Unpublished). Of the \$316 million spent in 2016, 86.4% was from external sources, 12% from government, and 1.4% from other private sources, while only 0.1% came from households. Between 2015 and 2016, the share of HIV resources dedicated to treatment increased from 33% to 42%, while the share of preventive care declined from 77% to 58%. Although the increased share of treatment has been attributed to the scale-up of the test and treat (now “Treat All”) policy, key informants have emphasized the need to increase spending on prevention, which is more cost-effective.

Zambia's HIV financing targets are presented in the *National HIV and AIDS Strategic Framework 2017–2021*, the goal of which is to achieve the Joint United Nations Programme on HIV/AIDS 90-90-90 targets by 2020 (MOH and NAC, 2017). The framework aims to reduce the heavy reliance on external funding for the HIV response and “to localize the major share of the AIDS budget by 2020.” Specifically, one of the objectives of the strategic framework is to increase domestic financing for the HIV response by 50% between 2017 and 2021. However, recent reductions in government funding for HIV have led to problems in program implementation. Several key informants stressed that these reductions were

Table 1. Key Epidemiological and Financing Indicators for Priority Disease Areas

Disease area	Prevalence and incidence	Burden of disease*	Expenditure (% of total health expenditure) (2016)	External funding as share of disease area expenditure	Estimated resource need for 2021
HIV	1.2 million adults and children living with HIV (12.3% adult prevalence)	18%	\$316 million (34%)	87%	\$311 million
Tuberculosis	638 cases per 100,000 population (2013)	5%	\$5.16 million (1%)	71% (2015)	\$29 million
Malaria	336 cases per 1,000 population (2015)	4%	\$123 million (13%)	26%	\$142 million

Sources: IHME, n.d.; MOH, 2014, 2015, 2017c, 2017e, Unpublished; MOH and NAC, 2017; NMEC, 2017.

* Disability-adjusted life years; source: <https://vizhub.healthdata.org/gbd-compare/>

expected because of recent economic challenges, however, others indicated that prioritization and inefficiencies—especially inflated procurement contracts and wastages—were the major causes.

The resource requirements for the strategic HIV framework are far higher than the projected available resources, which are estimated to be 20% higher in 2021 (\$504 million) than in 2017 (\$401 million) (MOH and NAC, 2017). However, the strategic HIV framework projects that available resources will be reduced by 36% from \$360 million in 2017 to \$265 million in 2021. The reduction is mostly due to projected reductions in external financing. To fill this gap, the strategic HIV framework underscores the importance of advocacy for legislation to broaden domestic resource mobilization from both state and non-state sources and of exploring innovative resource mobilization initiatives. Some key informants indicated that charging contractors of large construction projects fees based on environmental impact assessments showed promise as a mechanism for resource mobilization but was hampered by the lack of a legal basis by which to levy such a charge. Other key informants hoped that the recently introduced NHI scheme would help HIV financing but were unclear how it would do so. A third potential strategy for mobilizing new resources is through efficiency gains. Plans are currently underway to scale up differentiated models of care, decentralizing antiretroviral therapy to the communities in order to improve efficiency and adherence.

Tuberculosis

Although Zambia is among the highest TB burden countries in the world, its spending is much lower than some lower burden sub-Saharan Africa countries. From 2014 to 2015, nominal expenditure on TB dropped from \$5.7 million to \$5.2 million (MOH, Unpublished) and domestic resources for TB control decreased substantially as a share of total resources, from 44% to 29% (MOH, 2017c). These funding trends contrast with the ambitious targets of the *National Strategic Plan for Tuberculosis Prevention, Care, and Control (2017–2021)*, which aim to decrease deaths due

to TB by 40% by 2021 (MOH, 2017c). The total resources required for implementation of the plan over the five-year period was estimated at \$155 million—an average of \$31 million per year. At six times the current level of spending, substantial resource mobilization efforts would be needed to meet this goal.

The TB program has not, however, made resource mobilization a priority in the way that the HIV and malaria programs have. Among the strategic plans for these priority disease areas, the TB plan is the only one that does not have an objective to address the need to increase domestic resource mobilization, nor does the plan mention alternative or innovative domestic resource mobilization strategies as the HIV and malaria plans do. Also, despite identifying the lack of advocacy by the national TB program for more government resources as one of the key gaps in TB control, the strategic plan does not mention plans for increased budget advocacy. Instead, it emphasizes funding from traditional donors, such as the Global Fund to Fight AIDS, Tuberculosis, and Malaria and the U.S. government, as key to achieving the TB goal. Key informants have, however, mentioned that they are making efforts to engage nontraditional donors and explore options for domestic resource mobilization. Key informants believe that the NHI scheme will be crucial for mobilizing the required resources and have been consulted on the NHI benefit package design.

Other key informants suggested that the reason why the TB program has not been aggressive in resource mobilization is that they have not been able to spend the money they already receive. They indicated that execution rates could be improved by making the TB budget support more flexible, allowing for the funding of other aspects of the program, such as human resources (Box 2). The key informants emphasized that the biggest gap in financing is in human resources, where more health workers need to be deployed to identify the TB cases that are not being detected. As of 2017, Zambia was able to detect only 60% (4,000) of the estimated 62,000 annual TB cases (MOH, 2017c).

BOX 2.**SUSTAINABILITY OPPORTUNITY****Increasing Tuberculosis Budget Execution Rates**

Although the overall level of resources allocated for TB is relatively low, given its share of the burden of disease, key informants indicated that the national TB program has historically not been able to use most of the resources at its disposal. This low budget execution rate may have two possible causes. First, the national TB program is too centralized, which hampers effective program implementation. Second, although increased staffing levels and procurement of equipment are needed to increase case detection rates, external resources, on which the program is heavily reliant, have limited flexibility to fund either. Increasing the flexibility of funding, through decentralizing its management and shifting toward more flexible domestic funding sources, could yield gains in budget execution and efficiency.

Malaria

Although malaria accounts for the second largest share of total health expenditure, nominal expenditure on malaria declined by almost 40% between 2015 and 2016, from \$172 million to \$123 million (MOH, Unpublished). This change was attributed to a reduction in spending from both government and external sources, such as the U.K. Department for International Development's withdrawal of financial support to the malaria program. In 2016, the largest share of malaria spending was from domestic sources, with government expenditure accounting for about 63% of total spending on malaria, while external financing accounted for 26% and households for 8%. However, some programs, such as larval source management, which has been identified as critical to eliminating malaria, are fully funded by government.

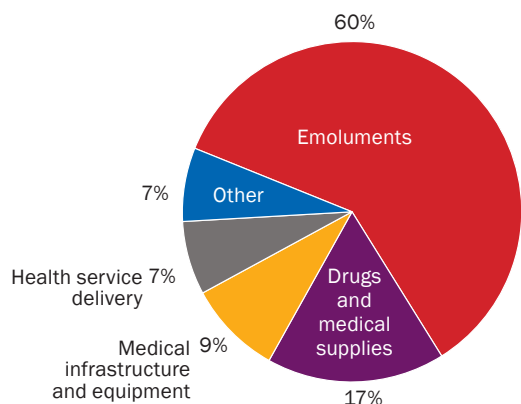
Although government funding accounts for the largest share of malaria spending, significant challenges to domestic financing for malaria remain, among which is that funds are not released in a regular and timely fashion. These delays have affected programs such as indoor residual spraying, which must be conducted at specific seasonal times. Similar to HIV, the share of malaria spending on prevention has shrunk while spending on curative interventions has increased (MOH, Unpublished).

Zambia formulated its *National Malaria Elimination Strategic Plan 2017–2021* with the vision of achieving 100% malaria-free status by and maintaining this status beyond 2021 (NMEC, 2017). The strategic plan aims to scale up key interventions relating to vector control, case management, malaria in pregnancy, parasite clearance, health promotion, financing, and other health systems strengthen activities. The cost of implementing these interventions is projected to rise from \$99 million in 2017 to \$138 million in 2021. A resource mobilization strategy or business plan is currently being developed, which will carefully present the funding gap and the strategies to be employed to mobilize the required resources. So far, key informants have indicated that a number of private organizations have been engaged to support the malaria program and that there are plans to set up an “end malaria council” to monitor implementation of malaria intervention and raise funds. The aim is to ensure that the private sector is part of and will play a key role in this council. The resource mobilization strategy will also look at further engaging nontraditional donors. China has already have been providing support to the malaria program by, for example, building the country's first polymerase chain reaction laboratory, providing transportation equipment, and providing technical assistance.

DOMESTIC RESOURCES FOR HEALTH

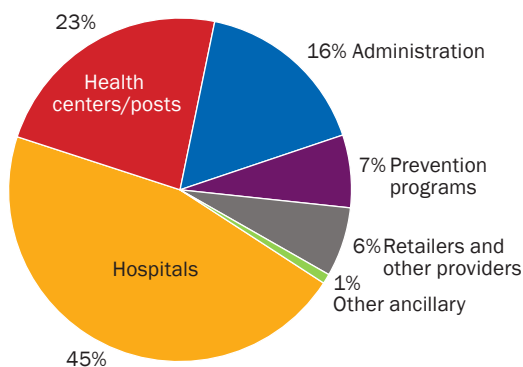
Domestic government expenditure on health constituted about 39% (\$359 million) of total health expenditure in 2016. Despite the fact that health centers account for more than three-quarters of health facility visits, only 23% of

Figure 4. Domestic Health Spending by Healthcare Level, FY 2016



Source: MOH, Unpublished.

Figure 5. Domestic Health Sector Budget by Health System Category, FY 2016



Source: MOH, Unpublished.

domestic government resources were spent at health centers compared to 46% at hospitals (CSO, 2016) (Figure 4). Administration accounts for an additional 17% of domestic government health spending while public health prevention programs (7%), contracted retailers of goods and services (6%), and other ancillary costs (1%) account for the remaining share (World Bank, Unpublished).

In 2016, about 60% of domestic government resources for health were allocated to personal emoluments or salaries, which left only 17% for essential drugs, 9% for infrastructure and equipment, and 7% for service delivery (MOF,

2016) (Figure 5). Key informants indicated that for 2017, personal emoluments accounted for 70% of the total health budget. The increased share of emoluments suggests that an even lesser share of the budget is now spent on service delivery and drugs. The large share of emoluments has been partly attributed to increases in wages and salaries, which have far out-paced growth in government health expenditure. In Zambia, emoluments, as a share of government health expenditure, is among the highest in southern Africa, where the average share was estimated at 40% (Vujicic et al., 2009).

In 2016, 38% of the operational budget (all non-salary/wage costs) was allocated to the administrative level, specifically, to MOH headquarters and provincial health offices. Training institutions and statutory bodies—institutions created by law to execute support functions such as regulating medicines or health professionals—accounted for an additional 16% of the operational budget, while the remaining 46% was allocated to health facilities. The latter was divided between secondary- and tertiary-level care provided at general and central referral hospitals (19%) and district- or primary-level care provided at health centers and district hospitals (27%) (World Bank, Unpublished).

Insurance as a Mechanism for Domestic Resource Mobilization

Social and National Health Insurance Scheme

After user fees were introduced at public health facilities in the 1990s, policy discussions began to focus on the need for developing an NHI (or social health insurance) scheme to provide financial risk protection and improve healthcare financing. However, progress on developing an NHI scheme stalled for more than 20 years due to a lack of political will and support (Freedom to Create, 2016). In 2012, the National Health Policy affirmed the need to create an NHI scheme and the government removed user fees for all primary care as a first step toward providing financial risk protection (ROZ, 2011). Despite these steps, households still incurred substantial costs at higher levels of care. Evidence shows that removing user fees from primary care services may not have significantly improved financial

risk protection as hoped (Hangoma, Aakvik, and Robberstad, 2018; Hangoma, Robberstad, and Aakvik, 2018).

In 2015, the government renewed its proposal to implement NHI. The creation of an NHI scheme (also referred to as the SHI scheme) was included as a priority in the *Seventh National Development Plan 2017–2021* (MNDP, 2017), the *NHSP 2017–2021* (MOH, 2017d), and the *Health Financing Strategy: 2017–2027* (MOH, 2017b). Despite resistance from key sections of the population, including labor unions, Zambia enacted the National Health Insurance Act in 2018, which legally established the National Health Insurance Scheme and Fund (ROZ, 2018b). One of the stated objectives of the NHI scheme is to “provide for sound financing of the health system.” Key informants within the MOH view the NHI as a system that will address key healthcare financing challenges. However, an already high tax burden in the small formal sector (about 15% of the labor force) and challenges in extending insurance to the informal sector may limit the ability of NHI to raise sufficient resources to finance the provision of a health benefit package to the entire target population. The NHI Act does allow for other financing mechanisms to be introduced to subsidize the NHI, but no specific mechanisms have yet been proposed.

Based on the actuarial assessment conducted in 2008, the government agreed that the NHI would be funded via a payroll contribution of 5% to be split equally between the employee and the employers. This has since been revised to 2% (1%/1%). The government aims to implement this tax in 2019. The revised lower contribution rate, however, raises concerns about the sustainability of NHI and the need for additional government subsidization of the scheme. Discussions about how much the informal sector could contribute and how these contributions could be collected are ongoing.

Although the NHI Act establishes the NHI Management Authority, the mandate for implementing the NHI has, for now, been given to the newly created Department of Healthcare Financing in the MOH. The department is currently

designing a benefit package and developing regulations for implementation of the NHI. According to key informants at the MOH, the focus has been on designing a hospital benefit package, since all services at the primary healthcare level are free. This means that primary care services will not benefit explicitly from revenues collected from the NHI, although it may free up government resources previously allocated to hospitals. The challenge with this approach is that the primary level of care constitutes almost two-thirds of all health facility visits and is substantially underfunded, which has resulted in patients experiencing low-quality services or having difficulty accessing services (Masiye et al., 2010; Das et al., 2016; Freedom to Create, 2016). Therefore, while NHI contributions will supplement resources available to hospitals, in the short term, emphasis must be placed on ensuring that the primary level of care receives an increasing share of discretionary, budgetary resources. In the longer-term, the design of NHI should be reconsidered and revised to include primary healthcare services (Box 3).

BOX 3.**SUSTAINABILITY OPPORTUNITY****Expanding National Health Insurance to Include Primary Healthcare Services**

Primary health services are excluded from the current NHI design and will, instead, continue to be free through in public facilities, financed by tax revenue. However, as primary healthcare is currently underfinanced—and given the stated objectives of the government to achieve universal health coverage and of NHI to “provide sound financing for the health system”—the future role of NHI in the financing of primary healthcare services must be considered. While, in the short term, the government may need to progressively increase budget allocations to the primary level, integration of primary services into NHI will help to ensure their long-term sustainable financing.

The lack of inclusion of primary healthcare in NHI may also hamper efforts to increase NHI enrollment. Although NHI enrollment is supposed to be compulsory, it is effectively voluntary for the large informal sector of the population (85% of the workforce) due to a lack of enforceable contribution mechanisms, such as payroll deductions. Therefore, proper incentives must be provided for this portion of the population to enroll and voluntarily contribute to the scheme. As most of the population's health needs are met at the primary levels regardless, there will be little incentive for them to enroll in NHI.

Private Insurance and Hospital Schemes

Until the likely implementation of the NHI scheme in 2019, Zambia has relied on private health insurance as the sole source of financial protection for healthcare costs. However, only a small fraction of the population has been covered. The private insurance market in Zambia is primarily composed of four main prepayment and insurance schemes: private health insurance, employer-based insurance, government facility high-cost schemes, and private facility medical schemes. According to the Zambia Household Health Expenditure and Utilization Survey, these schemes only cover 3.9% of the total population (MOH, UNZA, and CSO, 2016). The largest of these is the employer-based scheme, which accounts for 44% of all covered individuals. Under this type of scheme, an employer manages a group scheme for its employees (and their dependents) who contribute a payroll-based premium, entitling them to insured care in selected health facilities. In private health insurance schemes, which cover 19% of covered individuals, individuals (and possibly their dependents) are covered by a commercial insurance company in exchange for premium payments made either by the individual or their employer. Government facility high-cost schemes and private facility medical schemes are pre-payment schemes where policyholders deposit a minimum amount of money into the scheme and the medical services rendered are charged against that account. These schemes account for 19% and 17% of covered individuals, respectively.

In general, the private insurance market covers primarily formal sector workers and those with relatively high incomes. Low-income individuals

have no access to health insurance products, and no efforts have been made to extend health microinsurance products.

Private Sector Contribution to Health

Private Providers

The promotion of private sector participation in healthcare delivery is one of the strategic objectives of Zambia's Seventh National Development Plan and of the NHSP. Private providers already play a key role in the provision of health services in Zambia. According to the 2017 health facility listing, 19% (544) of all health facilities in Zambia are privately owned and an additional 2% (68) are owned by faith-based organizations (MOH, 2017a). With the exception of faith-based health facilities, private providers are predominantly located in urban areas. However, some privately owned health facilities, mostly by firms and companies, such as mining and agricultural companies, have a wider reach, providing services in both urban and rural settings. Faith-based providers use their own resources for the provision of health services and serve as financing agents for donors and the government, from whom they occasionally receive subsidies for selected costs, such as human resources for health.

Key informants within the MOH recognized a need to work closely with private providers and major policy documents, including the healthcare financing strategy, and have identified engaging and working with the private sector as an important policy direction. Plans are underway to extend the provision of free antiretroviral therapy to clients attending private facilities. Currently, unlike public facilities, private facilities charge for the provision of antiretroviral therapy services since they have to procure their own drugs. Under the new proposal, private providers would receive drugs from the government and would only be allowed to charge a small fee to cover the cost of dispensing them. Private providers have already been providing TB drugs procured by government for free to their clients. The National Malaria Elimination Centre has also worked with the private sector to deliver key interventions by leveraging existing private sector infrastructure and human resources to lower the public sector costs of providing malaria interventions.

KEY TAKEAWAYS: HEALTH FINANCING CHALLENGES AND OPPORTUNITIES

- After an 11-year period in which government financing for health grew nearly eight-fold to \$514 million in 2014, government financing levels declined sharply by 30% to \$359 million in 2016.
- Although infectious diseases, including HIV, TB, and malaria accounted for 59% of total health expenditure in 2016, this marked a significant decline in prioritization from 68% in 2013, reflecting Zambia's changing epidemiological profile and shifting government priorities.
- Government expenditure on health goes primarily to salaries (estimated at 70% of the health budget in 2017).
- Only 23% of government resources spent on health reach the primary healthcare level, which accounts for more than three-quarters of facility visits.
- Although the government is expecting to launch the NHI scheme in 2019 as the primary mechanism for domestic resource mobilization for health, the scheme faces significant challenges due to low contribution rates, the small formal sector, and the exclusion of primary health services, which will continue to be free in public facilities.

Finding the Money: Creating Additional Fiscal Space for Health

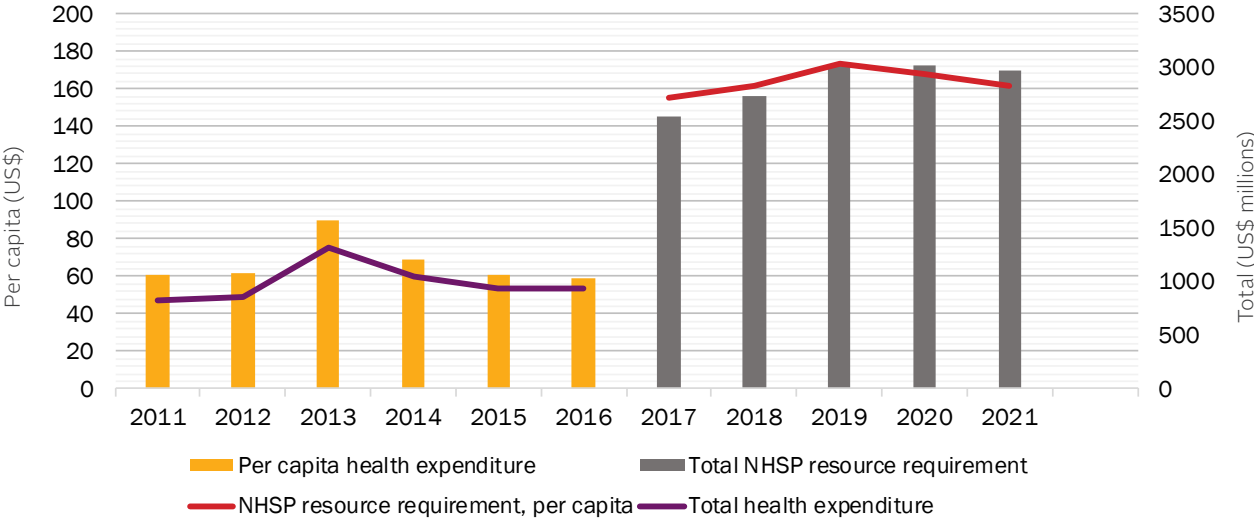
In order for Zambia to achieve universal health coverage, based on WHO recommendations, the government will need to more than double the current level of total per capita health expenditure from \$57 to \$146. Given the flattening of and potential reductions in external resources, the MOH and its partners must continue to advocate for increased prioritization of health in order to increase domestic resources for the sector. The country has already designed and costed the NHSP for the period 2017–2021 that lists priority areas and interventions and the costs associated with them. The NHSP is premised on Zambia’s long-term development plan, Vision 2030, which states that “achieving middle income status requires increasing annual health expenditure per capita to a period average of \$150, comparable to middle income economies” (MOH and UNZA, 2006).

TARGETS AND FISCAL SPACE FOR DOMESTIC HEALTH SPENDING

Current Targets

The MOH estimated that a total of \$14.3 billion dollars will be needed to implement programs identified in the NHSP 2017–2021. The annual resource need will increase from \$2.6 billion in 2017 to \$3 billion, in 2019 (MOH, 2017d) (Figure 6). This translates to an increase in the per capita resource need from \$155 to \$173, declining over the last two years to \$162. These targets highlight the MOF’s commitment to transform the health system and achieve universal health coverage goals, which are above both the Chatham House- and WHO-recommended levels of health expenditure (Stenberg et al., 2017). One challenge is that the resource requirements of the NHSP differ from those outlined in disease-specific plans, which may be a potential source of confusion for decision-makers, especially the MOF.

Figure 6. Total Health Expenditure per Capita and National Health Strategic Plan Resource Needs (Total and per Capita)



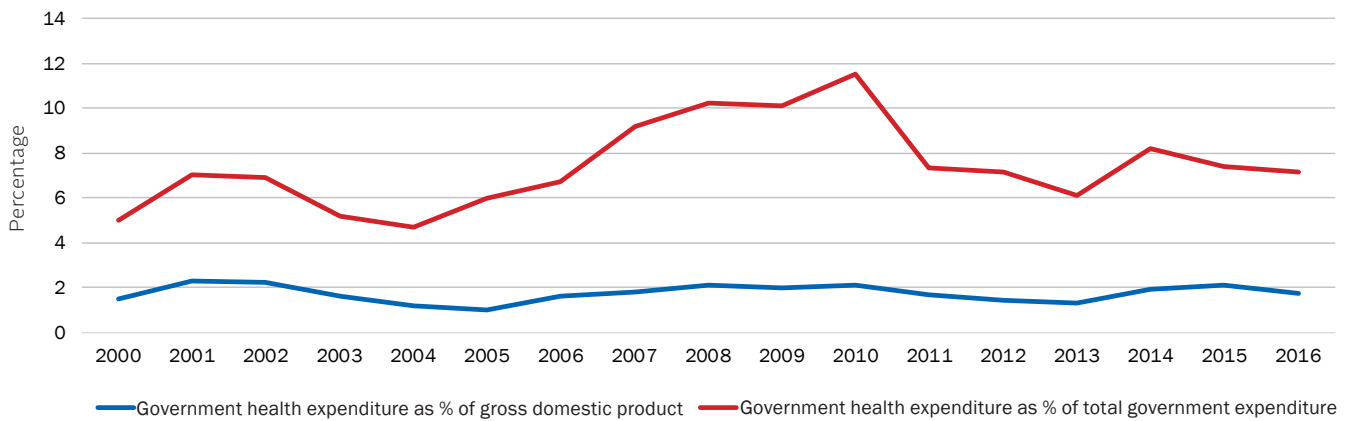
Sources: NHA and own computation from NHSP and World Bank population projections (MOH, 2013, 2017d, Unpublished; World Bank, Unpublished); MNDP, 2017.

As a share of GDP, government health expenditure has fluctuated in recent years from 1.3% in 2013 to 2.1% in 2015 and 1.7% in 2016 (MOH, Unpublished). Some key informants indicated that government health expenditure may be, at least in part, determined by and responsive to external financing levels. For example, in 2016, a decline in government health expenditure corresponded to an increase in external financing (Figure 1). Conversely, the significant decrease in external financing noted in the NHA between 2013 and 2014 corresponded to a significant increase in government financing (MOH, Unpublished). It is, however, unclear whether government health expenditure is responsive to external financing or vice versa.

While the share of the government budget allocated to health has fallen well behind the NHSP for 2019—9.3% versus 12%—the current Medium Term Expenditure Framework (MTEF) projects a sharp increase in the share, bringing it roughly in line with the NHSP for 2020 and 2021 (MOF, 2018) (Figure 8).

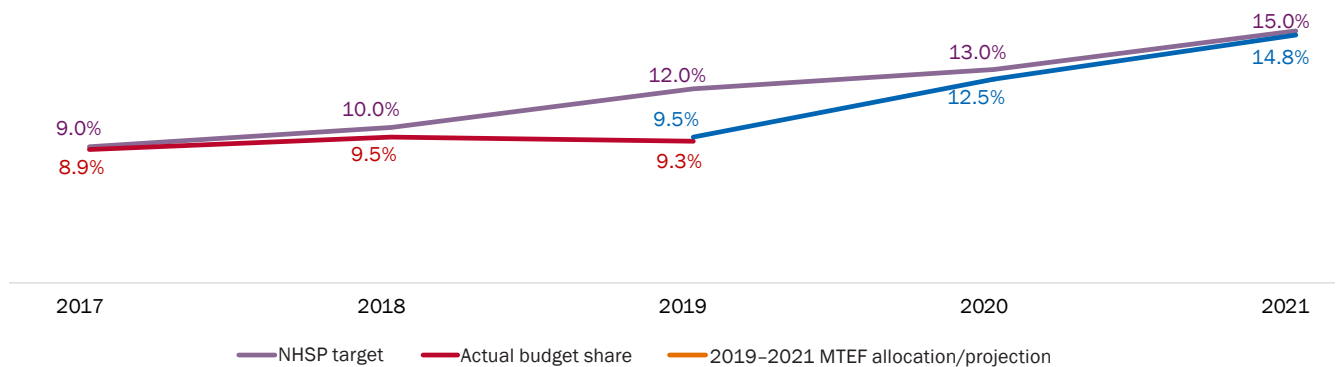
The resources required by the NHSP represent a three-fold increase over current total health expenditure of \$938 million in 2016 (MOH, 2017d). The NHSP states its aim is to increase government health expenditure to 15% of total government expenditure by 2021. However, efforts to increase government health expenditure levels has already fallen well behind this target (Figure 7).

Figure 7. Government Health Expenditure as a Percentage of Total Government Expenditure and Gross Domestic Product



Sources: MOH and UNZA, 2006; MOH et al., 2009; MOH, 2013, Unpublished.

Figure 8. National Health Strategic Plan Target versus Government Health Budget Share



Sources: NHSP 2017–2021 (MOH, 2017d) and MTEF 2017–2019, 2018–2020, 2019–2021 (ROZ, 2017, 2018a, 2019).

Prioritization of the Health Sector

In recent years, the share of the overall government budget allocated to health has remained relatively flat. After a significant increase in prioritization, during which the health sector budget increased as a share of the total government budget from 5% in 2004 to 12% in 2010, it again declined to 7% in 2011 and has remained at 6–8% since, representing 7% of the total budget in 2016 (MOH, 2013, Unpublished) (Figure 7).

MACROECONOMIC CONTEXT

Gross Domestic Product Growth and Revenue Generation

The flattening of domestic financing for health has been driven largely by less favorable economic performance in the past few years. Real GDP growth slowed from an average of 8% annually over 2003–2012 to 5.1% in 2013 and 2.9% in 2015, which was largely due to a 30% decline in the price of copper on which Zambia's economy is heavily dependent (IMF, 2017) (Box 4). Domestic government revenue declined from \$4.5 billion in 2013 to \$3.7 billion in 2016, which was also largely due to the fall in copper prices. GDP growth improved slightly to 3.8% in 2016, but declined again in 2017 to 3.4%, below the anticipated 4.0% (IMF, 2017; Bank of Zambia, 2019). Although official figures are not yet available, GDP growth was projected to increase to 4.5% in 2018 and remain at that level through 2022 (Bank of Zambia, 2019). Domestic revenue as a percentage of GDP was projected to remain below the 18% envisaged in the Seventh National Development Plan through 2019—at 16.5% in 2017 and 17.8% in 2018 and 2019—but increase slightly to over 18% in 2020–2021.

Debt and Foreign Exchange

Debt financing for infrastructure projects has increased interest payments, leaving less room for spending on other development activities. Public debt as share of GDP nearly doubled from 27% in 2013 to 61% in 2016, more than half of which was foreign currency denominated. At the same time, the Zambia kwacha declined in value

BOX 4.

KEY VULNERABILITY

Lack of Economic Diversity and Overreliance on Copper Revenues

Zambia's macrofiscal situation and ability to raise domestic resources is highly vulnerable to fluctuations in global copper prices. Copper accounts for three-quarters of import earnings (OEC, n.d.), a quarter of government revenue, and 10% of both GDP and formal employment. Declining global demand for copper, particularly in China, between 2013 and 2016 severely impacted both Zambia's public revenues and the value of the kwacha on the international market (Box 5).

against the U.S. dollar by 48% from 2013 to 2016, largely due to reduced global demand for copper (Box 4). Between 2015 and 2016, the Bank of Zambia, which maintains a floating exchange rate policy, intervened in the market by selling U.S. dollars to stop the decline and attempt to bring the exchange rate to its pre-2015 levels. Although the decline was contained, the exchange rate could not be brought to its pre-2015 levels. Furthermore, these actions reduced foreign currency reserves to less than three months of import cover (i.e., the amount needed to purchase three months of imports). This low level of foreign currency reserves made Zambia more vulnerable to future economic and foreign exchange shocks.

The weakening of the kwacha also increased the cost of debt servicing for external borrowing (i.e., with loans denominated in foreign currency). As a result, the debt service to revenue ratio nearly doubled, from 17% in 2013 to 33% in 2016. The increase in debt servicing means fewer resources are available for government spending, including health.

Unfavorable exchange rate conditions have also affected drug and equipment procurement costs (Box 5). Key informants highlighted that most medical supplies are procured internationally because of the high cost of local medical products.

BOX 5. KEY VULNERABILITY

Foreign Exchange Volatility and Drug Costs

Key informants highlighted that exchange rate volatility negatively affected the drug and medicine budget, as most of these commodities are procured internationally. For example, at the time of budgeting, an exchange rate of K10.9 to US\$1 was assumed for 2019. However, before the budget execution began, the kwacha depreciated by 10%, effectively reducing the drug budget from about \$83 million to \$75 million.

Given the vulnerability of procurements to exchange rate fluctuations and the perceived high cost of transportation for imports, particularly given Zambia’s land-locked status, the government views local or regional production of medicines and supplies as an important policy objective.

The Seventh National Development Plans states that “local production of medicines and generic drugs will also be promoted to reduce cost and improve access to health care” (MOH, 2017d). The country aims to achieve cost efficiency by procuring drugs from regional neighbors, which could potentially reduce transportation and other fixed costs. For example, the Government of Zambia signed a memorandum of understanding with Cipla Quality Chemical Industries Limited in Uganda in 2017 for the provision of antiretroviral and antimalarial drugs. The hope is that procuring from neighboring countries, such as Uganda, can reduce supply chain costs and could be a first step in moving future production to Zambia to further reduce these costs. However, any potential savings in the supply chain must be carefully weighed against likely increases in productions costs—which may be greater in the short term—due to high input costs and smaller economies of scale for regional or domestic production.

Fiscal Space for Health

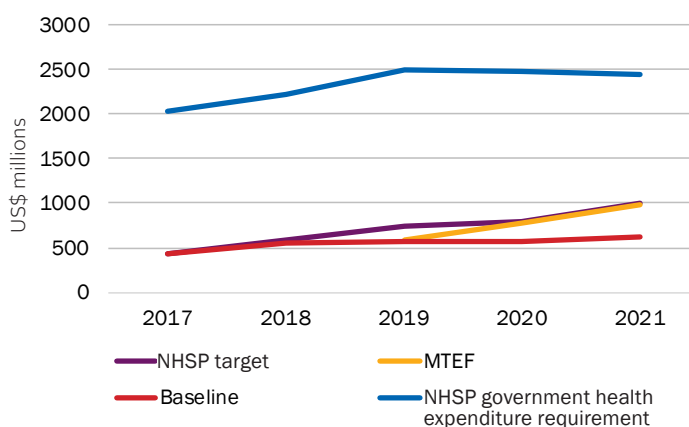
Given Zambia’s current macroeconomic situation, Palladium projected fiscal space—the amount of resources available for health through end of current strategic plans in 2021—under three scenarios for budget prioritization (i.e., the share of the domestically generated government budget allocated to health):

- 1) a baseline scenario, considering historical levels and prioritization (2017–2019) and assuming 2019 levels (9.3%) are maintained,
- 2) a scenario assuming that MTEF targets are met over 2019–2021, and
- 3) a scenario assuming the achievement of the NHSP targets for health expenditure as a share of total government expenditure.

All three scenarios assume the same rates of economic growth and government revenue generation as a percentage of GDP and a constant exchange rate of K11 per US\$1 (IMF, 2017).

Under the baseline scenario, we project that government resources allocated to health will increase from \$433 million in 2017 to \$629 million by 2021 (Figure 9). However, if MTEF targets are achieved, the allocation of government resources

Figure 9. Comparative Scenarios of Government Fiscal Space for Health



Sources: NHSP 2017–2021 (MOH, 2017d), MTEF 2019–21 (ROZ, 2019), and authors’ estimates based on Zambia: 2017 Article IV Consultation (IMF, 2017).

to health in 2021 would be \$987 million in 2021—\$367 million or 59% above the baseline projection. This is roughly in line with the estimated \$1 billion fiscal space created by achieving NHSP government health expenditure—as a percentage of total government expenditure—targets for 2021.

However, when compared to the NHSP resource need, all of the potential resource envelopes fall well short. Palladium estimated the resource need for the NHSP from government resources alone—accounting for anticipated donor funding levels remaining flat (\$399 million) and out-of-pocket contributions increasing proportionately with GDP per capita. Based on these estimates, the government would need to mobilize an average of \$2.5 billion annually over 2019–2021. Therefore, even under the NHSP target of 15% of government expenditure allocated to health in 2021, the government resource envelope (\$1 billion) would be only 41% of the need (\$2.4 billion). Given this, there is a clear need to look for additional domestic resources to finance the NHSP. Key informants have also suggested that interventions should be better prioritized to ensure improved efficiencies and to ensure that strategic plans are affordable within the current macrofiscal context of the country. This would make the plans more credible and more effective as tools for advocacy (Box 6).

Innovative Financing

The Seventh National Development Plan and the NHSP have both highlighted the need for innovative ways of raising domestic resources in order to improve healthcare financing. In general, these plans do not clearly specify what interventions will be used to raise resources. The NHSP indicated that such strategies would be specified in the national *Health Financing Strategic Plan*, which has since been developed; however, most of its recommendations are generic (MOH, 2017d). Specifically, the *Health Financing Strategic Plan* highlights the following strategies:

- Conduct evidence-based advocacy for increased government budget share on health

BOX 6. SUSTAINABILITY OPPORTUNITY

Prioritizing Interventions and Making Strategic Plans More Affordable May Increase Their Credibility

Current levels of total health expenditure are well below half of the total estimated resources required to implement the programs outlined in the NHSP (Figure 6). Tight economic conditions and flattening external resources have prevented efforts to substantially increase spending. Ensuring that strategic plans are realistic and consistent with economic fundamentals may increase their credibility and make them more effective advocacy tools. Prioritizing interventions that are cost-effective and demonstrate the greatest results is one way to both reduce the overall resource requirement and demonstrate return on investment in health.

- Lobby the MOF for the introduction of innovative financing strategies such as “sin taxes” on cigarette, alcohol, and sugar-sweetened beverages
- Establish an NHI/social health insurance scheme
- Promote the establishment of community health insurance schemes, which would then be linked to the NHI/social health insurance scheme
- Improve efficiency in the use of available resources
- Strengthen resource allocation
- Promoting private sector participation and public–private partnerships

The key informants identified other strategies that could be used to generate domestic resources. These included earmarking funds from third-party motor vehicle insurance contributions

and allocating a proportion of resources from infrastructure projects to HIV, given the impact that such project would have on the health of communities and key populations. However, apart from the NHI scheme, none of the identified strategies have been fully explored.

The taxation of alcohol or tobacco products through “sin taxes” is one area that has gained some commitment from government. At the beginning of 2019, the government announced a K0.3 per liter tax—approximately equivalent to a 3% excise tax—on alcoholic beverages, which was aimed at reducing the burden of noncommunicable diseases. The main purpose of this tax is to increase prices and disincentivize the consumption of alcohol; it is also meant to raise additional resources for health. However, the 3% tax rate has been shown to be ineffective both at reducing consumption and in raising significant revenues in Zambia (Hangoma et al., 2018). To be effective in either regard, the rate would have to be closer to 25%, a rate that has been used in studies in many other countries (Manyema et al., 2014). Earmarking of these tax revenues for health has also yet to be formalized in law. From 2006 to 2013, Zambia experienced challenges with the earmarking of revenues for health when the country instituted a medical levy charged on interest from bank savings. The levy raised revenues equal to, on average, 12.4% of the drug budget during the implementation period, but most of this amount was appropriated to the central treasury. Key informants, however, mentioned that they successfully advocated for

BOX 7.**SUSTAINABILITY OPPORTUNITY****Role of Nontraditional Donors**

Given the limited fiscal space in the short to medium term and the flattening of financing from traditional donors, key informants highlighted the potential role of nontraditional donors, such as China, as a source of new financing. The government has recently appointed “global health ambassadors” who will be stationed in Zambian embassies, including in China, India, Brazil, and South Africa, to explore and develop opportunities for cooperation in health. However, expectations about the quantity of resources from the new donors should be moderated, given the relatively small overall amount of development assistance they currently provide, as compared to traditional donors.

a portion of this money to be given to the MOH when they experienced freezes in external funding.

Although key informants acknowledged the need for innovative financing schemes, they stressed that donor financing still remains key considering the tight macroeconomic conditions for domestic resource mobilization. They emphasized to the need to identify and work with nontraditional donors, such as China, India, and Brazil, to offset the flattening or declining funding from traditional donors (Box 7).

Getting More for the Money: Efficiency in Health Spending

The previous discussion suggests that in the short to medium term, the government may have difficulty generating enough additional domestic revenue from taxes or other alternative financing methods. Additional resources for health improvements could, however, be freed within the existing resource envelope by eliminating inefficiencies in health spending. Key informants emphasized that, given the current economic situation, there is need for focus and improvement in this area. The following section assesses three dimensions of efficiency: budget, allocative, and technical efficiency.

BUDGET EFFICIENCY

Budget efficiency can be seen as the extent to which allocated funds are released as intended, for the intended inputs, and in a timely manner. Two commonly used measures of budget efficiency are the disbursement rate and the execution rate. The disbursement rate measures the share of the ministry or agency budget that is ultimately released to that ministry or agency. The budget execution rate, on the other hand, measures how much of these released funds are actually spent by that ministry or agency.

The MOH budget disbursement rate stood at 91% in 2016 (World Bank, Unpublished) (Table 2). However, this rate masks substantial differences in disbursement rates between emoluments/salaries and operational grants, which includes all other expenditure categories. While disbursement rates for salaries stood at 100%, those for operational grants were very low—as low as 66% in some instances (MOH, 2017b). Key informants indicated that budget disbursements for operational grants have further deteriorated in recent years due to fiscal challenges, including the high budget deficit and increased debt servicing costs. In addition to low disbursement rates, the timing of the operational grants—and recently salary payments as well—tend to be erratic and unpredictable (World Bank et al., Unpublished). This is especially so for grant-aided institutions, such as the National AIDS Council, that have recently had to manage

for multiple months without pay due to grants being either delayed or not received at all.

Health budget execution rates have also declined from an average of 97% between 2012 and 2015 to 49% in 2016 (World Bank, Unpublished). Some of the reasons suggested by key informants for low budget execution included the erratic and unpredictable timing of disbursements. For example, some programs that were scheduled for the first quarter of the year may not be conducted at all if the funds are only released in the third quarter. Funds not spent are returned to the treasury by the end of the fiscal year on December 31.

Lastly, there is also evidence that health sector funds are often not used for their intended purpose. According to the MOH guidelines, of funds for the primary healthcare level, which are managed by the district health offices, 85% should be sent to health facilities, such as health centers and the district hospitals. However, in 2017, the Public Expenditure Tracking Survey found that only 40% of the funds were sent to facilities (World Bank et al., Unpublished). It is not clear whether all remaining funds are consumed at the district health office (DHO) or whether the funds are used by DHOs to support other service delivery-related expenses that cannot be or are not tracked by facilities (World Bank et al., Unpublished). Although this does not necessarily indicate an inefficient use of resources, further investigation should be made into whether above facility-level costs could be reduced, and a greater share of funds transferred to the facilities.

ALLOCATIVE EFFICIENCY

Allocative efficiency measures the extent to which resources are spent on a subset of interventions or programs or in areas that yield the highest health gain given the available budget. Allocative efficiency is a multidimensional concept and several indicators can be used to illustrate how to measure it (Table 2).

Burden of disease should be a key consideration in the resource allocation decisions made to ensure that money is spent on appropriate programs and

Table 2. Efficiency Indicators

Indicator	Value
Budget Efficiency (2016)	
Budget disbursement rate	91%
Budget execution rate	66%
Allocative Efficiency	
Is burden of disease considered in MOH district allocation formulas?	Yes
Is an epidemiological modeling tool used to make resource allocation decisions?	No
Admissions per physician, national (Lusaka Province; Muchinga Province)	431 (137; 800)
Facility stock-out rate for selected essential drugs	13%
Technical Efficiency	
TB case detection rate	60%
Absenteeism rate	16%

Sources: MOH, 2017c; World Bank, Unpublished; World Bank et al., Unpublished.

in geographic areas where the burden of disease is highest. A resource allocation formula that considers several factors, including the burden of disease, is used for disbursing funds to DHOs and hospitals. However, for provincial health offices (PHOs), resource allocation decisions are not based on formulas but on planned activities, or activity-based budgets. Efficiency can also be improved by explicit priority setting across diseases. Specifically, available resources need to be spent on disease areas that yield the highest reductions in morbidity and mortality. This can be done using epidemiological or priority-setting tools. Some countries have health technology assessment units that have the primary function of evaluating different technologies, interventions, and diseases to determine where available resources should be spent to achieve value for money. Currently, Zambia does not have a health technology assessment unit and does not systematically use priority-setting tools to determine resource allocation across diseases, interventions, or programs.

Allocative efficiency also applies to human resources for health. Zambia has a severe shortage of health workers, and those they have are not distributed equitably across the country (World Bank, Unpublished). Urban areas have more health workers per capita but lower utilization of those health workers than rural areas. For example, while Lusaka province has 137 admissions per physician, relatively rural Muchinga has 800 admissions per physician (World Bank, Unpublished). Key informants have attributed these disparities to the unwillingness of health workers to work in remote areas. Although the government had introduced higher financial incentives for health workers who choose to locate in remote areas, this has since been reversed due to financial sustainability concerns.

In addition, efficiency can be gained in the supply chain, and stock-out rates for essential medicines can signal how efficiently the supply chain is working. The recently completed Public Expenditure Tracking Survey Quality of Service Delivery survey found an average facility stock-out rate of 13% for selected essential medicines in sampled facilities. Key informants indicated that stock-out rates vary considerably over the course of the year and are more common in rural facilities. This is worsened by the lack of timeliness in the distribution of drugs by Medical Stores Limited, which is responsible for distribution of drugs to all public facilities using either a kit (push) system or a requisition (pull) system, although the kit system is now less frequently used. For facilities that order drugs, the World Bank found that less than 10% received their order in a timely manner and only about 20% received the order they made (World Bank et al., Unpublished).

TECHNICAL EFFICIENCY

Technical efficiency is a term used to denote whether given interventions or inputs are used to get the maximum possible health benefit, or impact, and reduce wastage. The detection rate for diseases can be a valuable indicator of technical efficiency as it can measure the proportion of expected TB cases found, and

ultimately reported, to and tracked by national disease programs. It can also measure whether inputs, such as health worker time and diagnostics, are being used effectively to not only identify patients but also link them with treatment. While a low detection rate does not necessarily denote technical inefficiency, it can indicate that testing is not well-targeted or reveal a failure to link identified cases to treatment and notify national reporting systems. For example, while key informants noted that most patients living with TB had interacted with the health system, an estimated 40% of TB cases in Zambia are still not detected (MOH, 2017c). Efficiency gains could be made by ensuring that health workers are equipped with training and diagnostic equipment to effectively identify patients and link them to care.

Health worker absenteeism is another significant technical efficiency issue, as a high absenteeism or tardiness indicates that salaries are being paid but not translating into consultations and care. As noted earlier, the biggest share of the health budget (at least 60%) is allocated to health workers' salaries. In 2017, the Public Expenditure Tracking Survey Quality of Service Delivery survey found an absenteeism rate of about 16% countrywide and as high as 21% in Lusaka province (World Bank et al., Unpublished). Given that salaries account for 60% or more of the total health budget, this means that as much as 10% of the health budget is going to waste paying for absent health workers. Reducing absenteeism would lead to greater health worker output and/or reduced expenditure on emoluments, while maintaining the same output.

KEY TAKEAWAYS: EVIDENCE FOR ADVOCACY

- Zambia's current targets for resource mobilization for health, as expressed in the NHSP, are highly ambitious and unrealistic. Setting more realistic targets may increase the credibility of budget requests and help prioritize high-impact interventions, rather than simply developing "wish lists."
- Given current macroeconomic projections and budget prioritization of the health sector, Palladium projects a 34% increase in government health expenditure over 2016–2021, from \$359 million to \$480 million. While significant, this is far below the 179% increase to \$1.0 billion anticipated under the NHSP.
- Zambia's MTEF projects an increase in health as a share of the total government budget from 9.3% in 2019 to 14.8% in 2021. Achieving this target will be critical to ensuring progress toward NHSP goals.
- Given economic constraints, focus must shift to more effective and efficient use of available resources, including ensuring high rates of execution (which have fallen as low as 66%), prioritizing cost-effective interventions and levels of service delivery, obtaining the lowest prices for procurements, and reducing absenteeism and other leakages in the health system.
- Zambia's macroeconomic crisis has significantly undermined past efforts to increase prioritization of and financing for health and reestablished the need for continued donor support, at least in the near term.

Effective Advocacy for Health: Understanding the Budget Process

The previous sections have highlighted that, given significant resource gaps and flattening external resources, there is need to mobilize significant new domestic resources for health in order to meet national health targets. Although innovative health financing schemes and efficiency improvement can unlock resources, the resource needs required under the NHSP will almost certainly require greater prioritization of health in the health budget. Achieving increased prioritization will require sustained, effective, and targeted advocacy at all levels of government. A comprehensive understanding of the budget process is crucial for exploiting key entry points and identifying appropriate audiences and timing of advocacy efforts. The following section illustrates this process and identifies key opportunities for advocacy.

RESOURCE ALLOCATION

Funding to the MOH, PHOs, and hospitals (second and third level) is provided directly by the MOF. When the MOH receives funding, a portion of the fund is used for administration and other centrally managed programs. The rest is sent to DHOs using a resource allocation formula.

The MOH, hospitals, PHOs, and DHOs may also receive external support directly through vertical programs. Although a portion of external financing comes under general budget support from the MOF, a much larger share is off-budget. Key informants mentioned that this approach hampers effective service delivery and planning. Although the misuse of funds has been cited as the primary reason for establishing parallel financing mechanisms, external partners can be more involved in the budget process and use it to create sustainable systems that would reduce resource leakages (Box 8).

BUDGET PROCESS

Zambia operates a centralized budgeting system where all MPSAs submit proposed budgets to the MOF for review, approval, and funding. The constitution requires the budget be prepared

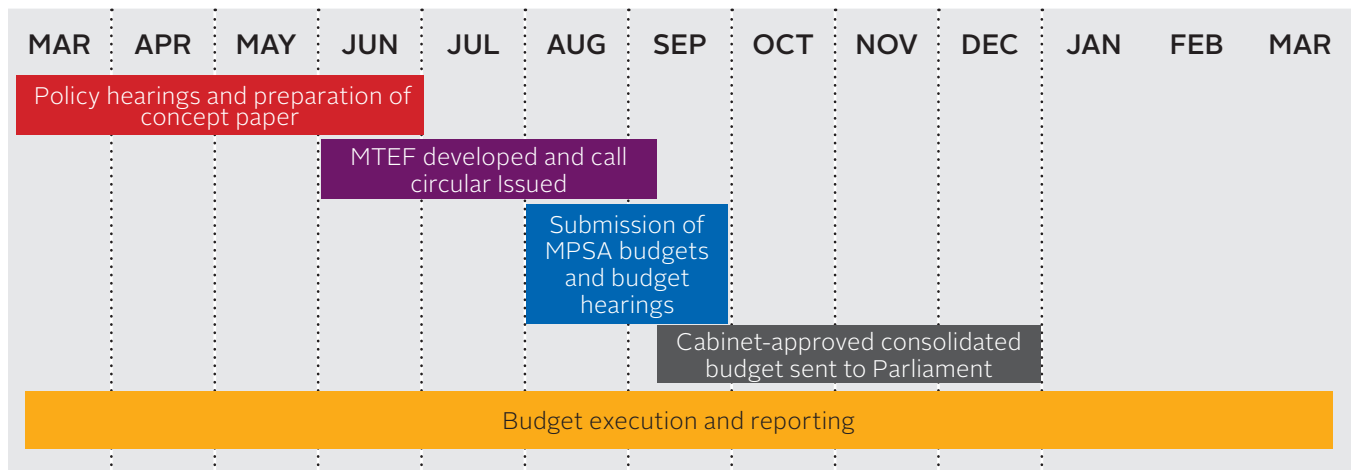
BOX 8. SUSTAINABILITY OPPORTUNITY

Improved and Consolidated Financial Management Systems

Key informants have indicated that the lack of financial management systems is partly responsible for financial leakages and lack of transparency. Many key informants believe that the rollout of the Integrated Financial Management Information System (IFMIS) will close many loopholes and want partners to support IFMIS as a way of ensuring integration, sustainability, and transparency in budget execution and reporting. Among these key informants is a belief that the resources spent rolling out Navision—an accounting, supply chain, and planning software—in the MOH could have been used for IFMIS, which is a more integrated and robust system. However, the IFMIS rollout has been slow. Although this has been largely attributed to cost constraints, some key informants suggested that the slow pace is due to health sector stakeholder fears that the IFMIS will indeed close loopholes.

To reduce resource leakages and avoid fragmentation of systems, partners should support the IFMIS rollout.

every year and submitted to the National Assembly for approval 90 days before the end of each calendar year (January to December). This means that the next year's budget should be designed and presented to Parliament before September 30. Broadly, the budget process has five stages: (1) policy hearing and preparation of concept paper, (2) preparation of the MTEF and issuance of the budget preparation guideline (“call circular”), (3) submission of MPSA budgets to MOF and budget hearings, (4) consolidation of budgets and submission for legislative approval, and (5) budget execution and reporting (Figure 10).

Figure 10. Health Budget Process

Policy Hearing and Preparation of Concept Paper

The first stage in the budget process is a public policy hearing that is used to collect qualitative information (and, if available, quantitative) on development priorities (Box 9). Through this process, the Ministry of National Development Planning (MNDP), collects information from MPSAs and the public on areas to be prioritized. This process is also informed by the priorities identified in the Seventh National Development Plan. The process culminates in the preparation of a concept paper by the MNDP summarizing proposed development priorities, interventions, and estimates of resources required, if available. Key informants from the MOH indicated that they are then asked to comment on the concept paper. When completed, the concept paper is submitted to the Cabinet for approval. This process takes place between March and June.

Medium Term Expenditure Framework and Issuance of Call Circular

Once the concept paper is approved by the Cabinet, the MOF conducts a projection of macroeconomic and fiscal indicators—including projected economic growth and revenue generation—and prepares indicative figures of

BOX 9. KEY ENTRY POINT

Policy Hearings and Concept Paper Development

The MOH and its partners could have the opportunity to propose broad changes in health and development priorities during the concept paper development process if evidence suggests that the proposed activities would be inconsistent with the overall goals of the national development plans and Vision 2030.

revenue and spending in the MTEF for the MPSAs for the next three years. If the MTEF indicates that there will be sufficient budget or fiscal space, the new programs and activities proposed in the concept paper are included. Upon the Cabinet's approval of the MTEF, the estimates are compiled in the MTEF and budget "Green Paper" for circulation to the public and MPSAs. In addition to the Green Paper, MPSAs are issued a "call circular," which is a set of budget preparation guidelines. This gives broad budget ceilings for each MPSA.

Submission of Ministry, Provinces, and Spending Agencies Budgets to the Ministry of Finance and Budget Hearings

Once the Green Paper is ready and the circular call is issued, MPSAs develop their budgets in line with these guidelines. All levels of the MOH—central, provincial, hospital, and district—update their budgets and workplans using the new MTEF (Box 10).

The MOH Directorate of Policy and Planning consolidates all updated budgets from DHOs, which are responsible for primary healthcare (health centers and first-level hospitals), and from second- and third-level hospitals, PHOs, and all departments at the MOH central level. The MOH is also supposed to include all estimates of grant support from external partners. Failure to include such information means that supplementary budgets have to be issued whenever such expenditures need to be made. Supplementary budgets require separate parliamentary approval.

The MOH submits the consolidated budget to the MOF, which then conducts budget hearings. Budget hearings provide an opportunity for the MOH to justify expenditures, such as those exceeding the ceilings provided (Box 11). Key informants, however, indicated that it is difficult to justify exceeding ceilings unless strong reasons are given; however, they did not specify what kind of reasons would be acceptable.

Consolidation of Budgets and Submission for Legislative Approval

After the policy hearings, the MOF consolidates the detailed MPSA revenue and expenditure estimates with the budget speech and submits it to the Cabinet for approval. The approved estimates are published in a Cabinet-approved consolidated budget called the Yellow Book. The Minister of Finance delivers the budget speech in September to the National Assembly as required

BOX 10. KEY ENTRY POINT

Through Workplan and Budget Development

The development of MPSA budgets and workplans is a continuous process. Sustained engagement with MPSAs throughout the year can effectively influence priorities and budget allocations over time.

BOX 11. KEY ENTRY POINT

Justifying Resource Requests During Budget Hearings

Conducted in September, budget hearings provide the MOH the opportunity to justify its budget request and advocate for additional resources beyond its assigned budget ceiling. The MOH should focus on generating necessary evidence on current and project resource gaps (i.e., in the context of flat or declining donor financing), health and long-term economic/financial impacts of underfinancing the health sector, and efficiency and cost-effectiveness of resource use. This evidence can help make an effective investment case for health to which the MOF is likely to be most responsive.

by the constitution. The Yellow Book is also submitted to the National Assembly for debate, review, and approval. Once the budget is approved, the estimates approved by Parliament are published in what is known as the White Book. The National Assembly is expected to finalize reviewing the budget and approve it within December.

Budget Execution and Reporting

MPSAs begin executing their budgets in January, the beginning of each calendar year, as required in the constitution. For the health budget, the MOF sends allocations directly to PHOs, second- and third-level hospitals, and health training

institutions. Allocations to the central level and DHOs are sent to the MOH, which then disburses funds according to DHO and department budgets and workplans. All MPSAs are required to report on their budget performance regularly.

KEY TAKEAWAYS: BUDGET ADVOCACY OPPORTUNITIES

Based on this budget process, we identified the following entry points in the budget process for advocacy:

- **During policy hearings and concept paper development.** Evidence-backed priority spending areas and levels should be proposed to the MNDP, through the MOH, during policy hearings between March and June.
- **During the development of annual and mid-term workplans.** Although districts, provinces, second- and third-level hospitals, and MOH departments develop their workplans on a continuous basis, so advocacy efforts can occur throughout the year, the primary period for workplan development is the period leading up to September.
- **In the budget hearing.** The budget hearing provides an opportunity for ministries to justify their budgets. Adequate and targeted evidence is necessary to substantiate new spending requests, particularly when requests exceed approved budget ceilings. All budgets, including supplementary budgets, must be approved by the National Development Coordinating Committee, which is chaired by the secretary to the Cabinet and includes a public representative.

Conclusion

Zambia has previously shown commitment to improving domestic resource mobilization, as evidenced by the steady increase in the share of health in the government budget from the mid-2000s until around 2013, when the country started experiencing economic challenges with slower growth and rising debt. Although the share of health in government spending has since flattened or fallen slightly, substantial political will has been committed to finding ways of increasing domestic resources for health to meet the goal of universal health coverage. This resulted in the development of the NHSP, which has set ambitious target for health improvements. The resource needs to meet this plan are enormous and overwhelmingly exceed the amounts recommended by WHO and Chatham House. Although the newly developed Health Financing Strategic Plan 2017–2027 lays out some strategies for resource mobilization, it does not clearly explain the extent to which they can meet the resource needs of the NHSP.

Although the NHI scheme is being promoted as the primary mechanism for resource mobilization for health, its current design has significant limitations not only to how much resources it can mobilize but also for whom and for what services. Support for the NHI should focus on designing a package of services that is:

1. cost-effective and encourages the use of primary healthcare services;
2. meets the needs of the broader population, including the informal sector; and
3. incentivizes voluntary enrollment and contributions from informal workers.

While the NHI may be the best long-term option for achieving sufficient sustainable health financing, in the short term, increasing efficiencies in the use of health resources is likely the best way to increase outputs and improve health outcomes in the context of Zambia's current tight macroeconomic position and limited fiscal space. Despite this limited fiscal space, the NHSP and other disease-specific plans are developed as ambitious “wish lists” without deliberate priority setting. The MOH may benefit from institutionalizing priority setting to ensure that

available financing is targeted toward interventions and programs that provide the greatest value for money. One way to do this would be to establish a health technology assessment unit tasked with assessing the cost-effectiveness of interventions and advising the allocation of resources across them. Basing strategic plans on these assessments and allocations, in a way that considers the available resource envelope, may also provide credible tools for the MOH and its partners to advocate the MOF for additional domestic resources.

Increasing the capacity of the MOH to generate evidence on the cost-effectiveness of and returns on investment to health expenditure—in terms of health outcomes and economic impacts—will be critical to ensuring effective budget advocacy. The budget process provides a number of key openings for the MOH to argue for greater prioritization of the health sector as well as the opportunity for sustained engagement and additional resource allocation throughout the year. The MOH's Health Financing Unit should also identify and further explore the resource generation potential of different and innovative health financing mechanisms and clearly link proposed new resources to outputs and outcomes.

Lastly, using current resources efficiently will be crucial not only for maximizing their impact but also for making an effective advocacy case to the MOF for additional resources. Specific efforts to improve efficiency should focus on:

1. Ensuring timely disbursement of health funds to ensure MPSAs are able to execute programs and activities as and when planned
2. Eliminating the common practice of procuring services and commodities at above-market prices
3. Reducing absenteeism and tardiness to maximize health worker output and minimize the health sector wage bill

At the same time, Zambia's current economic situation presents a continued need for external support, particularly for commodities, for which financing has been particularly vulnerable to economic shocks.

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