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Tanzania

Health Sector Public Expenditure Review 2020

Moritz Piatti-Fünfkirchen

Mariam Ally

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HNP

Contents

List of Acronyms

ADDO	Accredited Drug Dispensing Outlet	**HRMIS**	Human Resource Management Information System
AMO	Assistant Medical Officer	**HSSP**	Health Sector Strategic Plan
CBHI	Community Based Health Insurance	**iCHF**	improved Community Health Fund
CCHP	Comprehensive Council Health Plan	**IHME**	Institute for Health Metrics and Evaluation
CHE	Current Health Expenditure	**IPSAS**	International Public Sector Accounting Standards
CHF	Community Health Fund	**LGA**	Local Government Authority
CHMT	Council Health Management Team	**MOF**	Ministry of Finance
CRS	Credit Reporting System	**MoHCD GE&C**	Ministry of Health Community Development, Gender, Elderly and Children
DHFF	Direct Health Facility Financing	**MSD**	Medical Stores Department
DMO	District Medical Officer	**NHIF**	National Health Insurance Fund
FFARS	Facility Financial Accounting and Reporting System	**OC**	Other Charges
FMIS	Financial Management Information System	**PHI**	Private Health Insurance
GFATM	Global Fund to Fight Aids Tuberculosis and Malaria	**PORALG**	President's Office of Regional Affairs and Local Governance
GGE	General Government Expenditure	**RBF**	Results Based Financing
GHE	Government Health Expenditure	**RHMT**	Regional Health Management Team
GHED	Global Health Expenditure Database	**SHA**	System of Health Accounts
HBF	Health Basket Fund	**SNHIF**	Single National Health Insurance Fund
HCI	Human Capital Index	**TIKA**	Tiba Kwa Kadi (Community Health Fund)
HFP	Health Facility Plan	**WHO**	World Health Organization

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Executive Summary

This Public Expenditure Review (PER) report provides an update on trends and patterns of health expenditures in the public sector. It assesses the availability of fiscal space, the role of user fees and pooled financing arrangements, and provides an overview of the fund flow and financial management processes. The report also explores equity and allocative efficiency considerations, access to care and technical efficiency.

Current public spending on health is insufficient to provide access to quality services to all. Total per capita health spending across all public sources has increased modestly from US$23.6 to US$28.5 between 2010 and 2017. This modest increase is on par with population growth, but it is well below what is necessary to provide a basic benefits package of adequate quality to the whole population.

Tanzania has been unable to translate its rapid economic growth and development into increased access of quality health services. Domestic health expenditures have grown at a much slower rate than general government expenditure leading to prioritization away from health. Over the last decade, health expenditure as a share of total government expenditures fell by 3 percentage points to 6 percent in 2017. Since then, there has been an outflow of foreign direct investment (FDI) from Tanzania, the economy has slowed, and domestic expenditure pressures are mounting, which has meant that there are now even fewer opportunities to reallocate spending towards health. The current dialogue about fiscal space is centered on protecting the limited health budget from further cuts, while improving the budget execution of non-wage expenditures.

The health sector is highly donor dependent, and donors are shifting away from government systems. The government/donor shares of total public spending has consistently been about 40:60. This means that development partners provide an unsustainably high share of total health spending. In recent years donors have shifted away from use of government systems, which has created oversight and coordination challenges for the government.

User fees and pre-payment schemes make up a significant share of the revenues of health facilities. A small but growing share of total health spending comes from user fees and pre-payment schemes, and these contributions have become an indispensable source of flexible funding for service providers. Nevertheless, cost recovery remains a problem for public providers, with reimbursements to public facilities dwindling relative to private providers. User fees are charged for all levels of care and make up an important share of provider revenue. This inhibits access to care, especially for the poor and vulnerable.

Health spending is inequitable, especially with regard to budget allocations for human resources. There is significant variation in health spending across and within regions. The resources in the Health Basket Fund, in which health care funding from donors is pooled, is distributed by means of a formula that is driven in part by population and equity considerations. However, this formula does not apply to the budget allocations for or the distribution of human resources, which make up a large share of total health care costs. The difficulty of getting medical personnel to serve in remote and poor regions exacerbates the inequitable distribution of resources.

Opportunities exist to increase efficiency. Services are being produced at a rate better than regional averages, but the services that are available are not efficiently improving health outcomes. This may partly be because of factors outside the health sector but also partly to the low quality of the services provided in some areas of the country. Some councils perform significantly better than others despite having similar (or lower) financing allocations. Lessons should be identified from the experiences of these councils to enable others to learn from them. Learning from positive deviance should be explored to help others approximate the efficiency frontier.

Infrastructure investments need to become operational. The government has increased its health infrastructure investments, including building and refurbishing health centers and hospitals with the goal of increasing access to care. However, in the absence of commensurate increases in staff and of operational and maintenance budgets, these investments are unlikely to achieve that goal.

There is scope for improving human resource management. There are not enough health care staff in Tanzania, the available staff are not well deployed, the staff do not always have an operations budget, which makes them ineffective, and there is evidence of absenteeism and low productivity.

Important progress has been made in defragmenting funding for health providers. Health care providers are financed from a multitude of sources including government budget allocations through councils, the Health Basket Fund, project support for results-based financing (RBF) initiatives, and other sources including user fees, and pooled financing arrangements. This means that facilities have to deal with a multitude of planning and execution guidelines and reporting requirements. There has been no "whole of government" approach to strategic purchasing but instead a host of competing individual initiatives. However, the government has taken important steps towards unifying the payment system by harmonizing spending guidelines across financing sources. It has also reformed the PFM system to send its own budget allocations directly to the providers. This is a promising step towards laying the purchasing foundation for the proposed SNHIF.

This Public Expenditure Review identifies both broad and detailed policy recommendations designed to address these shortcomings. The main headlines from the analysis are:

- The budget for essential health services needs to be protected, and opportunities should be explored to expand fiscal space, especially given the government's proposal to create a Single National Health Insurance Fund (SNHIF).
- Allocations need to be balanced between personnel, development spending, and goods and services. Recent increased investments in infrastructure should be accompanied by increased allocations for goods and services to ensure the infrastructure becomes fully functional.
- The government should encourage donors to provide on-budget support to reduce any duplication, inefficiencies, inequities, and the administrative burden resulting from having many separate vertical projects.
- User fees make up an increasingly significant share of revenue for service providers at all levels. This inhibits access to care, especially for the poor and vulnerable. Analytical work

will be necessary to explore the possibilities for increasing financial protection in the transition toward the SNHIF.

- Pre-payment schemes generate limited resources from member contributions. A careful financial viability assessment including on fiscal impact through potential subsidies is recommended prior to shifting toward the NHIF.
- The government is encouraged to revisit its formula for allocating budgets to local government authorities to address inequities across and within regions. It should also consider adopting innovative incentive mechanisms to motivate staff to serve in remote and poor regions for prolonged periods of time.
- Lessons should be identified from the experiences of the councils who are the most efficient and effective in providing services to enable other councils to learn from them.
- The government has made remarkable progress in defragmenting the provider payment system, but more work needs to be done. Budget execution protocols need to be streamlined, and ICT investments will be necessary to ensure the seamless integration of all systems.
- The government has made PFM provisions to allocate funds directly to providers. This should be operationalized and follow the precedent of the Direct Health Facility Financing (DHFF) reform.

1. Introduction

1.1 **The Government of the United Republic of Tanzania is committed to ensuring universal access to quality health services without risk of financial hardship**. These principles are firmly embedded in the 2007 Tanzania Health Policy,[1] the 2015 Health Financing Strategy[2], as well as the current Five Year National Development Plan.[3] The government's vision for the health sector as set out in the Tanzania Health Policy is "to improve the health and well-being of all Tanzanians with a focus on those most at risk, and to encourage the health system to be more responsive to the needs of the people," This remains as relevant today as when the Health Policy was first approved in 2007.

1.2 **Tanzania has benefitted from political stability and strong economic growth.** Tanzania's post-independence history has been peaceful and politically stable since the start of the multiparty system in 1985. Until recently, the economic outlook has been quite positive with a strong external and fiscal position that was supported by a stable macroeconomic environment. The economy was buoyed by high natural resources prices and benefitted from a considerable resource windfall following various debt relief initiatives in the mid-2000s.[4] This allowed for the build-up of much needed foreign exchange reserves. Between 2005 and 2017, the economy grew steadily at an annual rate of 5 to 7 percent. The government's revenue performance at 14 to 16 percent of GDP is also relatively high given Tanzania's income level. Strong GDP growth and revenue performance has provided substantial fiscal space to fund service provision. (Table 1).

Table 1: Selected Economic Indicators

	2015	2016	2017	2018
GDP growth, real	6.2	6.9	6.8	5.2
GDP per capita (current US$)	948	967	1,005	1,051
Inflation (end of period), percentage changes	4.8	6.8	5.0	5.0
Revenue (% of GDP)	14.9	14.5	15.9	16.7
Expenditure (% of GDP)	17.9	17.8	19.7	21.0
Fiscal balance (% of GDP)	-5.2	-3.5	-1.5	-4.2
Debt to GDP ratio	33.8	36.9	39.0	40.3

Source: Tanzania Economic Update (2019), World Development Indicators, and the IMF's World Economic Outlook 2018.

1.3 **Poverty remains widespread, and improvements in outcomes were not commensurate with Tanzania's economic progress.** Despite rapid and sustained economic growth, progress against the national poverty line was modest for both basic needs and extreme poverty and is still estimated at close to 50 percent at the US$1.9 per capita rate. Between 2007 and 2012, there were signs of pro-poor growth, and the rate of consumption was higher among the bottom 40 percent

[1] United Republic of Tanzania (2007)
[2] United Republic of Tanzania (2015)
[3] United Republic of Tanzania (2016)
[4] Tanzania was a benefactor of the Highly Indebted Poor Country Initiative and the Multilateral Debt Relief Initiative.

than among the better-off. However, an updated poverty assessment cannot be carried out until the release of the 2018 household budget survey data.

1.4 **Realizing the ambitious goal of universal health coverage (UHC) requires an adequate health financing environment.** There is broad consensus that adequate resource provision and the efficient allocation and use of these resources is required to achieve UHC without inflicting financial hardship on the poor.[5] According to international benchmarks, achieving UHC will require spending of US$86 per capita and health spending equal to 5 percent of GDP.[6]

1.5 **The Tanzania health system is decentralized.** The Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGE&C) at the central government level has an overall policy setting, and stewardship role. This includes importantly the formulation of health policy, guidelines, strategies and determination of the essential health care package. The MOHCDGE&C provides technical guidance to organizations involved in service delivery and defines, controls and promotes maintenance of quality standards and sets the policy for social welfare. The President's Office of Regional Affairs and Local Governance (PORALG) oversees the provision of health services at the local government level. Funds for service provision at the local level do not flow through PORALG, but are sent from treasury to Local Government Authorities (LGAs) directly. Health care staff are hired directly by LGAs in consultation with the President's Office of Public Service Management (PO-PSM), which has to release recruitment permits. Service providers inform LGAs of their human resource requirements but play no role in the actual hiring or firing process. Regional and district hospitals serve as referral points and are managed by regional administrations or LGAs.

1.6 **Primary health care services constitute the base of the pyramidal structure of health care services in Tanzania.** The lowest level of primary care consists of community-based health workers bring health promotion and prevention activities to families in villages and neighborhoods, mostly along the lines of disease control programs. At the next level, public and private providers run dispensaries and health centers. Dispensaries provide preventive and curative outpatient services, while health centers can also admit patients and sometimes provide surgical services. The next step up consists of council hospitals, which provide medical and basic surgical services to referred patients. Regional referral hospitals provide specialist medical care, while zonal, special, and national hospitals offer advanced medical care and are teaching hospitals for medical, paramedical and nursing training (see Annex Figure 1.1 for the pyramid structure of the Tanzania health system).

1.7 **The Tanzanian health sector has benefited from a wide range of health financing reforms.** The government has recently reformed its public financial management structure to allow for budget allocations to be given directly to health facilities instead of indirectly through councils. This change followed from the results of a donor-funded results-based financing (RBF) pilot that successfully used direct health facility financing. The government has also introduced pooling mechanisms such as Community Health Funds (CHF) and a National Health Insurance Fund (NHIF) to leverage additional resources and pool risks, but the coverage of and the financial contributions to these funds remain limited. The government is seeking to reform these pooling

[5] Stenberg et al. (2017) and World Health Organization (2010).
[6] International Health Partnership (2009) and Mcintyre et al (2017).

mechanisms by introducing a Single National Health Insurance Fund (SNHIF) that would cover the entire population. Other micro-health insurance schemes managed by the for-profit private sector, churches or cooperatives exist, but these operate on a very small scale.[7]

1.8 **The objective of this public expenditure review is to update the available information on the level and allocation of financing to the health sector at all administrative levels of government.** It also assesses the fiscal space for the sector and provides an overview of the current funds flow and financial management arrangements. In addition, the PER provides an analysis of the various sources of funds and flow of funds in the sector to the extent that data are available. Since no recent household budget survey data was available, it was not possible to conduct a financing or benefit incidence analysis. Similarly, it was not possible to do an impoverishment assessment of out-of-pocket (OOP) spending. The analysis in the PER is based on financing and administrative data from central and local governments and from donors. No recent national health accounts data were available to estimate private spending. The analysis spans the fiscal years 2013 to 2017, which were the most recent years for which audited financial reports were available. Excluded activities are those that only indirectly affect health such as pollution control, road safety, and agriculture.

1.9 **The PER was produced jointly by the World Bank team and the Government of Tanzania.** The analysis builds on considerable input from technical staff at the Ministry of Finance (MOF), the MoHCDGE&C, and PORALG, all of whom have helped to interpret the findings.[8] The language used in the PER closely follows government terminology. The analysis benefitted from information contained in a series of health sector PERs produced by the government as well as a World Bank PER produced in 2010.[9] The PER also builds on a background paper on the financial management of various funding flows at the council and facility level as well as a set of studies that were commissioned by the health financing technical working group.[10]

2. Context: Demographics and Health Outcomes

2.1 **Tanzania is a pre-demographic dividend country, characterized by rapid population growth and a youthful population.** In 2017, Tanzania's population was estimated to be 57.3 million (50.5 percent of whom were women). Since 1990, Tanzania's population has increased consistently by more than 3 percent per year and is projected to double in size by 2040. Approximately 56 percent of the population is under 19 years of age, with the adolescent population projected to grow from 12 million in 2015 to 25 to 33 million by 2050 (Figure 1). In contrast, the working-class population between 20 and 59 years of age constitutes only 40 percent of the population but will increase to about 59 percent in 2050 with the demographic transition.

[7] Mills et al (2012) and Schneidman et al (2018).

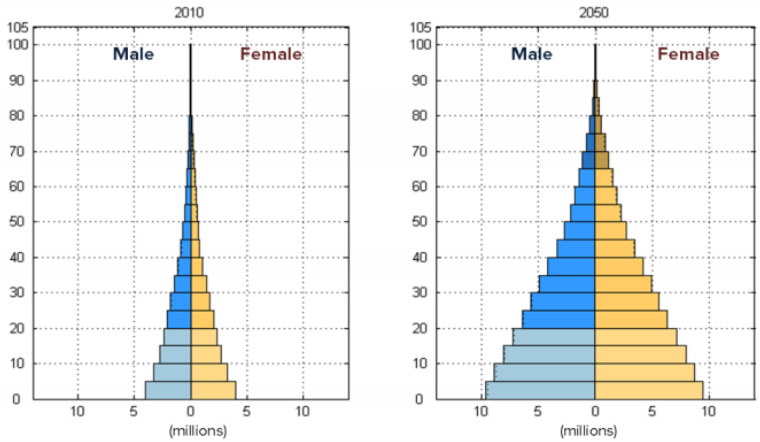
[8] In parallel with the PER process, the World Bank provided technical assistance to Tanzanian institutions that needed real time support on health financing issues that arose, for example, updating comprehensive council health plans based on the experience of using results-based financing (RBF) and direct health facility financing (DHFF) and unifying execution protocols. This was made possible through the generous support of the Global Financing Facility (GFF).

[9] World Bank (2010).

[10] These include a provider autonomy options paper (2013), a fiscal space and innovative financing assessment (2014), an options paper for financial management and reporting (2014), an assessment of geographical resource allocation (2013), and a cost sharing study in the Shinyanga and Geita regions (2016).

The total dependency ratio of 94 percent of the total working age population is higher than the average for both Sub-Saharan Africa (SSA) and low-income countries. Economic modeling has shown that reducing the current fertility rate (4.9 children per woman) by one child could increase Tanzania's per capita GDP by 19 percent by 2050.[11]

Figure1: Total Population by Age Group and Sex, 2010 and 2050 projection



Source: Population pyramids are based on medium variant of the 2010 revision of the *World Population Projections (WPP)* by UN Population Division.

2.2 **Tanzania's high population growth has followed from reductions in child mortality and persistently high fertility rates.** Improvements in socioeconomic conditions and increased availability of food, health services, and levels of education have contributed to improving infant and child health. Between 1990 and 2015, under-5 child mortality declined steeply,[12] and the infant mortality rate halved from 92 to 43 deaths per 1,000 live births during the same time period. Life expectancy increased to 65 years, surpassing the regional average of 61 years.[13] Stunting rates decreased to 34 percent in both urban and rural areas. About 75 percent of all Tanzanian children between 12 and 23 months old are receiving a full set of vaccines, and skilled birth attendance has increased with the largest gains among rural women with low education levels.[14] Despite these achievements, the total fertility rate remains high at 4.9 children per woman. This is driven partly by early marriage (36 percent of women get married before their 18th birthday) and partly by low contraceptive use (32 percent).

2.3 **Progress on key health indicators is mixed.** Tanzania has a lower maternal mortality, under-5 mortality, malaria, and HIV incidence rates than its regional peers, but it lags behind with regard to TB incidence while its stunting rates remain stubbornly high (Table 2). Tanzania's score on the World Bank's Human Capital Index equals the Sub-Saharan Africa average.

[11] Schneidman et al (2018).
[12] National Bureau of Statistics/Tanzania and Macro International. (2000).
[13] MoHCDGEC, MoH, NBS, OCGS, and ICF (2016).
[14] Schneidman et al (2018).

Table 2: Mixed Performance in Key Health Indicators in Tanzania

Indicator	*Tanzania*		*SSA*	
	2010	**2017**	**2010**	**2017**
HCI index		0.4		0.4
Life expectancy	58.6	64.5	56.7	60.9
Fertility rate (births per woman)	5.4	4.9	5.3	4.8
Maternal mortality (per 100,000 live births)	514	398	549	447
Stunting rate (% of children)	42.5	34.4	35.7	30
Under-5 mortality rate (per 1,000 live births)	73	54	90	63
HIV prevalence (% of population 15-49 years)	5.4	4.5	5.3	5.6
TB incidence (per 100,000 people)	426	287	301	237
Malaria incidence (per 1,000 population at risk)	176	114	225	180

Source: World Development Indicators, 2019.

2.4 **Communicable diseases remain the largest contributors to morbidity and mortality.** HIV/AIDS is the leading cause of death among adults in Tanzania. About 1.5 million people are estimated to live with HIV in Tanzania, with 65,000 new infections occurring annually. Malaria is the leading cause of morbidity and mortality for children under 5 and pregnant women. Malaria prevalence increased from 9 percent in 2012 to 14 percent in 2016, and 93 percent of Tanzanians are at risk of malaria at any point in time. In 2008, malaria was ranked as the largest contributor to under-5 mortality, being responsible for 16 percent of deaths among children under the age of 5. While under-5 malaria prevalence decreased significantly from 40.1 percent in 2005 to 14.4 percent in 2016, there are large disparities between rural and urban areas, among wealth quintiles, and across geographic regions.

2.5 **Non-communicable diseases are becoming increasingly prevalent.** Tanzania is at the brink of an epidemiology transition, with non-communicable diseases beginning to contribute an increasing share of morbidity and mortality. Tobacco use, alcohol consumption, obesity, and high cholesterol are the biggest risk factors. The latest WHO STEPS survey in Tanzania showed the share of tobacco users (15.9 percent), alcohol consumers (29.3 percent), those who ate less than five servings of fruit and/or vegetables on average per day (97.2 percent), those who are overweight and obese (26 percent), those with high cholesterol (26 percent), and those with high triglycerides (33.8 percent).[15]

3. Trends and Patterns of Health Expenditure in the Public Sector

Total Health Expenditure

3.1 **Public health expenditure has increased only marginally since 2010, and the government provides about 40 percent of the total.** Public health expenditures are considered

[15] Government of Tanzania (2016) and United Republic of Tanzania (2013a).

to include all government resources spent on health,[16] donor spending, reimbursements to public providers from the NHIF, spending on public providers by CHFs, and spending of resources received by public facilities as out-of-pocket user fees. Total health expenditures grew by an average of 5.2 percent between 2010 and 2017, driven by government expenditure growth that averaged 8 percent annually. Growth in total donor expenditure averaged 3.9 percent over the same period. This growth rate is comparable to rates in low-income and lower-middle-income countries (see Annex Figure 2).[17] The NHIF, CHF, and user fee spending (referred to as complementary financing mechanisms) make up a small but growing share of total public health expenditure and together almost doubled from US$7 million per year to US$12 million in 2017.[18] Table 3 does not include household spending on private hospitals and pharmacies, but the latest NHA assessment (based on 2012 data) estimated that this private spending amounts to approximately 34 percent of total health spending.

Table 3: Public Health Expenditures (in US$ Millions and percentages)

	2010	***2011***	***2012***	***2013***	***2014***	***2015***	***2016***	***2017***
Government expenditure	353.1 *(32.4%)*	370.9 *(34.4%)*	462.2 *(37.8%)*	529.4 *(36.1%)*	558.5 *(38.3%)*	509.8 *(41.1%)*	546.1 *(38.5%)*	662.1 *(40.5%)*
Donor total	736.1 *(67.6%)*	705.9 *(65.6%)*	760.1 *(62.2%)*	937.3 *(63.9%)*	900.6 *(61.7%)*	730.2 *(58.9%)*	871.2 *(61.5%)*	970.9 *(59.5%)*
…on budget	282.6 *(25.9%)*	362.4 *(33.7%)*	236.3 *(19.3%)*	237.3 *(16.2%)*	350.0 *(24.0%)*	171.7 *(13.8%)*	262.9 *(18.5%)*	160.2 *(9.8%)*
…off budget	453.5 *(41.6%)*	343.4 *(31.9%)*	523.8 *(42.9%)*	700.1 *(47.7%)*	550.7 *(37.7%)*	558.5 *(45.0%)*	608.3 *(42.9%)*	810.7 *(49.6%)*
NHIF	n/a	n/a	n/a	1.3 *(0.1%)*	2.8 (0.2%)	2.5 (0.2%)	3.8 (0.3%)	3.8 *(0.2%)*
CHF/TIKA	n/a	n/a	n/a	2.0 *(0.1%)*	3.2 *(0.2%)*	2.9 *(0.2%)*	2.8 *(0.2%)*	2.7 *(0.2%)*
User Fees in Public Facilities (Out of pocket)	n/a	n/a	n/a	3.8 *(0.3%)*	5.7 *(0.4%)*	5.1 *(0.4%)*	6.4 *(0.5%)*	5.5 *(0.3%)*
Total	1,089 *(100%)*	1,076 *(100%)*	1,222 *(100%)*	1,466 *(100%)*	1,459 *(100%)*	1,240 *(100%)*	1,417 *(100%)*	1,633 *(100%)*

Source: Government FMIS, PlanRep[19], and Donor CRS.

[16] Government health sector spending is considered to include transfers from government domestic revenue (allocated for health purposes) and transfers of foreign origin distributed by the government in accordance with the 2011 System of Health Accounts definition. Clear distinctions are made between sources in this analysis. Direct foreign transfers are covered under off-budget donor spending. All other sources are discussed under complementary financing.

[17] World Health Organization (2018). Lower and Lower-Middle Income Countries report average growth rates of 6 and 5 percent respectively since the early 2000s. More data on growth rates by income group brackets are provided in Annex Figure 1.

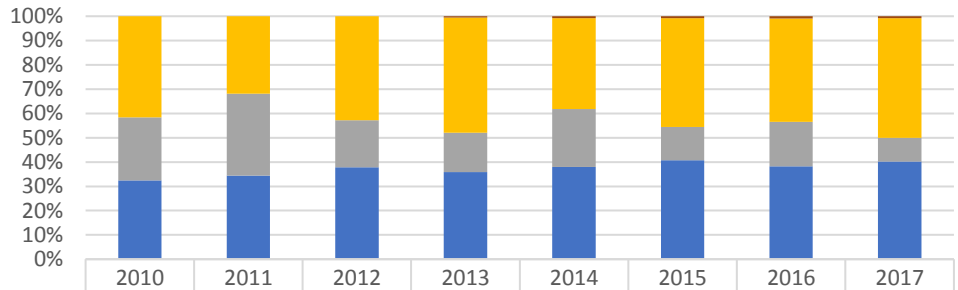
[18] The government's published figures for government spending on health are slightly different from the figures published here. This report treats health insurance funds as health expenditure when reimbursed at the health facility level, whereas the government's figures include health insurance transfers from the Treasury as health expenditures before they are transferred to the facilities.

[19] PlanRep is a planning and reporting database used by local government authorities. Data on private spending on private providers were not available. All figures are in current US dollars. Estimated using the calendar year interbank exchange rate.

3.2 **Per capita spending on health has increased moderately.** The growth in health spending was offset by high population growth, estimated at 2.7 percent.[20] Total per capita expenditure increased from US$23.6 to US$28.5 between 2010 and 2017, while government per capita expenditure increased from US$ 7.7 to US$11.6.

3.3 **Donor financing has shifted toward off-budget support.** Since 2012, on-budget donor support has decreased by an annual average of 7 percent. Simultaneously, off-budget donor support has increased by 14.5 percent. As a result, 84 percent of total donor support is now provided on an off-budget basis (as of 2017). The overall shares of donor and government spending have remained about the same (see Figure 2 and Annex Figure 3).

Figure 2:Expenditure Trends Across Funding Sources (Per Capita, US$)



	2010	2011	2012	2013	2014	2015	2016	2017
Compl fin	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.2
Donor (off budget)	9.8	7.2	10.7	13.8	10.5	10.4	10.9	14.1
Donor (on budget)	6.1	7.6	4.8	4.7	6.7	3.2	4.7	2.8
Govt expenditure	7.7	7.8	9.4	10.5	10.7	9.5	9.8	11.6

Source: Government FMIS and PlanRep; Donor CRS; Government Census and Projections
Note: Compl fin = refers to NHIF, CHF, and user fees.

3.4 **The shift away from on-budget donor support has made it difficult for the government to ensure that donor support is aligned with national health priorities.** Vertical donor support has been skewed considerably towards financing vertical programs.[21] This has contributed to some inefficiencies as coordination mechanisms are weak and costly, and there is anecdotal evidence that there has been some duplication of activities. It also jeopardized the effort to ensure equity in access (as stipulated by the 2007 Health Policy[22]) as weak coordination has led to some regions benefitting significantly more from support than others.[23]

[20] United Republic of Tanzania (2013b).
[21] United Republic of Tanzania (2015), Government of Tanzania (2015), World Bank (2012), Boex and Omari (2013), and James et al (2014).
[22] United Republic of Tanzania (2007).
[23] Donor support is discussed in more detail in the Donor Health Expenditure section.

Government Health Expenditure

3.5 **Government health spending has grown but at a decreasing rate.** Health expenditures have grown but more slowly than the growth rates of general government revenue and general government expenditure. While growth in government health spending has slowed considerably, growth in revenue and general government spending (GGE) has stabilized at around 14 percent annually (see Table 4 and Annex Figure 4). The result of this trend is that the health sector has effectively been deprioritized. As a share of general government spending, health now constitutes around 6 percent, about 3 percentage points less than in 2010 (see Table 4 and Annex Figure 5).[24]

3.6 **Government health spending is insufficient to achieve universal health coverage and is below major international benchmarks.** At 6.1 percent of GGE, Tanzania spends less than half the 15 percent to which it committed in the African Union's Abuja declaration.[25] Furthermore, government health spending is estimated to be only 2.5 percent of GDP, which is about half of the notional target of 5 percent that would be necessary to achieve universal health coverage[26] and has dropped by a percentage point since 2010 (Table 4). One modest international benchmark estimates the total per capita financing need for universal health coverage to be at least US$86,[27] which is still much higher than current spending in Tanzania. Therefore, there is an urgent need not only to protect the current limited health spending but also to explore opportunities to expand the fiscal space available for health care.

Table 4:Overview of Health Expenditure Trends in Tanzania

	2010	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*	*Target*
GHE as % GGE	9.5%	9.6%	8.0%	8.0%	8.2%	7.4%	7.7%	6.1%	15%
GHE as % GDP	3.4%	3.8%	3.1%	3.0%	3.2%	2.5%	2.8%	2.5%	5%

Source: Government FMIS. IMF World Economic Outlook
Note: GHE = government health expenditure; TGE = total government expenditure; GDP = gross domestic product.

3.7 **Although Tanzania's health spending is low, it is similar to spending in other countries in the region.** Comparing Tanzania's spending indicators with those of other countries in the region shows that its government health expenditures (GHE) as a percentage of GDP is in line with other countries, whereas its GHE as a percentage of GGE is somewhat lower.[28] However, the wage bill share in Tanzania is significantly below that of its peer countries, reflecting that these expenditures are in part subsumed into the local government grant (Table 5).

[24] A scatterplot of government and donor spending is provided in Annex Figure 7. It shows a significant shift in priorities away from health by both government and donors. This makes Tanzania a regional outlier.
[25] African Union (2001).
[26] McIntyre et al (2017)
[27] International Health Partnership (2009) and Mcintyre et al (2017)
[28] A scatterplot using data from WHO's Global Health Expenditure Database (GHED) shows a similar pattern (see Annex Figures 6 and 7).

Table 5: Comparing Tanzania's Health Expenditure Indicators to Other Countries

Country	*GHE as share of GDP*	*GHE as share of TGE*	*Wage bill as share of GHE*	*Source*
Tanzania	***2.5***	***6.1***	***43.2***	***PER 2019***
Zambia	2.1	7.0	62.0	PER 2018
Zimbabwe	1.9	8.6	60.0	HFSA 2019
Kenya	1.8	6.5	41.0	PER 2014
Lesotho	8.1	13.1	35.0	PER 2017
Malawi	3.0	9.0	40.0	PER 2013
Angola	1.5	5.6	43.7	PER 2017
Seychelles	n/a	8.6	54.0	PER 2014

Source: Authors' review of health PERs in SSA, FY 2012-2017.
Note: GHE = government health expenditure; TGE = total government expenditure; GDP = gross domestic product.

3.8 **Almost half of all government health spending was at the local government level, a share remained fairly consistent between 2013 and 2017.** The recent slight increase in the share of the central government (up to 55 percent of total spending) reflects the government's efforts to channel more resources for medicines and medical supplies through the MOHCDGE&C to achieve economies of scale. The share of funds spent at the regional level has remained relatively stable, with most of the funds being spent at the local government authority (LGA) level. As this is closest to primary care, this spending is likely to be progressive. Councils and facilities also receive funds from other sources such as development partners, reimbursements from the CHF and NHIF, and user fees. Regional and council hospitals only make up a small share of total expenditures (Table 6).

Table 6: Distribution of Spending Across Levels of Government

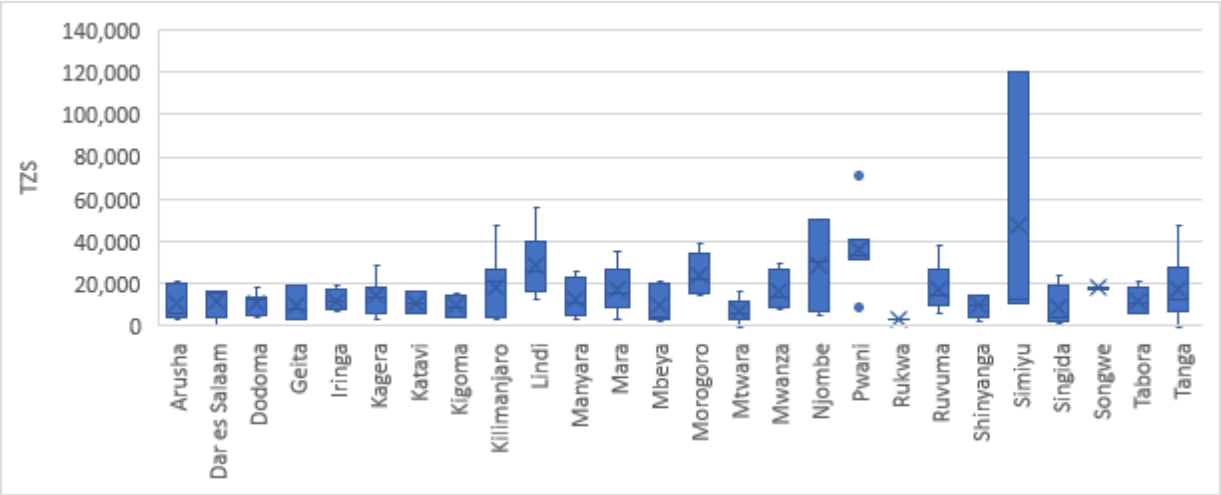
	2013	*2014*	*2015*	*2016*	*2017*
Central Government	55.3%	61.3%	56.3%	47.5%	55.4%
Local Government Authorities	38.2%	33.4%	37.5%	45.6%	37.5%
Regional Administration and Hospitals	6.5%	5.3%	6.3%	6.9%	7.1%

Source: Government FMIS.

3.9 **There is considerable variation in per capita government health spending across regions and districts.** All districts have benefitted from a real increase in per capita financing, and the gap between high spending districts and low spending districts has been reduced from a six-fold difference in 2013 to a five-fold difference in 2017. Nevertheless, total spending remains low, and differences between districts remain substantial (Figure 3). This is partly because of considerable differences in the prioritization of health in the budget across regions and an outdated budget allocation formula. Health spending as a share of total regional spending was 19 percent in Njombe but only 4 percent in Rukwa. The Simiyu region is an outlier having made major investments in infrastructure. It is concerning that low spending on health is most associated with

poor regions and regions with already bad health indicators. This shows that there is potential to reduce inequities and strengthen allocative efficiency by adjusting the budget allocation formula.

Figure 3: Regional Variations in Per Capita Government Health Spending



Source: Authors based on MOF Epicor.

3.10 **The promised budgetary allocations often did not materialize, which resulted in low budget execution.** The health sector budget has been under-executed, but this has generally not been a problem related to the absorption capacity of the health sector. When funds were released, they were spent in full. The low budget execution rates have largely been due to adverse macro-fiscal conditions (see Box 1). The health sector budget execution rate in 2017 was 82 percent, which, though low, was higher than in other sectors such as water, agriculture, and energy (see Annex Table 4). In the health sector, the budget for wages and salaries was generally executed in full. Grants to local government were executed up to 80 to 90 percent. Budget execution rates of only about 70 percent[29] for goods and services and development spending reduced even further the already limited allocations to these budget lines (see Annex Table 5). Low execution of government budget allocations leaves health workers either dependent on donor contributions or without the necessary supplies to operate effectively. Low execution of the goods and services budget was partly due to increased budget controls and cost containment measures introduced by the incoming administration.[30]

Box 1: Macro-fiscal Factors Leading to Low Budget Execution in the Health Sector

Macro-fiscal factors contribute to the under-execution of the health budget. Low budget execution rates often follow from inadequate revenue projections and unforeseen spending pressures. On the revenue side, reduced foreign direct investment between 2013 and 2017 dampened revenue mobilization (World Bank, 2019). On the expenditure side, government investments in the Standard Gauge Railway

[29] In 2016, budget execution rates were particularly low at 40 percent.

[30] For example, while conferences and training sessions were originally budgeted to take place in expensive hotels, the new administration moved them to government facilities at a much lower cost. However, the cost savings were not credited back to the health sector.

and Stiegler's Gorge Hydroelectric Power station as well as the move of many government agencies to Dodoma crowded out budget allocations to other sectors such as health.

Debt and wage payments are statutory or quasi-statutory in nature and take priority. To accommodate revenue shortfalls and new spending pressures, the budgets for goods and services and for development were therefore disproportionately affected. This problem has been repeatedly raised, including by recent IMF Article IV missions (International Monetary Fund, 2016 and 2019, PEFA, 2016, and Piatti-Fünfkirchen and Schneider, 2018).

3.11 **Low budget execution has contributed to Tanzania's accumulation of arrears.** Arrears are a fundamental efficiency concern. In 2017, health sector arrears were equal to 44 percent of total MOHCDGE&C spending. Health facilities need to make expenditures in order to be able to provide services, and if their budget allocations do not arrive, then they can be put into a situation where they have to commit to pay suppliers at a later date when funds become available.[31] The amount of arrears that they accumulate becomes significant, and even as they pay off those arrears, they are accumulating new ones. Arrears produce considerable inefficiencies as suppliers build risk premiums into their prices, and the budget becomes opportunistic rather than strategic. Allowing arrears to build up also undermines basic PFM processes as current systems and procedures are subverted and internal budgetary and commitment controls are not used. Since 2015, the stock of arrears in health was significantly reduced but is still substantial (Table 7).

Table 7: Overview of Health Sector Arrears

	2014	*2015*	*2016*	*2017*
MOHCDGE&C arrears	484,013 M	629,546 M	585,466 M	360,606 M
Total GOT arrears	4,415,294 M	6,644,613 M	8,363,920 M	9,529,519 M
MOHCDGE&C share of total arrears	11%	9%	7%	4%
Stock of arrears as % of MOHCDGE&C spending	61%	84%	93%	44%

Source: Ministry of Finance.

3.12 **The MOHCDGE&C health budget consists of the recurrent budget and the development budget.** The recurrent budget is composed of personnel emoluments (wages and salaries) and other charges (goods and services). The development budget covers capital investments. In the 2018/19 budget,[32] 68 percent of the health budget was allocated to recurrent spending. Of this, 25 percent was earmarked for strengthening referral hospitals. The curative service budget was allocated to the Muhimbili National Hospital (33 percent), followed by faith-based hospitals and other specialized public hospitals. The "other charges" budget allocation for preventive services was almost negligible. Instead, these activities were financed predominantly by donors through the development budget.[33] The preventive budget was allocated for the purchase

[31] A breakdown of arrears at the provider level was not available to the team.
[32] The budget numbers are discussed here because actual 2018/19 spending figures were not made available for analysis.
[33] Even though the development budget is dedicated to capital investments, it is frequently used by donors to ringfence support and finance recurrent activities.

of drugs and other specialized medical supplies for various vertical programs including those related to antiretroviral therapies. Vaccines co-financing constituted a large part (about 11 percent) of the preventive budget, while only about 1 percent was dedicated to nutrition activities. The historical trend of the composition of the MOHCDGE&C 's recurrent and development expenditures is presented in Annex Figure 8.

3.13 **The 2018/19 health sector budget made significant provisions for infrastructure investments, mostly for building and upgrading health facilities.** About TZS 103 billion were allocated for the construction of 67 district hospitals in areas where these were most urgently needed. In addition, about TZS 30 billion were allocated for the construction and renovation of 418 facilities including regional referral hospitals, health centers, and dispensaries. However, many of these facilities are still not fully functional as they lack staff (199), medical equipment (128), power (50), and reliable water sources (39).[34] New facilities need to be staffed and be to be regularly maintained and have sufficient supplies available, so future recurrent budgets will need to provide enough funds to make capital investments effective.

3.14 **The wage bill in the health sector has been steadily increasing until 2016**. At the central level, it made up more than 50 percent of total expenditures in 2017. Since 2016, there has been a hiring freeze across the entire government. Moreover, a thorough review of the payroll identified ghost workers who were removed. As a consequence, total wage expenditures decreased, and this resource windfall was allocated to development expenditures, especially infrastructure projects. While there has been a general increase in wage and salary payments, Tanzania still compares well with other countries in the region (Figure 4-5).

Figure 4: Increase in Spending for Human Resources in Health

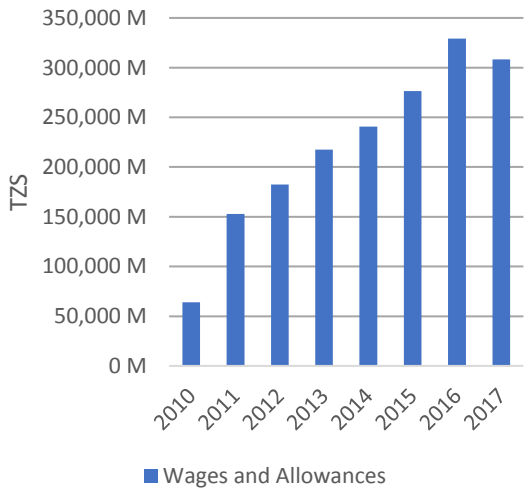
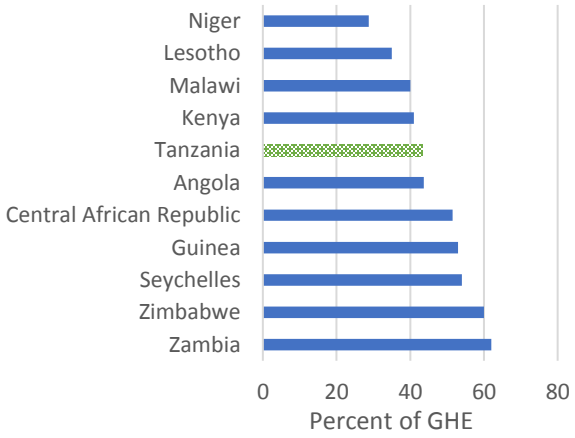


Figure 5: Spending on Human Resources in Health, % of GHE

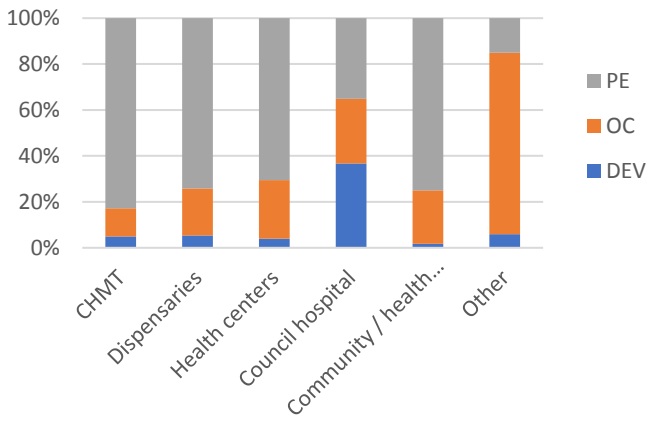


Source: FMIS and Boost. Authors' review of health PERs in SSA, FY 2012-2017
Note: Dev = development spending. OC = other charges. PE = personnel emoluments. GHE = government health expenditure.

[34] World Bank (2014). Star rating information used as a proxy for facility performance is provided in Annex Table 2.

3.15 **Wage payments dominate local government spending.** At the LGA level, human resources account for about 80 percent of total spending. These expenditures are generally managed by council health management teams (CHMTs). At higher levels of care (such as council hospitals), development expenditures play a more important role, which also includes the budget for infrastructure development. The share of other charges remains about the same (Figure 6).

Figure 6: Breakdown of Expenditures at the Local Government Level



Source: Local Government Epicor and PlanRep.

3.16 **The structure of budget and execution reports could be improved to facilitate better sector management.** The chart of accounts uses adequate classifications and follows the IMF's standard practice.[35] However, a lot of central government spending (around 70 percent) is allocated to "Grants," "Other Expenses," and "Current Subsidies" (Annex Table 6), which mostly relate to other levels of government including LGAs and regions. At the local government level, a separate financial management information system is used that is not sufficiently integrated with the Ministry of Finance's central budget, income, and expenditure system, Epicor, which means that the central Epicor system cannot provide detailed breakdowns of local government spending. This makes it challenging for policymakers and managers to use budget execution reports in making management decisions. Furthermore, the development budget line is often used for non-development or capital investment spending, even by donors. This can make budget execution reports misleading and difficult to interpret. Furthermore, the existing accounting systems do not make it easy to identify the functional purpose of spending. This would require execution reports to be compared with the budget books, which is not easily done.

3.17 **Expenditure and outcome data are available but underused.** The government collects sector outcome and service use data on a routine basis. Routine surveys such as the USAID's Demographic and Health Survey (DHS) and Tanzania's own national health accounts yield a wealth of data. Furthermore, the government's financial management information system (FMIS) provides reliable budgetary, release, and expenditure data as per the chart of accounts that have detailed breakdowns into administrative, functional, and economic classifications. Data on human resources are available from the payroll and from the human resource management information

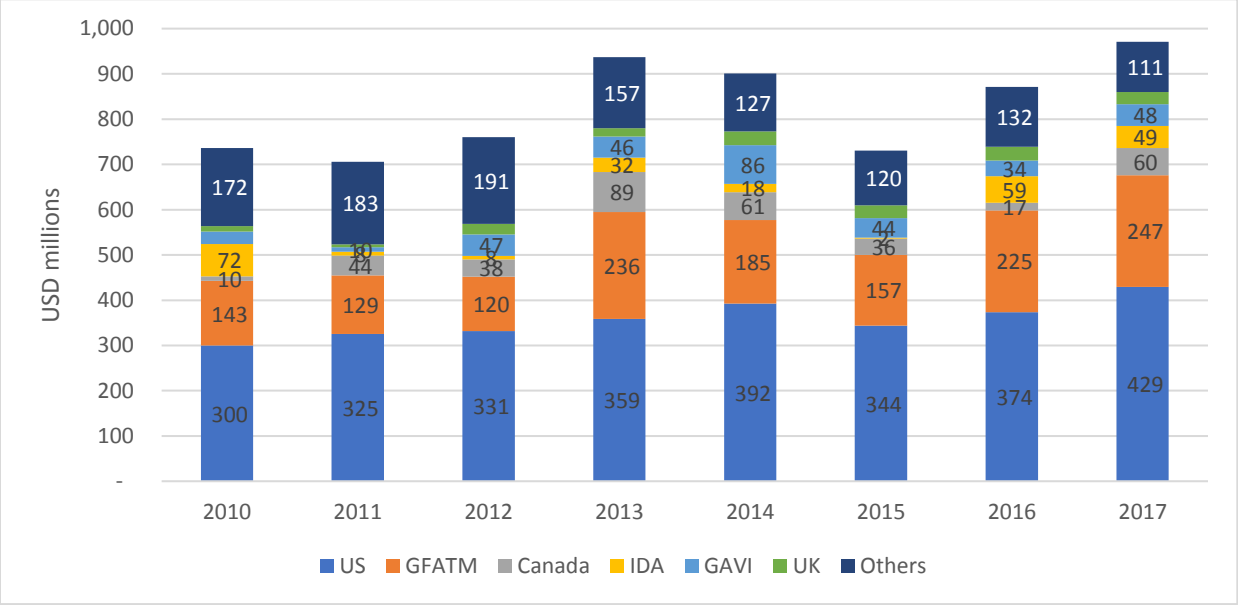
[35] Cooper and Pattanayak (2011).

system. However, these information sources are insufficiently used to inform budgetary processes or allocation decisions.

Donor Health Expenditure

3.18 **Total donor support has fluctuated significantly.**[36] Total donor support slumped in 2015 as significant pledges did not materialize but has picked up since with an US$150 million increase in support by 2017.[37] US government support makes up about 45 percent of total development assistance in Tanzania, followed by the Global Fund to Fight AIDS, Tuberculosis, and Malaria (GFATM), Canada, the World Bank, the GAVI Alliance, and the UK (Figure 7).

Figure 7: Trends in Donor Project Support, US$ Millions



Source: Donor CRS (2019).

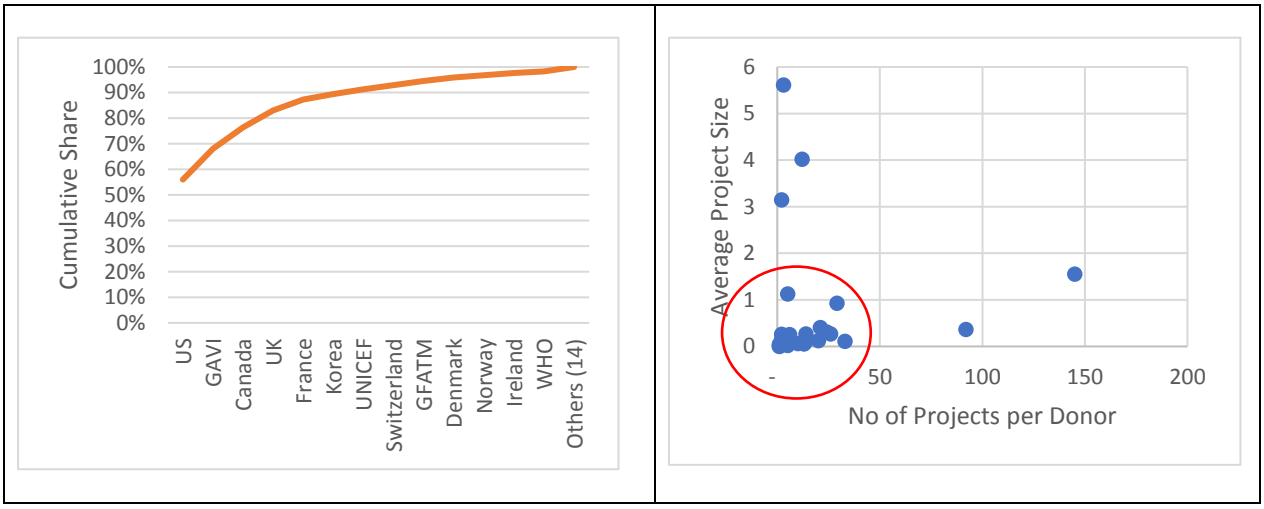
3.19 **Donor support is fragmented and is difficult for the government to manage.** The top three donors (the US government, GAVI Alliance, and Canada) together provide two-thirds of total off-budget donor funding (or about US$306 million). The remaining 24 donors fund about US$2 million each per year. Most donors have many small projects of less than US$1 million each. In 2017 alone, there were 504 vertical projects funded by all development partners, most of which provided only a small amount of support. The US government supported 145 projects to the tune of an average of less than US$2 million each. This was followed by Canada, which supported 92 projects of less than US$0.5 million each on average. On the other end of the spectrum is GAVI, which only had about 12 projects averaging US$4 million each (Figure 8). Reducing the number

[36] This paper uses data reported by donors, which are significantly higher than the amounts that the government has reported having received. This discrepancy should be reconciled.

[37] Donor financing has slowed because of tightening global financial conditions, higher commercial borrowing costs, and delays in project preparations. This trend also reflects priorities that are not aligned with those of the current government in Tanzania. Actual grants received were 2.2 percent of GDP, 0.2 percentage points less than what was expected.

of projects and amalgamating donor support for fewer larger projects would enable the government to play a better stewardship role better going forward.

Figure 8: Mapping Off-Budget Donor Support



Source: Donor Credit Reporting System (2019).

3.20 **Donors have shifted towards off-budget financing.** Since 2014, donors' on-budget support has gradually been reducing, and many of their commitments did not materialize in 2015 and 2016. By 2017, the share of on-budget donor support was merely 14 percent of total donor support **[check]** (Figure 9). Most on-budget donor support was provided to the Health Basket Fund, while most off-budget support was spent on STD control including HIV/AIDS, basic health care, family planning, and malaria control (Table 8).

Figure 9: Trend in Donor Funding

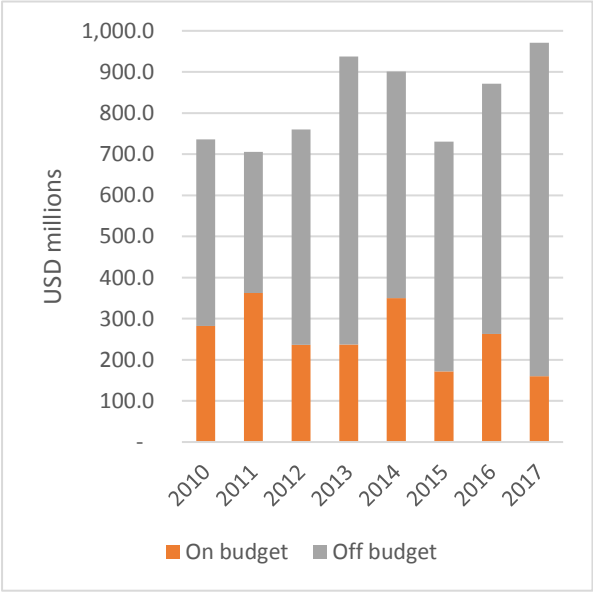


Table 8: Types of Off-budget Donor Support

Type	*Share*
STD control including HIV/AIDS	31.83%
Basic health care	14.54%
Family planning	8.46%
Malaria control	7.53%
Reproductive health care	6.52%
Tuberculosis control	5.78%
Health policy and administrative management	4.58%
Basic nutrition	4.33%
Medical services	4.21%
Infectious disease control	3.30%

Source: Donor CRS (2019).

4. User-Fees, Pooled Financing and the Role of Insurance (Complementary Financing Mechanisms)

4.1 Domestic financing sources other than general government budget allocations include funds raised from user fees or cost sharing, reimbursements from the national health insurance fund (NHIF), funds made available from the improved community health fund (iCHF), support from the Community Health Fund (CHF), insurance for workers in the urban informal sector (TIKA), and other private insurance. In Tanzania, these are referred to as complementary financing mechanisms.

4.2 **Complementary financing sources make up a small share of total spending but are critical for funding operational expenditures.** Complementary financing is received and spent at the facility level. These sources represent a small percentage of total spending, given how much the government spends on human resources and how much donors contribute to the procurement of medicines, medical supplies, vaccines, and other commodities. However, these sources contribute a critical amount of the revenue received by health service providers, which use them to cover their operational expenses.

Figure 10: Complementary Financing Compared to Other Charges (Absolute)

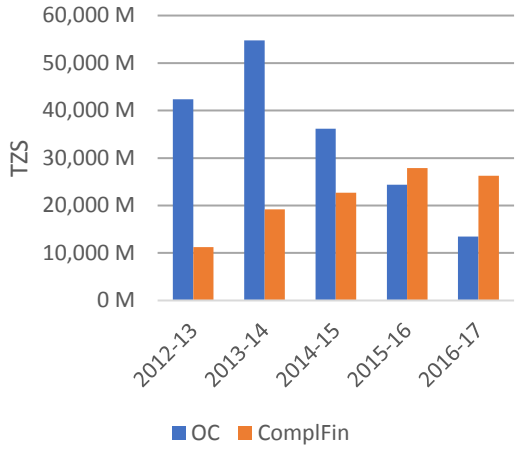
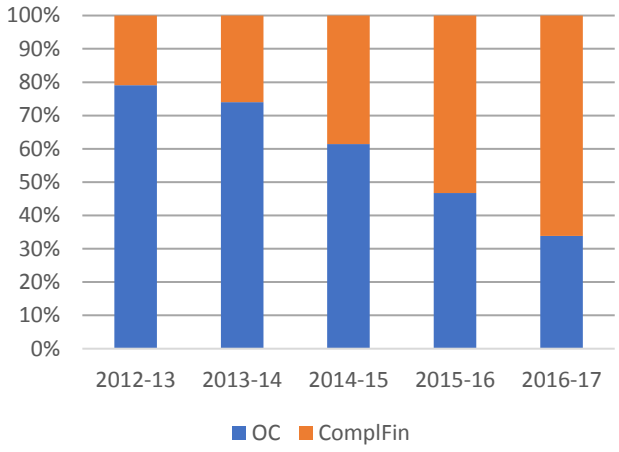


Figure 11: Complementary Financing Compared to Other Charges (Relative)



Source: *PlanRep*.
Note: OC = "Other Charges" from the government budget. ComplFin = the sum of all complementary financing mechanisms.

4.3 **The increase in complementary financing has protected providers from a decline in funding from the government's non-wage recurrent budget.** The "other charge" budget category is meant to cover operational expenditures. At the local government level, spending at this level has declined significantly while complementary financing has become increasingly necessary (Figures 10 and 11). In 2016 and 2017, the amount of complementary financing available to health facilities was higher than the regular government budget allocations for health.

Furthermore, the government's "other charges" budget allocations were given to the councils, and there is some evidence that these resources did not always reach providers.[38]

4.4 **The Health Basket Fund (HBF) is an additional revenue stream to providers.** The HBF is entirely financed by donors and has recently been reformed so that funds are provided directly to service providers instead of to districts and councils. When the HBF is included, complementary financing resources constitute only about 30 percent of total spending at the facility level (Annex Figure 9). However, the long-term viability of donor financing support is uncertain. Being able to generate own revenue is a sign of the potential sustainability of the direct health financing facility modality, which will be an important foundation for the transition toward the SNHIF.

4.5 **User fees have become an increasingly important source of funding.** At the facility level, user fees constitute 40 to 50 percent of all revenue from complementary financing sources (Figure 12). This raises concerns about the ability of poorer households to access care, especially as fees have also been collected at primary levels of care (Figure 13).[39] Tanzania already follows good practice by allowing facilities to retain revenue from user fees and by giving them some discretion over how they are spent. Most revenue from user fees is collected by council and district hospitals given the type of care that they provide. The government has introduced electronic financial management and accounting systems in all council and district hospitals to account for the revenues collected at that level. This has increased accountability and the general efficiency of fund management and reduced the likelihood of informal payments. The system operates in parallel with other financial management systems in the health sector and needs to be better integrated with them.

Figure 12: Trend in User Fees Revenues at Facilities

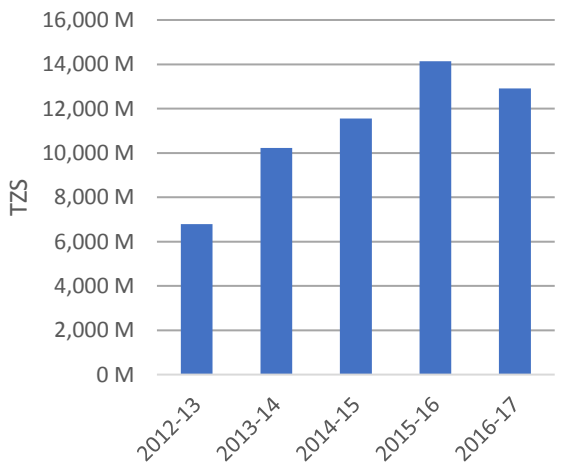
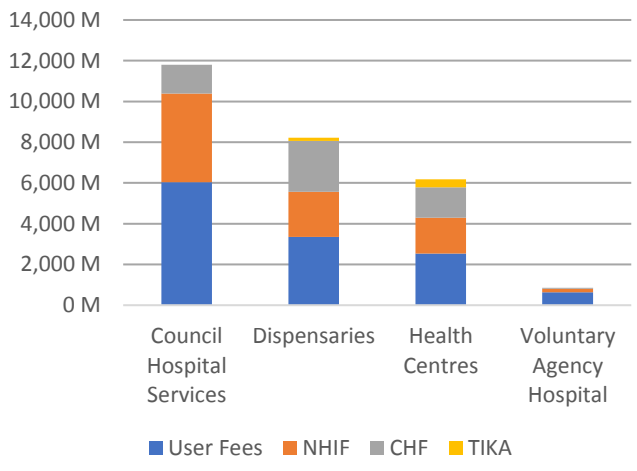


Figure 13: Complementary Financing by Type of Provider, 2017



Source: PlanRep.

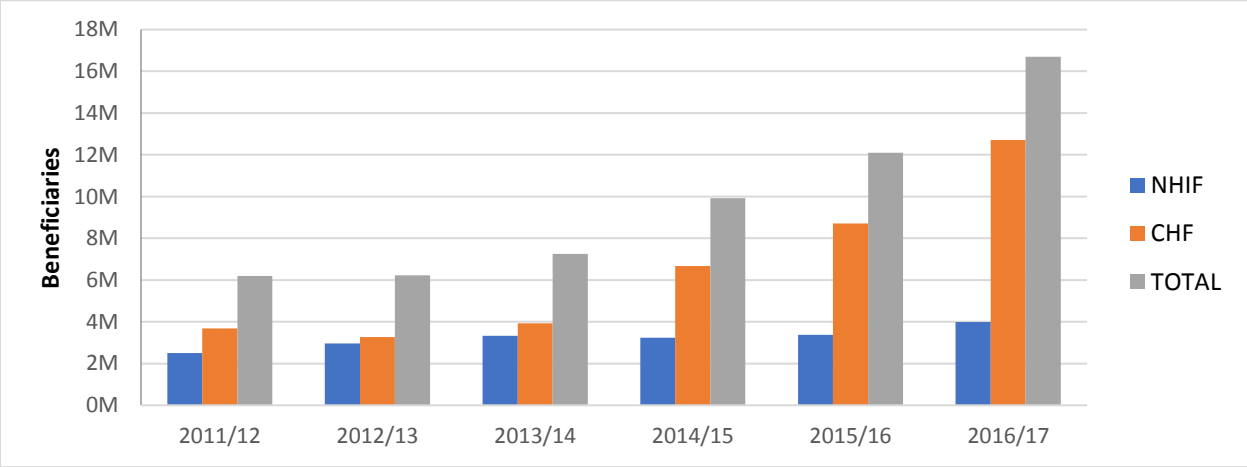
[38] Kapologwe et al (2019) and Boex et al (2015)
[39] Lagarde and Palmer (2008)

National Health Insurance Fund: Design and Operations

4.6 **The NHIF is a publicly managed insurance scheme that provides affordable and accessible health services to employees, mostly in the formal sector.** As of 2017, NHIF population coverage was about 8 percent. The NHIF Act specified that all employers and employees in the public sector must register themselves and no more than five of their legal dependents in the NHIF. The NHIF has been striving to increase enrollment but has struggled to make significant inroads into the broader population, especially those working in the informal sector.

4.7 **There has been significant growth in membership of Community Health Funds (CHF).** The concept of a CHF was piloted in the Igunga district in 1996 in an attempt to make health care more affordable and available to the rural population and the informal sector, and there are now CHFs in all districts in Tanzania**.** Currently about 16 million Tanzanians, or 28 percent of the population, are covered by either the NHIF or a CHF (Figure 14). The CHF almost tripled the number of its beneficiaries to over 18 million between 2011/12 and 2016/17.[40] This was partly due to the simplification of the procedures to access matching funds as well as to the expansion and introduction of new initiatives like the Health Systems Strengthening project in Dodoma, Morogoro, and Shinyanga and innovations taken by Pharm Access in the Kilimanjaro and Manyara regions. The CHFs have also received a lot of political support, which has increased knowledge of them among local communities. Membership of the NHIF has grown more slowly as it targets the formal sector.[41]

Figure 14: Number of Beneficiaries of the NHIF and CHFs



Source: Authors, based on the NHIF Annual Financial Report, 2019.

[40] NHIF (2019).

[41] There are several types of members in the NHIF, including members of cooperatives, employees of public institutions, retirees, interfaith staff, and dependents (for example, children and students). Contribution levels and enrollment arrangements differ for these different types of members, but the benefit package is the same for all categories. Some categories allow for single-person enrollment (for example, for children), while others require in family enrollment (through private companies). This has created an adverse selection problem as healthy people opt to not purchase health insurance or to wait until they need health services.

4.8 **The NHIF has been accrediting health facilities at a rapid pace with the aim of expanding the number of health facilities across the country, including primary care providers** (Annex Figure 10). Given the speed of this mass accreditation, significant quality differences have been found to exist between accredited providers, especially among primary care facilities, most of which are in rural areas.[42] The accreditation of drug dispensing outlets has made drugs more widely available but has also resulted in challenges related to administration and claims management. According to NHIF regulations, facilities' claims should not paid within 60 days. Investments have been made in IT to simplify claims management in large health facilities with a high number of claims, but these challenges are still being faced by smaller providers.

The NHIF's revenue comes from the 3 percent payroll contributions from both employees and employers. The Government of Tanzania is the largest employer in – and contributor to – the NHIF. NHIF revenues have been growing as a result of increases in both salaries and membership. Investments yield only about 15 percent of the NHIF's total income. Other sources of income such as service fees and minor payments are negligible (Table 9).

Table 9: NHIF Sources of Income

TZS Millions	*2011/12*	*2012/13*	*2013/14*	*2014/15*	*2015/16*	*2016/17*
Contributions	163,458	207,502	245,176	286,702	352,763	417,197
Investment income	38,035	54,739	72,030	82,385	99,611	78,396
Other income*	2,518	4,292	859	1,388	1,623	843
Total	204,010	266,533	318,066	370,476	453,997	496,435

Source: Authors, based on NHIF (2019).
Notes: *Other income includes funds collected from service fees and related minor payments.

4.9 **Total NHIF spending consists of payment of benefit claims, administrative costs, and capital investments.** About 79 percent of the expenditure goes on paying benefit claims. Administrative costs made up about 15 percent of total spending, which is relatively high but has decreased over time due to the introduction of an automated claims management system and the use of better IT equipment. About 6 percent is spent on capital investments (Annex Table 7).

4.10 **NHIF revenue has been exceeding expenditures, at times by over 10 percent** (Table 10). As a result, the NHIF has consistently had a surplus of funds, though the size of this surplus has diminished over time. As surpluses indicate inherent inefficiencies, any decrease would be a positive development if it reflected increased access to services, and providers making better access of claims, but such decreases should be carefully monitored as they can be a source of contingent liabilities. Furthermore, the benefit package should be revisited after an actuarial study is conducted to ensure that services are both adequate to meet demand and financially sustainable.

[42] The providers accredited in 2017 consisted of government facilities (75 percent), faith-based providers (11 percent), and private providers (14 percent).

Table 10: NHIF Income, Expenditure, and Balance

TZS Millions	*2011/12*	*2012/13*	*2013/14*	*2014/15*	*2015/16*	*2016/17*
Total Income	204,010	266,533	318,066	370,476	453,997	496,435
Total Expenses	86,808	132,652	182,313	227,661	286,971	333,407
Surplus	117,202	133,881	135,753	142,815	167,026	163,028
Rate of change		14%	1%	5%	17%	-2%

Source: Authors, based on NHIF (2019).

4.11 **Referral hospitals are largest recipient of NHIF payments.** They receive more than two-thirds of NHIF payments, while the remainder is reimbursed to health centers, dispensaries, and pharmacies at the primary care level (Figure 15). While most patients seek care from public providers (especially in rural areas for primary care), only about one-third of NHIF payments are made to public providers (Figure 16). This is partly due to an increase in the use of private providers for more complex procedures, but it raises also raises concerns about whether public providers are submitting claims sufficiently for the services that have actually been rendered. This may in part reflect that staff in public facilities have no incentives to improve claims management. The majority of NHIF payments that have been made were found to cover medicines and consumables (Annex Figure 11).

Figure 15:Proportion of NHIF Benefit Payments by Level of Facilities, 2017

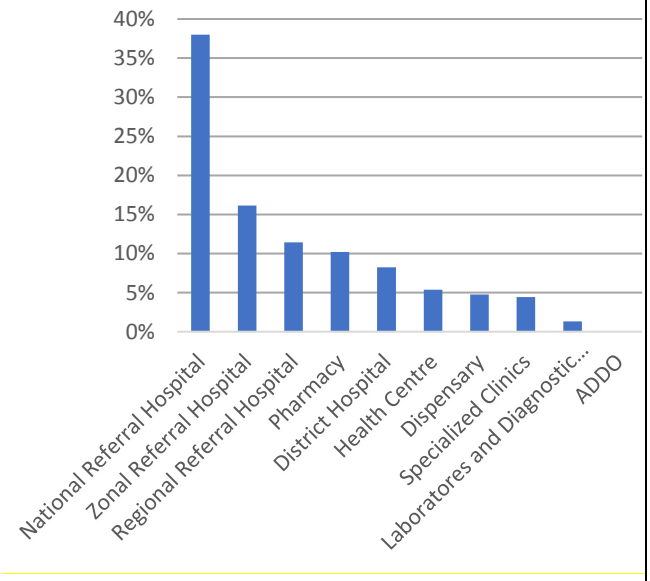
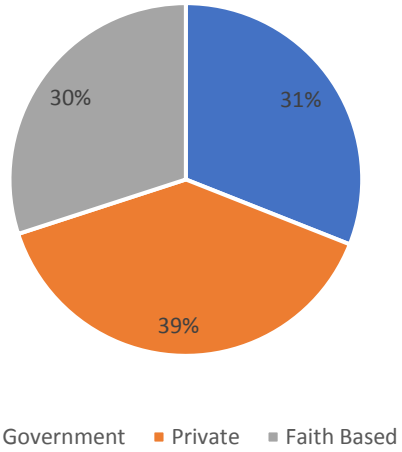


Figure 16: Distribution of NHIF Reimbursements to Facilities by Ownership, 2017



Source: Authors, based on NHIF (2019).

4.12 **NHIF capacity needs to be strengthened in preparation for the transition to the SNHIF.** The government seeks to pursue a SNHIF. If the NHIF is to take the sole responsibility of serving about 58 million Tanzanians, its capacity needs to be strengthened. A more systematic support system through the government budget in form of subsidies may need to be considered. Furthermore, providers need to be supported in order to ensure resources can be absorbed and there

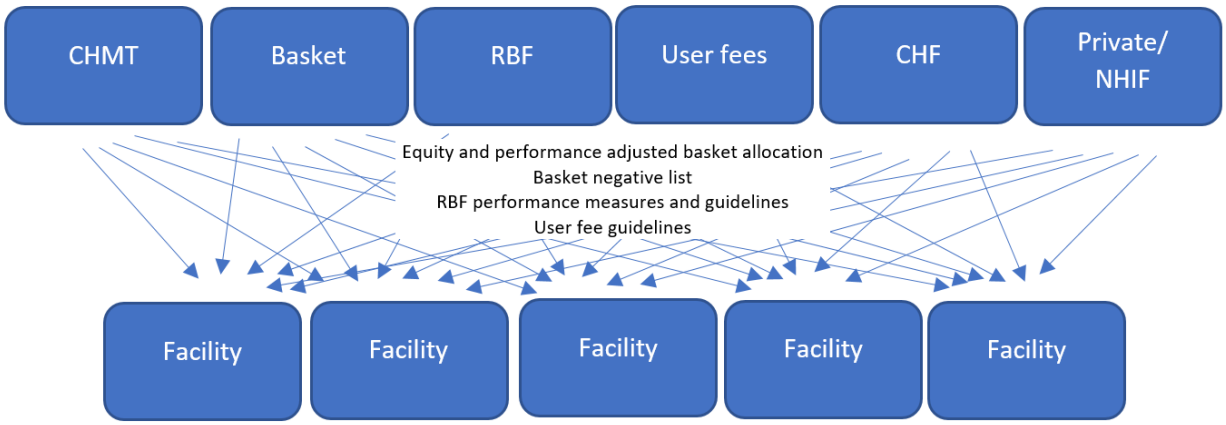
is confidence that they are used prudently. The NHIF mainly serves curative services. It may be beneficial to extend its mandate to preventive services. This may be cost reducing in the medium term and there is a precedent of other countries such as Ghana who have explored similar arrangements.

5. Flow of Funds, Provider Payment System, and Financing Reforms

5.1 **The Tanzania health system is in transition as various important reforms are ongoing**. Until recently, the payment system was dominated by an input-based budget allocation from the government, the donor-financed Health Basket Fund, which financed the operational expenditures of district health management teams, and various vertical programs funded by off-budget donors directly. This situation is changing rapidly: there are ongoing discussions at the MOF about restructuring the budget to make it program oriented; the MOHCDGE&C is piloting a results-based financing initiative with support of the World Bank initiative in nine regions, where providers are being reimbursed against performance indicators; and the government has introduced a Direct Health Facility Financing (DHFF) initiative nationwide which enables HBF resources to be allocated directly to facilities using an allocation formula that include a combination of capitation and output indicators. Furthermore, the NHIF and the improved Community Health Fund (iCHF) now pay facilities directly in accordance to conditions related to the delivery of services and not inputs. These reforms are encouraging as they constitute a shift away from an input-based allocation toward a system that finances outputs, which can incentivize service providers to improve utilization and efficiency. These steps are also necessary to prepare the health systems for a transition toward a purchasing arrangement using a SNHIF.

5.2 **The many separate financing streams have led to fragmentation.** The Tanzanian health sector has multiple funding sources, which means that there are many different fund flows through the sector as follows: (i) facilities receive in-kind support from the government (via districts and councils); (ii) facilities receive a capitation grant from the donor-financed Health Basket Fund that has equity and output considerations; (iii) the results-based financing pilot reimburses participating facilities for services or outputs delivered conditional on the quality of the provision; (iv) facilities collect user fees from out of pocket payments at the point of service; and (v) receive other sources of complementary financing such as the iCHF and the NHIF which reimburse facilities according to service provided. These processes have their own guidelines for planning, budgeting, execution, and reporting as shown in Annex Table 9. Together this leads to a fragmented provider payment environment, with which service providers have to contend (Figure 17, Annex Figure 12).

Figure 17: Current Financing Arrangement for Facilities



Source: Authors, based on discussion with authorities and development partners.

5.3 **The different funding sources all have different budgeting protocols and different rules that govern how facilities can spend the funds.** Trying to follow nine different guidelines (and to reconcile the funding projections against these guidelines) becomes a very difficult task, especially given the unpredictable nature of the sector. What this has meant for facilities in practice is that the negative list for the Health Basket Fund (for example, capital expenditures) needs to be honored in the plans. Health Basket Fund resources are used for operational expenditures. Apart from the negative list, the health basket fund also has an allocation criterion to some of the areas (for example, 33 percent of the allocation should be spent on the procurement of medicines and medical supplies). The introduction of comprehensive facility and council health plans is an improvement as these take all funding sources into account, which is a significant step forward. However, complying with the many planning and spending protocols remains problematic as facilities are required to plan activities against funding source and ensure compliance to spending protocols for that specific funding source. Incentives facilities face from this mixed provider payment system are a combination of what the various funding source holders require. They do not serve a strategic goal such as efficiency or access considerations.

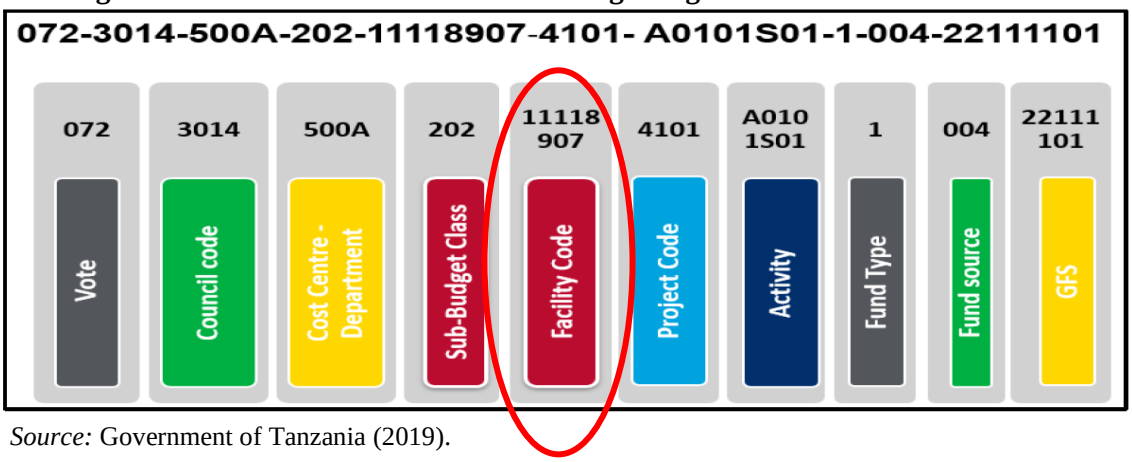
5.4 **The fragmentation is also concerning because the different sources of funding all require separate expenditure control mechanisms.** As a result, if a facility has an unforeseen shortfall of funds from one source, this cannot easily be substituted by another, and a crucial activity that was due to be funded from one source may not be implementable, even though funding may be available from other sources for less important or urgent tasks. This either creates inefficiencies or puts pressure on staff to break the financial management rules in order to finance the urgent activity. This makes optimal planning for facility managers very difficult as it requires them to take into account the various execution protocols during the planning phase.

5.5 **Fragmentation also requires different reporting structures.** The various spending protocols also have differing reporting requirements. An audit trail is necessary to evidence that funds were spent in accordance to protocol. This puts an unreasonable administrative burden on facility staff and distracts from their core function, attending to patients.

5.6 **The government is taking measures to unify the payment system.** Comprehensive council health plans are an important step to unify plans by financing source. The government has also recognized that execution rules need to be unified and is currently working on a harmonized spending protocol that will guide facilities through the procedures required by all major financing sources Once this document is finalized and ratified, it should help facilities to fulfil the requirements more efficiently. This follows progress in unifying reporting requirements. All sources are currently already reported against accounted for through FFARS.

5.7 **The government has taken steps to increase the autonomy of providers.** Health facilities are now recognized for the first time as explicit spending units within the budget (Figure 18). This means they are legally recognized and can receive and spend government funds for the first time. This is necessary for the government to send funds for operational expenditures directly to facilities instead of via councils, thereby following the precedent set by the Direct Health Facility Financing (DHFF) program, a recent government initiative to devolve fiscal autonomy to primary health care facilities. This was a significant departure from the status quo when the districts managed and controlled funds for these facilities. This fiscal decentralization now needs to be operationalized in a way that does not risk accountability.

Figure 18: Chart of Accounts Reform Recognizing Providers at the LGA Level

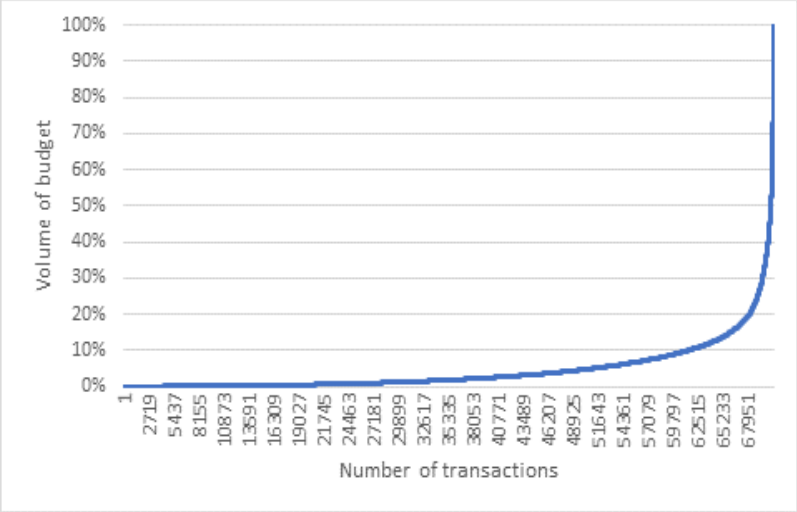


Source: Government of Tanzania (2019).

5.8 **Lessons learned from implementing results-based financing (RBF) projects may be helpful for the ongoing DHFF reform process.** Under RBF, funds are transferred to health facilities to enable them to provide a pre-agreed set of services and the continued payment of funds is conditional on the facilities' providing services of sufficient quality. This gives facilities an incentive to improve their performance and deliver the best possible services. While the RBF model as it is currently being implemented may not be sustainable, it can provide useful lessons for the DHFF reform process. For example, the DHFF program could incorporate quality requirements similar to those set out in RBF projects (as anticipated for the 2020 facility allocation formula). Another lesson learned is that flexibility on the use of funds at the level of service provider is critical. Funds made available through DHFF are subject to more rigorous controls (commitment and budget control embedded in FFARS). Limited virement within the OC budget offers some flexibility. Flexibility could be extended further, given that transactions at the frontline only make up a small share of total spending. The lowest 60,000 transactions (which happen predominantly in districts at the frontlines of service delivery) only make up about 10 percent of the total volume of spending. Thus greater flexibility could be extended for those without loss of

accountability. Conversely, the few high value transactions deserve greater scrutiny through rigorous ex-ante commitment control (Figure 19).

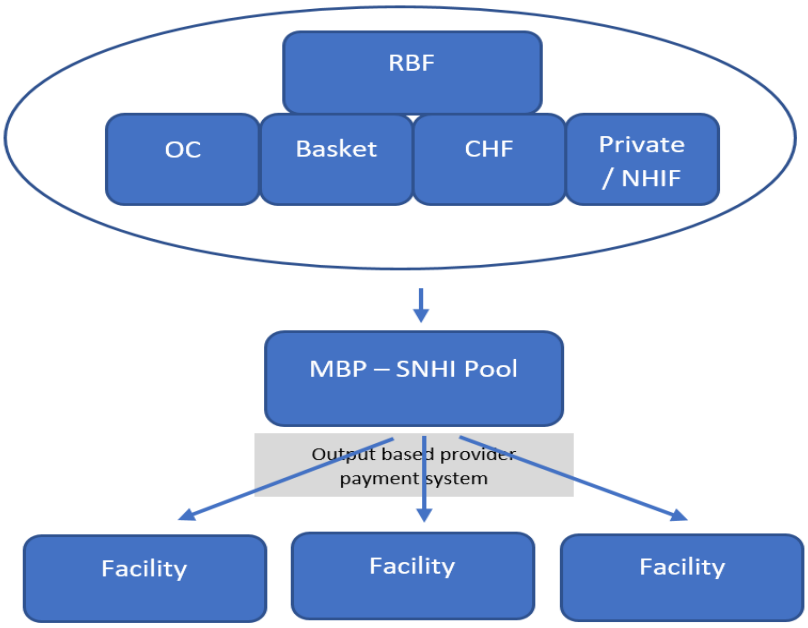
Figure 19: Transactions Profile in the Tanzania Health Sector, 2017



Source: Authors based on government FMIS.

5.9 **In the long term, the MoHCDGE&C and PORALG are working towards developing a unified payment system across financing sources as part of the transition towards a single national health insurance fund (SNHIF).** However, other steps could be taken in the meantime by unifying funding sources, harmonizing protocols, and mimicking strategic purchasing through the general budget. This scenario is outlined in Figure 20. In this scenario, operational budget allocations (other charges), the Health Basket Fund, and the Community Health Fund would be pooled and topped up by a performance-oriented bonus payment. This pool of funds could then be used to purchase a minimum set of services (or benefits package) from facilities and the modality through which the purchasing would happen could be a strategic combination of equity adjusted capitation and fee for service or output/performance orientation. This approach is not a drastic deviation from the current status quo, as many of these elements are already reflected in the current different financing modalities. At a later stage, all of these sources could then be folded into the SNHIF.

Figure 20: Unifying the Payment System for Strategic Purchasing



Source: Authors, based on discussion with donors and authorities.

6. Access to Care and Technical Efficiency

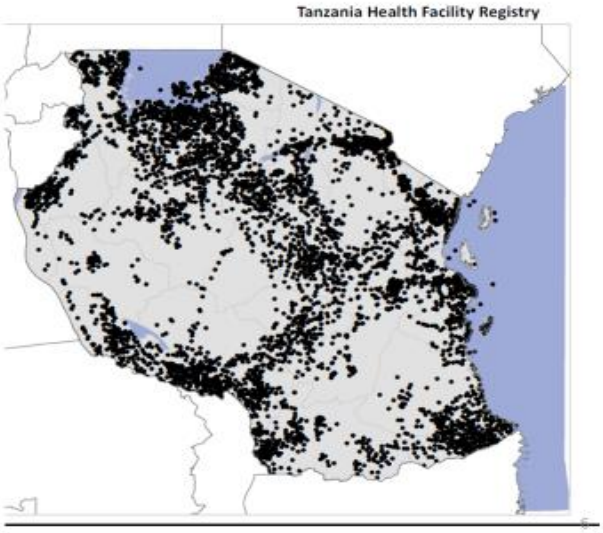
6.1 **Access to care and utilization of key health services remains problematic.** Key indicators on access to and use of care have improved. For example, between 2010 and 2015, the proportion of women who attended four or more antenatal care visits increased from 43 percent to 51 percent, and the proportion of women who delivered their babies in a health facility increased from 50 percent to 62.6 percent. At the same time, however, the share of women encountering access problems increased significantly. About 50 percent of women reported experiencing financial barriers to accessing care, and 42 percent reported that the long distance to a health facility was their main obstacle to accessing care (Figure 21).

Figure 21: Impediments to Accessing Care in Tanzania

Problems in accessing health care

Indicators	TDHS 2010	TDHS 2015
Percentage of women age 15-49 who reported that they have serious problems in accessing health care for themselves when they are sick		
- Getting permission to go for treatment	2.4	14.3
- Getting money for treatment	24.1	49.5
- Distance to health facility	19.2	42.3
- Not wanting to go alone	10.5	29.9
- At least one problem accessing health care	35.5	65.5

Distribution of health facilities in the country

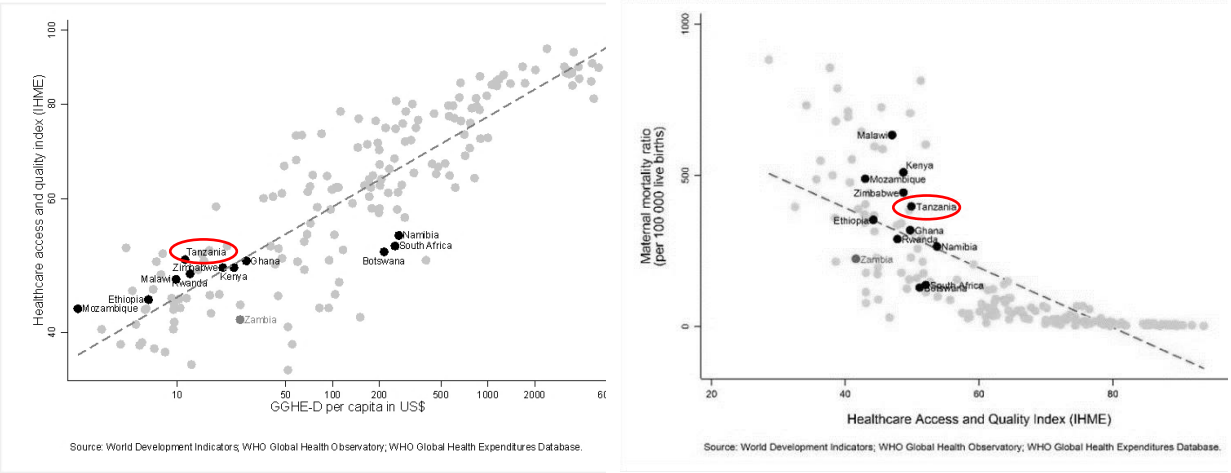


Source: Tanzania Demographic and Health Survey Rounds 2010 and 2015
Note: TDHS = Tanzania Demographic and Health Survey.

6.2 **The government is emphasizing the quality of care as the low quality of many services has undermined progress towards achieving universal health coverage**. The government has taken several measures to improve the quality of health care in Tanzania. It has introduced a star rating system to evaluate certain aspects of quality of care and to rank providers and hold them accountable. The facility star rating system tracks antenatal care visits, the proportion of babies delivered in health facilities, the provision of folic acid, contraceptive prevalence, and the availability of tracer drugs. Over 2,000 facilities were assessed in 2016 and 2017, with a general improvement in ratings over the baseline. While 33.2 percent of assessed providers did not qualify for a star rating in 2016, this share dropped significantly to only 4.2 percent in 2017. The share of facilities with a three-star ranking also increased to 21.8 percent in 2017, up from 1.8 percent in 2016.

6.3 **Tanzania is below its peers in terms of translating services to better outcomes.** Given current health expenditure levels, Tanzania provides above average access to services. This is in part to good coverage of public and faith-based providers, even in remote and rural areas. health outcomes remain relatively poor. Comparing to other countries, Tanzania performs relatively well in terms of increasing access to care but poorly on actual service delivery outcomes (Figure 22).

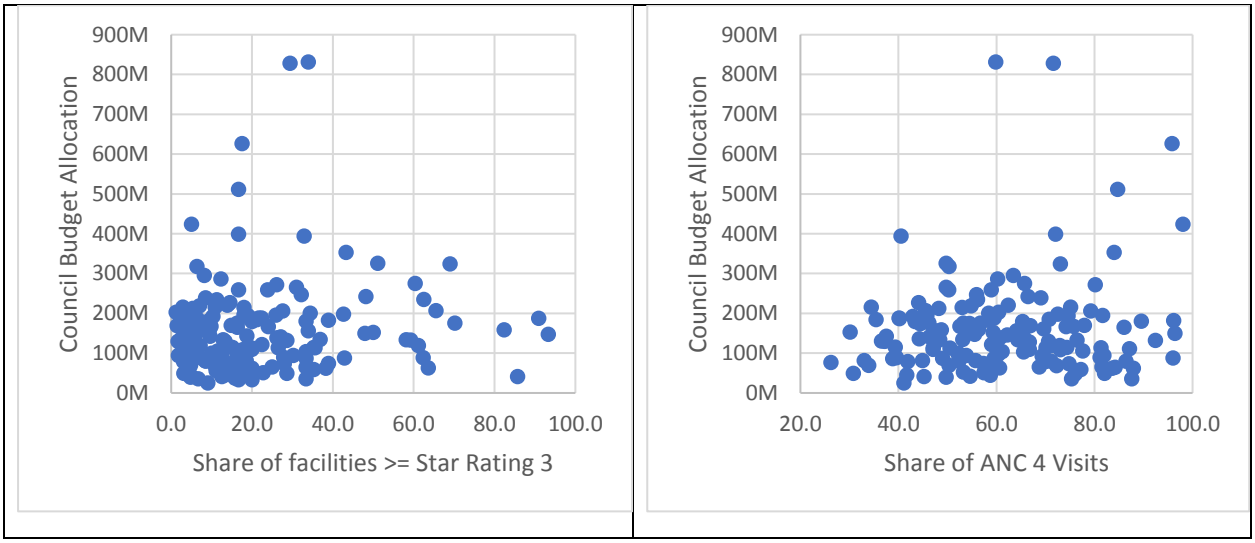
Figure 22: Financing for Service Delivery and Health Outcomes in Tanzania and Other Countries, 2019

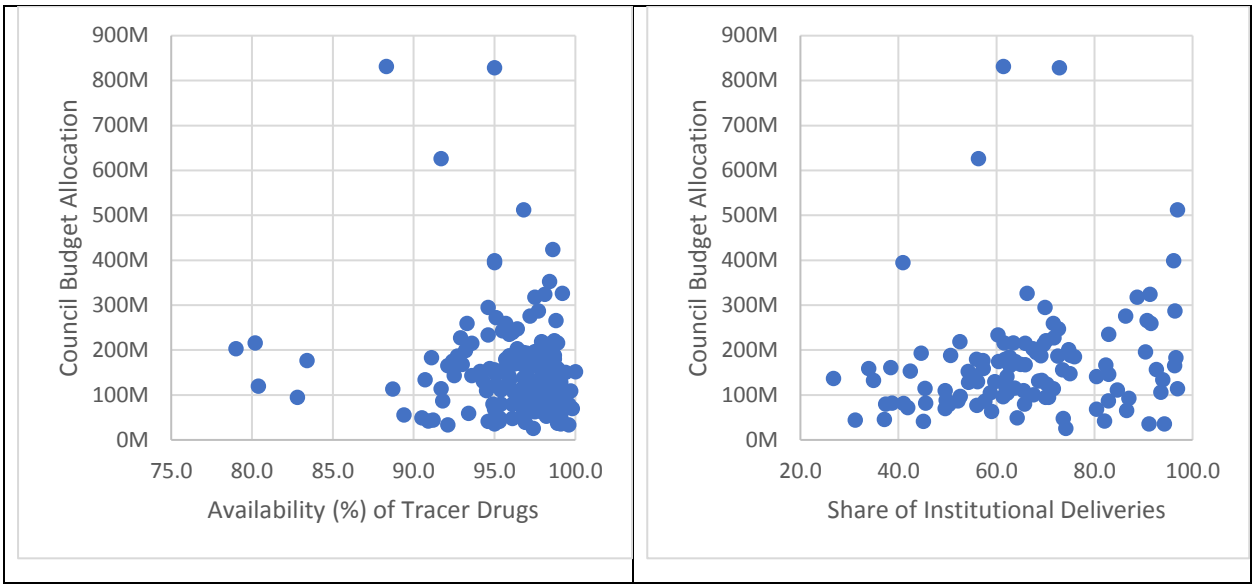


Source: World Development Indicators and WHO Global Health Expenditure Database (GHED)
Notes: Figure 21 shows this relationship with regard to the health care access and quality index and the maternal mortality ratio, but the finding also holds when mapping other indicators such as financing and antenatal care visits in the first scatter plot and antenatal visits and child or maternal mortality in the second chart.

6.4 **Tanzania has many opportunities to make efficiency gains.** There is significant variation in the performance of councils on key output indicators and financing allocations. For a given budget allocation, some councils achieve much better star ratings than others on indicators such as antenatal visits, tracer drug availability, and institutional deliveries (Figure 23). It is therefore crucial to explore what enables these councils to succeed where others fail and to develop context-specific lessons to inform the efforts of other councils.

Figure 23: Variations in Financing and Performance at the Council Level





Source: Authors, based on PlanRep, FMIS, and the Star Rating Database.

6.5 **The variation in the performance of councils on key output indicators may be partly explained by a lack of service readiness.** The World Health Organization's latest service availability and readiness assessment (SARA) for Tanzania pointed to significant shortcomings in the country's health system with regard to service availability and readiness.[43] Malaria services, antenatal care, family planning, child immunization, and preventive and curative child health services were available in 80 percent or more of all facilities in the sample, which is likely to have contributed to the recent significant reductions in under-5 mortality and malaria incidence. Services that were available in fewer than 30 percent of facilities included antiretroviral therapy for HIV (which explains the high rates of HIV in the country), basic surgery capacity, cardiovascular and chronic respiratory infection services, diabetes services, blood transfusion capacity, and advanced delivery services (Figures 24 and 25). In addition, Tanzania also ranks low in the WHO general service readiness (GSR) index, which is a composite measure that combines findings on amenities, equipment, standard precautions for preventing infection, diagnostics, and medicines and commodities.[44] Tanzania's overall GSR score was 42 out of 100**.** The highest score was for equipment (70), while in all other categories, Tanzania scored under 50 (Figure 26).

[43] World Bank (2016).
[44] World Bank (2016).

Figure 24: Specific Service Availability (% of all facilities offering the service)

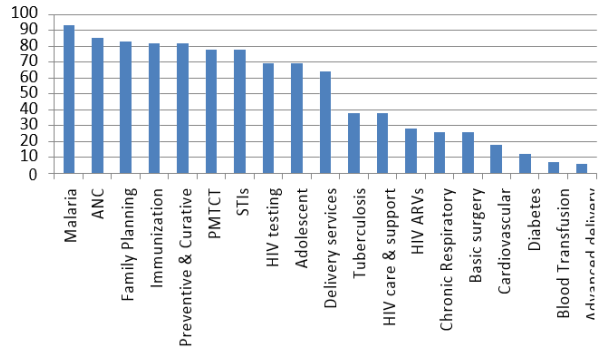
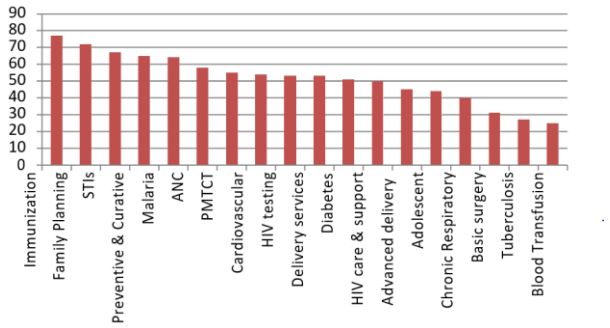
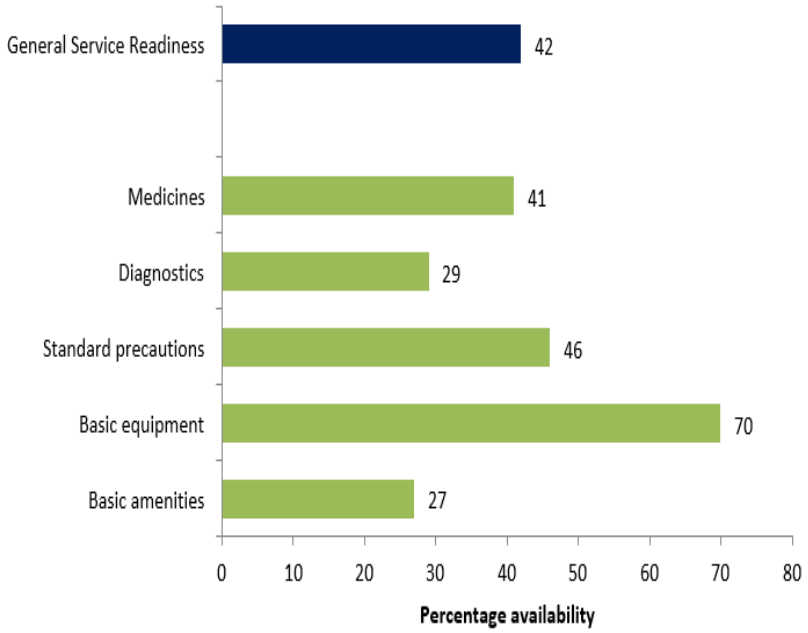


Figure 25: Readiness Score for Specific Services



Source: World Bank (2016).

Figure 26: General Service Readiness by Domain



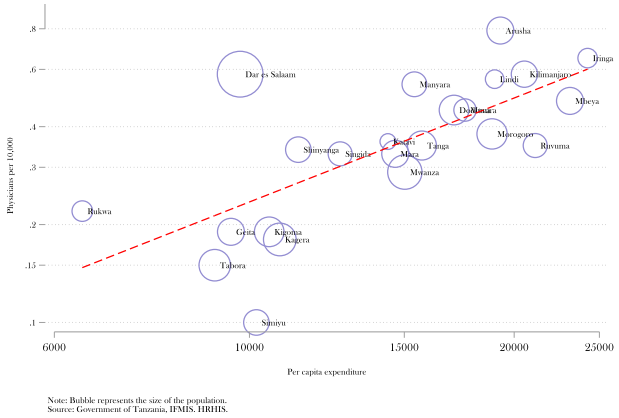
Source: World Bank (2016).

Human Resource Management

6.6 **Tanzania is not a well-resourced country in terms of the number of physicians and hospital beds.** It is estimated that there are 4.6 skilled staff for every 10,000 population, which is well below the regional average of 13. There are only 0.02 physicians for every 1,000 people, which compares to a regional average of 0.22. This is well below the WHO recommendation of 1 physician for every 1,000 people. Tanzania also has a low number of hospital beds, at 8 per 10,000 people, which is almost half the regional average of 15 (Annex Figure 13).

6.7 **Where there are physicians, there must also be an operations budget.** The government's operational budget financing is positively associated with the number of physicians (Figure 27). This is efficient as it means that physicians have some recurrent budget with which to work. However, there are notable exceptions to the trend where some facilities have only limited per capita financing despite having physicians in place. It is important to apply the budget allocation formula for the donor fund to the human resources budget as well as to the operations budget to ensure that objective and efficient decisions are taken.

Figure 27: Distribution of Physicians by Per Capita Spending in Tanzania



Source: Authors using FMIS and HRMIS data.

6.8 **Service use is low.** In Tanzania, the numbers of both outpatient visits and inpatient admissions are far lower than recommended by WHO. While the WHO benchmark is five outpatient visits per person and 10 discharges per 100 people respectively, Tanzania currently has only two visits per person and 0.6 discharges per 100 people respectively (Figure 28). Regions such as Simiyu, Tabora, Geita, and Rukwa that have fewer physicians also have lower than average service use, which demonstrates the need for more equitable allocation of physicians among the regions. On the other hand, service use does not always correlate with the number of physicians available, indicating that some physicians are significantly busier than others (Figure 29). Given their scarcity, ensuring the adequate distribution and use of physicians is a particularly challenging proposition.

Figure 28: Inpatient and Outpatient Visits

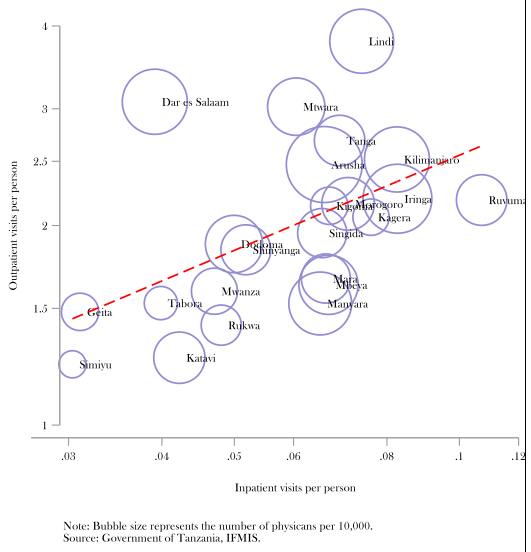
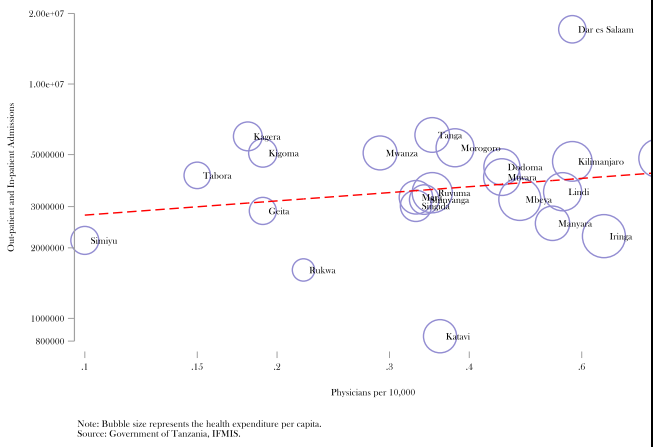


Figure 29: Service Use Compared to Number of Physicians



Source: Authors using data from the FMIS and the HRMIS.

6.9 **Absenteeism is a key problem in Tanzania.** The latest estimate of absenteeism rates from 2012 is provided in Table 11 broken down by facility level, ownership, location, and cadre. While not recent, it paints a sobering picture. Overall, only 73 percent of health workers scheduled to work were present during random site visits. The percentages differed drastically by facility level, ownership, and location.[45] Health centers and dispensaries had a much higher absenteeism rate than hospitals, and health workers were far more likely to be absent from facilities in rural areas. Clearly, location plays an important role in the rate of absenteeism. There are fewer private facilities in the rural areas, and in general, very few medical officers and assistant medical officers are posted to the rural areas. Thus, most of the differences in absenteeism were driven by the location of the facility, as NGO-run facilities and public facilities, which both serve similar populations, had similar rates of absenteeism.

[45] Renggli et al (2018).

Table 11: Level of Absenteeism by Type of Facility Level, Ownership, Location, and Cadre

Broken down by		# Scheduled	Present	Absent
Facility Level	Dispensary	28	66%	33%
	Health Center	19	52%	46%
	Hospital	46	84%	15%
Ownership	Public	63	71%	28%
	Private	15	80%	20%
	NGO	15	73%	26%
Location	Rural	19	63%	34%
	Semi-rural	38	74%	25%
	Urban	36	77%	22%
Cadre	MO	11	90%	10%
	AMO	15	87%	13%
	C. Officer	45	76%	23%
	C. Assistant	22	45%	55%
Overall average		93	73%	26%

Source: Government of Tanzania (2012).

7. Conclusions and Recommendations

7.1 This public expenditure review of the health sector in Tanzania covered a wide range of issues and was designed to identify the main bottlenecks and challenges facing the health sector and to offer recommendations for overcoming them.

7.2 ***Missed opportunity in good financial times***: Total government expenditures for health in Tanzania have increased at a moderately faster pace than population growth. However, at about US$28 per person, they remain well below what is necessary to provide an adequate package of services to the population. This modest increase happened during a time of financial and political stability, high growth, and good revenue mobilization, but with this situation now deteriorating, the opportunity has been missed to increase financing for the sector to make meaningful progress towards achieving universal health coverage.

7.3 ***Under-execution of the budget:*** Budget allocations to the sector, which were already low, were not implemented in full. This is due to factors outside the health sector including late and low release from treasury. Under execution of the budget further aggravates the under-funding of the sector, with the goods and services and maintenance budgets being most affected. This reduces the efficiency of the sector as infrastructure and human resources have not been used to their full extent. The insufficient execution of budgets also led to the accumulation of arrears, which have led to stock outs and supplier price increases.

7.4 ***High donor dependence and a shift to off-budget support:*** The shares of total public spending contributed by the government and donors has been consistently about 40:60. Development partners make up an unsustainably high share of total spending, and they are increasingly shifting their support towards off-budget modalities, which results in oversight and coordination challenges for the government.

7.5 ***User fees and pre-payment schemes****:* A small but growing share of total health spending comes from user fees and pre-payment schemes. These currently constitute only about 1 percent of total health spending, but these contributions have become an indispensable source of flexible

funding for service providers. Public providers face difficulties in recovering costs from insured patients, and the NHIF is consequently running a surplus. Private providers submit substantially more claims for the services they provided to the NHIF. User fees are charged for services at all levels of care, and, while they are crucial revenue for providers, they are a barrier to accessing care, especially for the poor and vulnerable.

7.6 ***Equitable distribution of spending:*** There is significant variation in health spending across and within regions. The Health Basket Fund is distributed by means of a formula that is driven in part by population and equity considerations. However, this formula is not used for the budget allocations and distribution of human resources, which constitute a large share of the total costs. The difficulty in finding health care personnel willing to be deployed to remote and poor regions exacerbates the inequitable distribution of resources.

7.7 ***Access to care and technical efficiency:*** More services are being provided in Tanzania than the regional average, but the available services are not efficiently resulting in better health outcomes. This may partly be due to factors outside the health sector, but it is also due to the low quality of many of the services in some parts of the country as there is significant deviation in the quality of the outputs produced by the country's councils. Some councils perform significantly better than others despite having similar (or lower) financing allocations. Lessons should be identified from the experiences of these councils to enable others to learn from them.

7.8 ***Public investment management:*** The government has increased its development spending with a focus on infrastructure investments, including building and refurbishing health centers and hospitals, to address the urgent need for more access to care. However, in the absence of commensurate increases in human resources and the creation of an operational and maintenance budget, these investments are unlikely to succeed in increasing access to quality care.

7.9 ***Human resource management***: There are a number of concerns about the availability and deployment of medical personnel in Tanzania. There are not enough staff, the available staff are not efficiently deployed, they do not always have an operations budget with which to work, which makes them ineffective, and there is evidence of absenteeism and low productivity. Furthermore, there are concerns about the availability of drugs, medical supplies, and equipment, which also affects whether physicians can operate effectively.

7.10 ***Fragmented provider payment architecture:*** Health care providers are financed from a multitude of sources including government budget allocations through councils, the Health Basket Fund, and results-based financing (RBF) projects. This has required facilities to deal with a multitude of planning and execution guidelines and reporting requirements. There was no "whole of government" approach to strategic purchasing, but instead there were a host of competing individual initiatives. However, the government has taken important steps towards unifying the payment system by harmonizing spending guidelines across financing sources. It has also reformed the PFM system to send its own budget allocations directly to the providers. This is a promising step towards laying the purchasing foundation for the proposed SNHIF. The analysis in this report recommends practical steps aimed at increasing the harmonization of financing sources to facilitate the transition toward a strategic output-based payment system.

Recommendations

7.11 The report offers a set of recommendations by stakeholder to address the concerns identified in the analysis. These have been developed with the outlook for an eventual transition toward a SNHIF.

Central Government Recommendations

- **Recommendation 1:** Consistent with national aspirations and commitments, domestic government health spending needs to increase significantly to provide a basic benefit package that is of sufficient quality. The non-wage recurrent budget should at least match population growth to prevent service quality from deteriorating and avoid any undue depreciation of infrastructure investments. It should be argued that increasing the health budget is an investment rather than merely a social service. An analysis that explicitly quantifies the economic and social returns to investments in health would help to make the case (such as deepening the fiscal space assessment by adding an inter-temporal dimension).

- **Recommendation 2:** There should be a balance between the allocations for personnel, development, and goods and services. Recent increased investments in infrastructure should be accompanied by increased allocations for goods and services to ensure that this infrastructure can become fully functional. Increased expenditure on maintenance will also be necessary to prevent any unnecessary depreciation. It is not enough to increase budget allocations – they must also be executed in full. The government should be encouraged to release its budgeted allocations in full to minimize the risk of facilities accumulating arrears. A public investment management assessment would be helpful to determine how best to strengthen the operationalization of infrastructure development spending and to ensure minimal price differentials among investments. This may include carrying out a costing exercise to identify the financial costs of running a hospital, health center, or dispensary after the buildings have been constructed to guide the future "other charges" budget allocation process.

- **Recommendation 3**: The government has made the necessary PFM provisions to provide budget allocations directly to providers (instead of districts or councils). The government should now operationalize this budget, based on the valuable lessons learned from the Health Basket Fund's experience of providing financing directly to health facilities. Implementation should be carefully monitored, and measures taken to avoid potential policy reversals. To minimize any disruption and fragmentation, it is recommended that the government should use the Health Basket Fund's allocation and execution protocols. Lessons from RBF implementation should be considered, including extending flexibility of resources use at the facility level.

- **Recommendation 4:** The government should encourage donors to bring their aid on budget to reduce inequities and duplications in support and to reduce the heavy administrative burden that results from the co-existence of many small projects. The health sector's budgetary processes are sufficiently strong to support the consolidation of financing sources to make better use of the limited resources available if and fiduciary

precautions taken. The Health Basket Fund represents a good opportunity for donors to use government systems to support primary care directly. In the meantime, the MOHCDGE&C would benefit from developing a dedicated reporting tool for off-budget donor support that can easily be integrated with other government systems such as Epicor, PlanRep, and FFARS (the facility financial accounting and reporting system).

- **Recommendation 5:** The government is encouraged to revisit the budget allocation formula to local government authorities to reduce inequities across and within regions. It should also consider adopting innovative incentive mechanisms to motivate staff to relocate to remote and poor regions for prolonged periods of time. Analytical work is needed on the adequacy of the health sector workforce, the role played by the community health platform, and explore opportunities for expansion.

Recommendations for the MoHCDGE&C and PORALG

- **Recommendation 6:** User fees make up an increasingly significant share of the revenue of health service providers at all levels, but they are a barrier to accessing care, especially for the poor and vulnerable. Analytical work is necessary to explore possibilities for increasing financial protection in the transition toward the SNHIF. Once the 2018 household budget survey data are available, a benefit and financing incidence analysis should be undertaken to better understand who benefits and who carries the financing burden of health spending and revenue generation. An impoverishment assessment of the effects of user fees would also be useful to shed light on the urgency of the matter.

- **Recommendation 7:** Pre-payment schemes generate limited resources for health care through member contributions. Policymakers will need to give careful consideration to the financial viability of expanding access to insurance through the proposed SNHIF. The government should explore options for providing subsidies from the general budget.

- **Recommendation 8:** Qualitative studies should be done of the variations between regions in their production of service delivery outputs in order to identify lessons from those councils that have been most successful. Sharing context specific examples of good practices will help others operate more efficiently and effectively, which in turn will translate into the need for fewer resources to provide quality health services to all.

- **Recommendation 9:** The government has made remarkable progress in defragmenting the provider payment system, but more work needs to be done. The comprehensive facility and council health plans should be complemented by a unified set of budget execution protocols (including reporting requirements) that apply to all financing sources. The government already has a reliable financial management information system infrastructure but making further investments in the ICT infrastructure will help the ongoing effort to defragment the provider payment system. It would be helpful to have an assessment of the financial management information systems in the health sector and their interoperability to guide this effort.

Further analytical work is recommended. In particular:

- Household budget data should be used once it becomes available to assess the financing and benefit incidence of spending. The same data can be used to conduct an impoverishment assessment of out of pocket spending.
- A public investment management assessment to determine whether newly built facilities are functional, whether there is adequate staff to operate them, and if there are significant price differentials across facilities.
- Undertake a costing study to identify financial requirement to run a hospital, health center, or dispensary after construction to guide the future OC budget allocations process.
- The last national health accounts exercise was done with 2012 data. It would be useful to estimate private sector spending to supplement data collected in this PER.
- An updated Service Availability and Readiness Assessment would be helpful to pinpoint human resource management and quality concerns.
- Expand the fiscal space assessment in this PER to account for intertemporal factors and treat health as an investment in human capital to explicitly recognize the economic returns.
- Analytical work on the adequacy of the workforce, the role of community health platform and opportunities for expansion is recommended.
- Assessment of financial management information systems and supporting interface and interoperability of systems to strengthen management and oversight functions.
- Analytical work should be conducted to provide options to government on how to unify financing streams and spending protocols.

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Annex 1: Additional Tables and Figures

Annex Table 1: Population Estimates, 2018

Region	Population	Share
Dar es Salaam	5,663,519	11.3%
Mwanza	3,250,163	6.5%
Kagera	2,910,705	5.8%
Tabora	2,677,873	5.3%
Morogoro	2,516,447	5.0%
Kigoma	2,418,569	4.8%
Dodoma	2,328,870	4.6%
Tanga	2,303,087	4.6%
Geita	2,000,669	4.0%
Mara	1,989,297	4.0%
Mbeya	1,974,682	3.9%
Arusha	1,960,309	3.9%
Kilimanjaro	1,801,651	3.6%
Simiyu	1,747,012	3.5%
Shinyanga	1,713,784	3.4%
Manyara	1,688,337	3.4%
Singida	1,551,039	3.1%
Ruvuma	1,541,633	3.1%
Mtwara	1,356,384	2.7%
Pwani	1,233,534	2.5%
Rukwa	1,191,712	2.4%
Songwe	1,154,451	2.3%
Iringa	999,649	2.0%
Lindi	908,555	1.8%
Njombe	732,593	1.5%
Katavi	670,632	1.3%
Grand Total	50,285,155	100.0%

Source: National Bureau of Statistics, Tanzania.
Notes: Estimates based on 2012 Census data

Annex Table 2: Council Star Rating Performance, 2017/18

Region	Number of Councils	Number of 4 Star Facilities	Number of 3 Star Facilities	Average Share of Council with 3 Star Facilities
Mbeya	7	8	103	44.6%
Geita	6	2	56	44.2%
Kilimanjaro	7	23	126	43.5%
Mwanza	8	2	117	34.4%
Kagera	8	5	90	33.3%
Dar es Salaam	5	26	117	32.4%
Shinyanga	6	2	51	26.6%

Singida	7	4	49	23.7%
Tabora	8		71	23.3%
Dodoma	8	3	64	20.8%
Arusha	7	3	74	20.3%
Pwani	9	2	59	19.5%
Simiyu	6		32	16.4%
Iringa	5		33	15.4%
Katavi	5		11	12.8%
Manyara	7		25	12.6%
Mtwara	9	1	23	12.2%
Morogoro	9	4	43	11.3%
Lindi	6	1	22	9.2%
Mara	9		26	9.0%
Tanga	11	3	27	8.6%
Rukwa	4	2	15	7.9%
Njombe	6	3	12	7.4%
Ruvuma	8		15	5.1%
Songwe	5		5	4.3%
Kigoma	8		10	3.5%
Total	**184**	**94**	**1276**	**19.1%**

Source: Ministry of Health, 2018.

Annex Table 3: Council Level Key Performance Indicators (%), 2018

Council	ANC 4 Visits	Institutional Deliveries	Iron and Folic Acid	Contraceptive Prevalence	Tracer Drugs Availability	Facilities rated 3 stars or above
Arusha cc	96.4	115.5	73.3	39	99.4	47.95
Arusha dc	52.2	52.6	73.5	36.9	97.7	16.36
Babati dc	43.4	55.9	82	37.6	95.7	4.44
Babati tc	53.2	107.1	97.8	63.3	98.2	16.67
Bagamoyo dc	87.9	104.6	69	44.1	97.5	20
Bahi	53.8	70.6	92.9	54	98.1	30.23
Bariadi dc	55.9	72.6	73.6	23.4	96.4	32.14
Bariadi tc	81.1	108.4	75.5	25.1	97.8	27.78
Biharamulo dc	73	91.3	76.2	29.3	98.1	68.97
Buchosa dc	56.1	82.9	69.9	18.5	95.9	62.5
Buhingwe	62.2	82.9	45.9	35.5	95.1	5.88
Bukoba dc	46.2	57.2	76.6	38.1	83.4	7.32
Bukombe dc	70	105.6	96.8	36.6	99.6	15.79
Bukuba mc	58.4	96.6	71.8	21.5	91.1	38.89
Bumbuli	33	41	93	35.2	97.1	8.33
Bunda dc	44.4	60.4	82.3	29.8	98.2	3.57
Bunda tc	49.7	101.6	67.3	37.3	96.9	4.76
Busega	49.6	61.1	73	33.7	88.4	0

Busokelo dc	60.6	59	73.6	51.3	96.9	63.64
Butiama	48.4	55.3	70.7	37.2	98.5	12.82
Chalinze dc	53	65.8	77.2	33.4	93.6	18.03
Chamwino	44.8	72.5	86	48	92.7	3.08
Chato dc	84	118.2	93.3	34.7	98.4	43.24
Chemba	43.2	33.6	79.5	35.7	93.5	0
Chunya dc	158.9	107.8	109.8	56.8	97.4	90.91
Dodoma mc	50.2	91.5	57.9	36.1	95.7	23.88
Gairo	47.2	45.8	74.8	42	95.6	0
Geita dc	84.7	96.9	78.4	20.8	96.8	16.67
Geita tc	74.3	128.6	90.4	27.4	91.7	35.29
Hai dc	39.6	49.7	96.9	42	96.7	62.3
Hanang'	42.9	44.6	81.8	28.4	97	10.34
Handeni dc	54.8	52.5	63.2	39.7	97.9	6.98
Handeni tc	82	108.2	84.8	25.1	95.3	28.57
Ifakara	71.6	138.5	86.7	70.3	98.6	0
Igunga	60.2	96.4	63.8	25.8	97.7	12.31
Ikungi	65.3	61.7	82.2	31.8	98.2	20
Ilala	71.6	72.8	75.3	19.3	95	29.38
Ileje dc	41.9	50.3	70	57.5	96.1	3.03
Ilemela mc	53.1	55.3	84.6	25.2	95.9	36.84
Iramba	74.6	68.1	85.5	45.7	98.3	19.05
Iringa dc	47.5	73.5	67.3	39.4	95	8.97
Iringa mc	74.8	120.3	86.2	41	98.5	28
Itigi	52.2	67.5	72.7	37.5	96.9	10
Itilima	40.2	69	69.3	15.5	95.9	6.45
Kahama dc	73	151.7	69.7	43.8	99.7	17.65
Kakonko	63.2	103	94.2	43.3	96	0
Kalua	64.3	93.9	76	42.8	90.7	58.14
Karagwe	72	96.1	63.6	30.4	95	16.67
Karatu dc	58.9	71.6	83.2	37.1	93.3	16.67
Kasulu dc	60.3	61.3	67.4	49.3	97.9	12.5
Kasulu tc	98	121.5	85.9	57.3	98.6	5
Kibaha dc	77.6	93.5	78.2	44.1	96.2	11.54
Kibaha tc	83.6	125.8	71.4	60.8	97.9	38.24
Kibiti dc	86.4	118.8	76	35	98.2	10.2
Kibondo	107.9	162.5	87.8	104	94.3	2.22
Kigamboni	66.4	148.8	63.4	59.9	95.5	48.15
Kigoma dc	132	70.3	79.8	63.6	97.6	2.38
Kigoma mc	63.8	90.7	74.8	51.3	97.8	0
Kilambo	81.5	86.5	84.4	29.4	96.8	10.94
Kilindi	65.3	53.1	60.4	38.6	91	0
Kilolo dc	37.2	59.6	78.1	45.6	97	1.67
Kilombero	48.2	69.6	71.1	31.1	98.3	5.36
Kilosa	56	60.3	60	36.7	94.6	11.27
Kilwa	81.9	70	75.1	63.8	82.8	1.75
Kinondonl	95.8	56.3	83.1	15.5	91.7	17.5
Kisarawe dc	70.1	96.9	58.9	56.7	96.7	26.47
Kishapu dc	86	96.3	88.1	46.4	97.5	16.33

Kiteto dc	69.6	38.4	62.5	37.4	95.7	3.13
Kondoa dc	48.7	33.9	86.7	36.2	98.9	82.35
Kondoa tc	103.7	136.8	99	37.8	99.6	16.67
Kongwa	61.3	76.5	99	59.9	96.6	0
Korogwe dc	30.1	42.4	67.5	34	95.7	3.77
Korogwe tc	42.7	124	97.7	46.8	99.1	0
Kwimba dc	44.1	71.7	77.7	22.3	92.9	14.55
Kyela dc	81.3	71.6	88.7	44	99.1	35.56
Kyerwa	58.4	74.7	92.7	32.6	98.1	34.38
Lindi dc	59	61.8	65.8	65.2	95.1	22.45
Lindi mc	54.6	82	79.5	51.2	90.9	5
Liwale	72.2	80.4	87.6	124.6	95	18.42
Longido dc	44.9	38.7	80.5	45.2	97	18.52
Ludewa dc	30.8	64.2	49.1	39.1	90.5	3.13
Lushoto	54.5	63.8	76.5	27	97.2	9.09
Madaba	41.7	37.1	88.2	40.7	99.1	13.33
Mafia dc	75.3	94.2	84.6	58.9	99.1	33.33
Mafinga tc	107.2	152.4	91.5	58.3	98.9	15.79
Magu dc	56.7	108.2	81.4	27.7	97.9	70.21
Makambako tc	101.7	131.2	57.1	43.9	92.1	20
Makete dc	27.9	69.3	60.2	55.9	90.3	0
Malinyi	114.7	103.6	96.2	48.3	92.5	18.75
Manyoni	49.7	90.7	63.2	55	98.8	30.95
Masasi dc	59.3	54.2	66.2	58.5	94.1	6.38
Masasi tc	77.2	129.8	81.9	76.6	93.4	35.29
Maswa	35.4	62.6	58.2	22.4	96.2	21.28
Mbarali dc	65.7	86.3	68.9	31.5	97.2	60.38
Mbeya cc	89.5	108.1	69.8	38.7	98.7	33.33
Mbeya dc	66.9	63	94.2	35.2	96.2	1.47
Mbinga dc	37.5	55.2	64.7	22.9	93.6	9.62
Mbinga tc	51.1	141.8	53.2	26.4	96.8	0
Mbogwe	72.9	107.2	92.6	29.7	97.3	61.11
Mbozi dc	60.4	67.4	84.8	53.6	96.4	1.25
Mbulu dc	50.5	62	84.4	33.2	88.7	20
Mbulu tc	69.3	87	50.1	50.1	99.1	6.67
Meatu	34.4	61.5	74	19.5	98.9	10.91
Meru dc	38.8	57.6	50.1	45.8	96.5	11.67
Missenyi	59.5	75.1	91.1	42.9	98.7	21.62
Misungwi dc	69	107.4	66.5	33.2	96.1	8.51
Mkalama	49	52.1	74.9	44.9	97	33.33
Mkinga	38.9	53.2	70.5	60.3	96.6	0
Mkuranga dc	77.9	106.9	55.4	36.2	96.5	14.81
Mlele	204.4	145.9	73.1	68.1	95.3	12.5
Momba dc	59.5	82.8	57	50	91.8	5.88
Monduli dc	55.7	45.5	72.6	46.8	98.2	15.91
Morogoro dc	75.1	63.4	96.4	37.8	80.2	2.9
Morogoro mc	64.1	92.6	76.8	40	98.2	33.93
Moshi dc	76.4	34.9	98.2	50.1	98.9	59.26
Moshi mc	96	136.4	88.2	39.1	96.7	42.86

Mpanda dc	76	73.6	78.5	52	96.1	19.05
Mpanda mc	81.6	130.8	48.4	37.7	96.8	5.56
Mpimbe	71.3	103	67.1	54.4	80.4	7.14
Mpwapwa	52.5	64.9	86.9	56	93	9.84
Msalala dc	96.1	101.6	77	39.7	98.5	9.38
Mtwara dc	64.9	55.9	57.2	94.9	93.9	0
Mtwara mc	57.4	107.9	66	73.8	99.1	22.73
Mufindi dc	40.1	50.6	80.8	54.5	97.3	22.39
Muheza	26.2	56	65.9	47.8	97.7	4.26
Muleba	49.7	66.2	85.9	31.1	99.2	51.06
Musoma dc	48.4	65.5	57.5	28.3	97.9	0
Musoma mc	84.2	112.1	81.3	42.1	98.6	33.33
Mvomero	56.3	57.3	57.2	34	94.7	9.46
Mwanga dc	58	41.9	99.8	38	97.1	15.09
Nachingwea	75.7	65.8	76.8	88	96.8	2.33
Namtumbo	59.3	48.9	42.3	45.5	88.8	0
Nanyamba	71.1	37.4	57.8	88.8	95.4	4.17
Nanyumbu	92.4	69.2	98.4	95.9	97.1	28.57
Newala dc	63.6	43.9	79.3	78.6	96.7	0
Newala tc	87.6	91.1	68.8	86.9	95	6.67
Ngara	79.2	101.7	93.4	54.3	98.6	27.59
Ngorongoro dc	47.1	45.4	93.3	24.8	98	15.15
Njombe dc	47	49.5	69	42.3	98.1	3.7
Njombe tc	33.9	105	71.6	48.6	98.9	4.76
Nkasi	110.2	109.1	88.8	43.7	97.5	18
Nsimbo	70.7	75.9	72.1	43.8	96.9	20
Nyamagana cc	72.5	148.9	60.6	27.5	93.2	42.59
Nyang'hwale dc	55.5	75	84.3	25.1	97	93.33
Nyasa	52.3	65.7	54.6	42.4	94.9	8.57
Nzega dc	53.2	106.2	68.7	26.6	92.4	16.33
Nzega tc	58.7	31.2	68.4	19.8	91.2	12.5
Pangani	41.1	74.1	79.8	47	97.4	9.09
Rombo dc	61.1	58.7	85.2	31.3	98.6	33.33
Rorya	36.5	68.6	104.3	28.6	95.9	4.26
Ruangwa	65.5	62.2	81.8	135.7	98.7	5.41
Rufiji dc	106.8	118.1	82.2	70.6	98.3	3.13
Rungwe dc	46.3	62.1	69.4	25.4	98.2	27.08
Same dc	66.7	54.3	92.6	45	99.1	5.8
Sengerema dc	80.1	136	84.6	28.6	95.1	26.09
Serengeti	54.4	62.7	53.9	42.5	92.1	8.93
Shinyanga dc	68.7	104.2	75.5	29.7	98.4	25
Shinyanga mc	45.5	124.8	84.1	29.7	98	65.52
Siha dc	45.2	45.1	90.2	38.9	94.6	85.71
Sikonge	144.3	160.2	53.7	55.3	79	2.94
Simanjiro	44.2	26.7	79.4	31.5	99	26.83
Singida dc	70.6	56.1	91.6	61.1	97.3	13.33
Singida mc	57.3	152	68.2	43.5	98.7	38.89
Songea dc	87.1	84.6	75.1	27.4	95.4	3.13
Songea mc	62.3	123.9	55.5	37	95.7	0

Songwe dc	88.9	97.6	101	41.2	96.5	0
Sumbawanga dc	94	107.4	58.4	40.4	97	0
Sumbwanga mc	110.5	129.1	90.9	47.7	97.8	2.56
Tabora mc	60.7	114.2	57.6	36.6	96.8	26.19
Tandahimba	65.5	80.4	79	53.4	95.9	5.56
Tanga city	74.2	82.3	88.8	45.6	98.6	24
Tarime dc	39.3	63.7	70.9	26.6	97.1	13.33
Tarime tc	40.2	128.2	33.3	28.8	92.7	0
Temeke	59.8	61.4	72.8	17.3	88.3	33.93
Tunduma cc	76.4	102.3	59.6	28.9	89.4	11.11
Tunduru	50.3	88.7	36.1	76.4	97.5	6.35
Ubungo	40.5	40.9	88.4	14.5	95	32.88
Ukerewe dc	62.4	70.1	79.4	27.2	98.7	13.89
Ulanga	66.7	65.5	62.1	37	94.5	20
Urambo	101.4	142.4	60.6	51.5	100	50
Ushetu dc	45.8	90.4	90.3	30.3	98	25.93
Uvinza	51.2	67.6	87.9	33	98.8	0
Uyui	63.4	69.9	72.5	28.3	94.6	8.16
Wangang' dc	50.3	49.5	59.2	48.6	99.8	12.77

Source: Ministry of Health, 2018.

Annex Table 4: Budget Execution Rates by Sector and Expenditure Type, 2017

Sector	Total	Recurrent	Wages	G/S	Grants	Development
Security	93%	95%	96%	81%	100%	29%
Defense	89%	94%	94%	82%	54%	60%
Education	88%	95%	91%	54%	90%	63%
Health	*82%*	*89%*	*96%*	*70%*	*80%*	*70%*
Judiciary	75%	96%	96%	66%	64%	37%
Infrastructure	71%	83%	89%	27%	71%	70%
Energy	70%	120%	88%	122%	66%	66%
Agriculture	54%	76%	86%	53%	66%	26%
Water	34%	71%	90%	32%	34%	32%

Source: FMIS.
Note: G/S = Goods and Services.

Annex Table 5: Budget Execution in the Health Sector

	2010	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*
Total	81%	81%	94%	90%	87%	91%	76%	82%
Recurrent	93%	102%	94%	92%	91%	94%	94%	89%
Wages	95%	130%	98%	98%	98%	97%	97%	96%
Goods and Services	69%	57%	97%	91%	95%	95%	35%	70%
Grants	91%	98%	91%	88%	88%	91%	86%	80%
Development	67%	61%	94%	87%	81%	85%	38%	70%

Source: FMIS and Boost.

Annex Table 6: MOHCDGE&C Spending by Economic Classification, 2017

Category	*TZS 2017*	*Share*
Grants	175,692 M	29.5%
Other Expenses	152,012 M	25.6%
Goods and Services	135,393 M	22.8%
Current Subsidies	85,317 M	14.3%
Wages and Allowances	40,211 M	6.8%
Acquisition of Fixed Assets	3,979 M	0.67%
Social Benefits	1,926 M	0.3%
Routine Maintenance	339 M	0.1%
Total	594,868 M	100.0%

Source: Epicor.

Annex Table 7: NHIF Expenditure Categories, TZS millions

TZS millions	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Benefits Payment	56,043.79	97,924.61	132,033.59	156,710.21	220,088.33	263,487.42
Administrative Expenditure	21,102.30	26,563.34	37,329.85	50,224.31	48,707.72	49,786.78
Other/Capital Expenditures	9,661.69	8,163.77	12,949.19	20,726.14	18,174.78	20,132.75
Total	86,807.78	132,651.72	182,312.63	227,660.66	286,970.83	333,406.95

Source: Authors, based on NHIF (2019).

Annex Table 8: Composition of Human Resources in Health Sector

Profession type	Sex	Total
Nurse	Female	28,442
	Male	6,111
	Total	**34,553**
Medical attendant	Female	22,547
	Male	5,386
	Total	**27,933**
Clinical officer	Female	3,835
	Male	7,305
	Total	**11,140**
Administrative	Female	2,551
	Male	3,767
	Total	**6,318**

Other	Female	2,625
	Male	3,653
	Total	**6,278**
Medical doctors	Female	1,515
	Male	3,720
	Total	**5,235**
Lab technician	Female	2,187
	Male	2,984
	Total	**5,171**
Pharmacist	Female	550
	Male	885
	Total	**1,435**
Specialist	Female	142
	Male	350
	Total	**492**
Grand Total		**98,555**

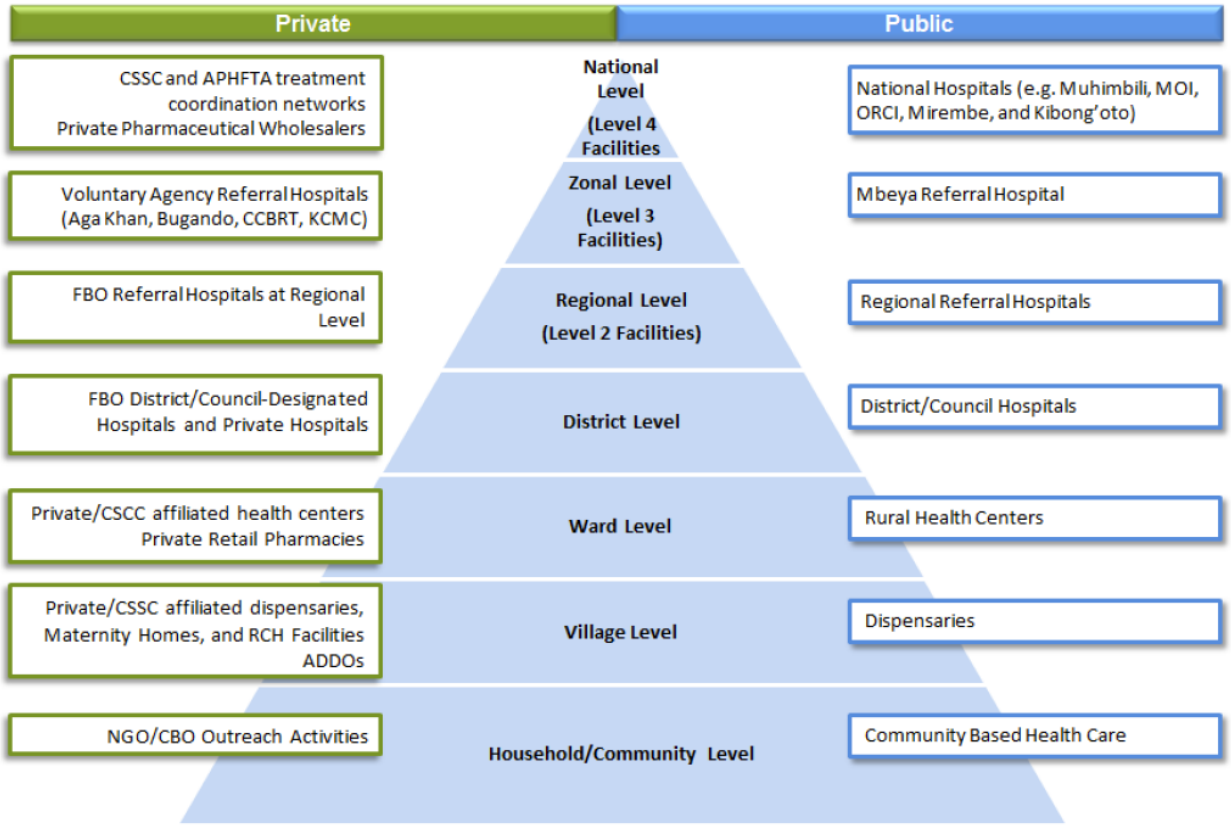
Source: Ministry of Health, 2018.

Annex Table 9: Summary of Provisions in the Planning, Spending, and Reporting Guidelines

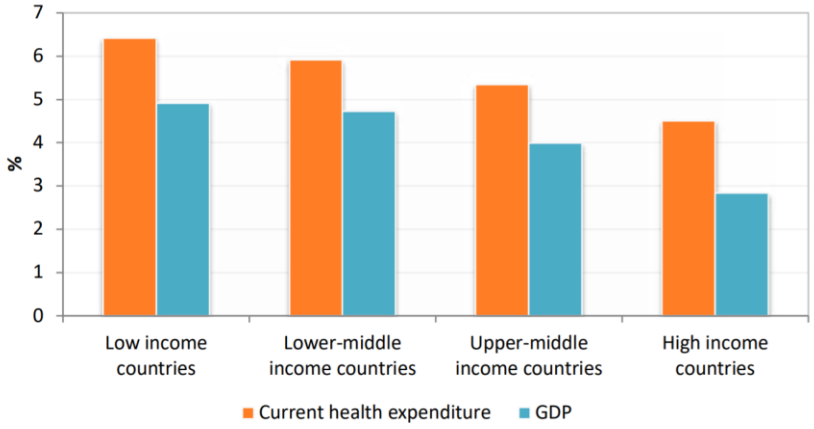
	Cost-sharing Guidelines	*CCHP Guidelines*	*RBF Guidelines*	*DHFF and FFARS*
Planning & Budgeting	Procurement of health commodities (medicines, medical equipment, supplies and diagnostic reagents) = 50% Expenditures for extra duty and incentives for staff = 15% Minor works for the hospital 20% Maintenance of equipment = 5% Other operational costs = 10%. All plans and budgets for all facilities including all sources of funds are compiled in the CCHP, including user fees, CHF, and NHIF.	The formula for the allocation of HBF to councils has been maintained for determining budget ceilings. This formula considers equity; population, poverty, under-5 mortality and service area. All facilities prepare comprehensive facility plans which includes activities funded by all sources. The CCHPs are compiled and include all facilities plans and CHMT activities.	Quarterly business plans are updated after every quarter and approved by health facility governing committees. Facilities can change/ add/delete activities as they see fit. Facilities are allocated funds according to the agreed indicators and the fees for service that they set. All facilities prepare comprehensive facility plans that include activities funded by RBF. All plans and budgets for all facilities including all	Provides formulae to allocate funds between health centers and dispensaries within the same LGA. Considers facility use, service population, and distance from the district headquarters. All facilities prepare comprehensive facility plans that include activities funded by RBF. All plans and budgets for all facilities including all sources of funds are compiled in the CCHP.

			sources of funds are compiled in the CCHP.	
Execution	Provide directives on how to manage and spend revenues collected at the facility level. i.e which indicative prices for services charged user fees, which spending categories are allowed, the maximum to be spent in each category, and authorization entities. All accounting processes are done within FFARS.	The CCHPs are put into practice by executing facility plans and CHMT plans. The CCHPs are exported into FFARS for execution	Facilities have the autonomy to make decisions and spend funds according to their quarterly business plans. No negative list is provided. The objective is to increase performance of the indicators lagging informed by verification. All accounting processes are done within FFARS.	Automatically receive from PlanRep: plan, budget and chart of accounts codes Perform procurement procedures consistent with internal controls. Enter accounting transactions for facility-level funds received and spent and reconcile bank account. Provide financial reports for facilities and for LGA, the sector ministry, and other funders. Automatically send information on funds received and expensed to PlanRep and Epicor. All accounting processes are done within FFARS
Reporting	Nine specific forms to be filled in are included in the guideline. Frequency of filling the forms (quarterly) and submission authority for each form is specified.	PlanRep produces quarterly reports for physical implementation and FFARS financial reports.	FFARS system used to account, monitor, and report on how RBF funds were spent.	FFARS generates automatic reports

Annex Figure 1: An Overview of the Tanzania Health System

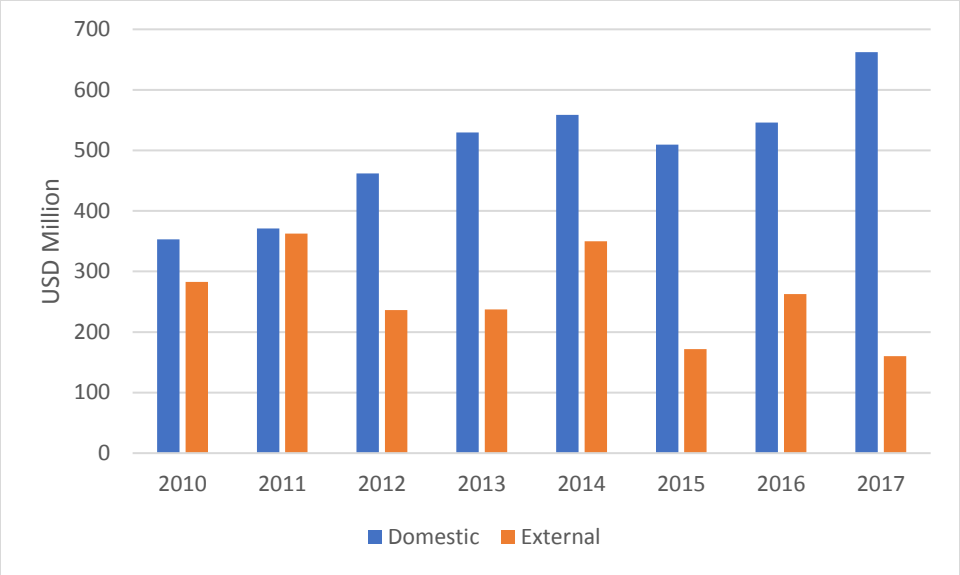


Annex Figure 2: Health Spending Growing Fastest in Low-income Countries, Average Real Growth Rate (2000-2016)



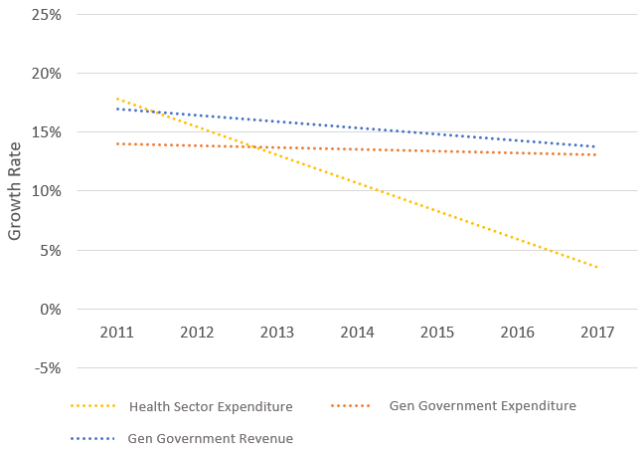
Source: World Health Organization (2019)

Annex Figure 3: Foreign Financing of the Health Budget

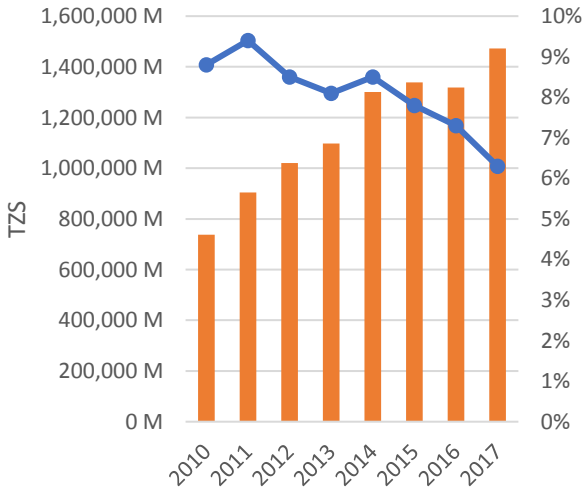


Source: Government FMIS.
Note: In government terminology, domestic and external are called *local* and *foreign* respectively.

Annex Figure 4: Growth Rate Trend of Health Expenditures Compared to General Government Revenue and Expenditure



Annex Figure 5: Health as a Share of General Government Expenditure



Source: Government FMIS.
Note: Government health spending follows the definition in the Systems of Health Accounts 2011 (World Health Organization, 2011)
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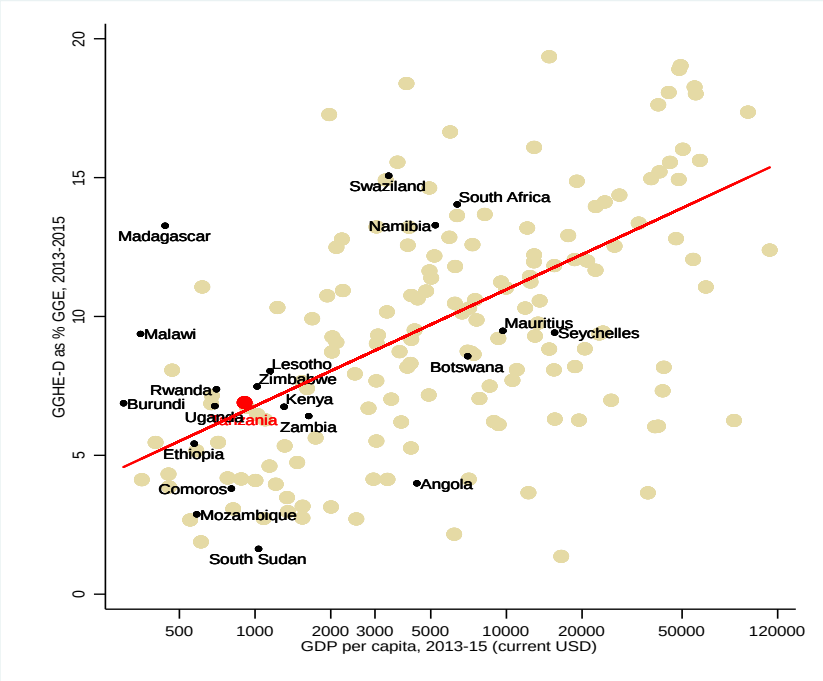
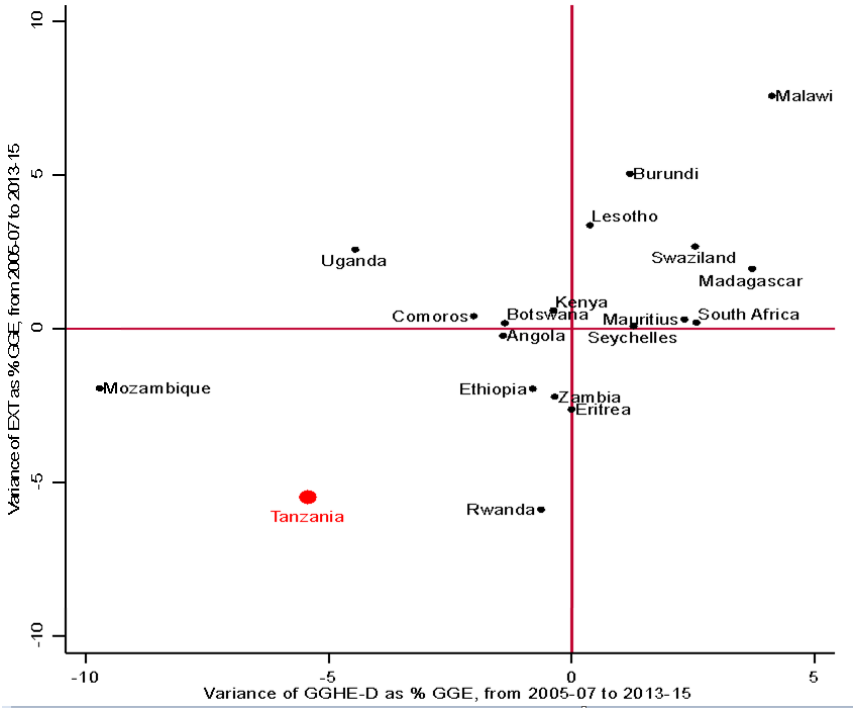
Annex Figure 6: Health Spending Across the Region, GHED Estimates



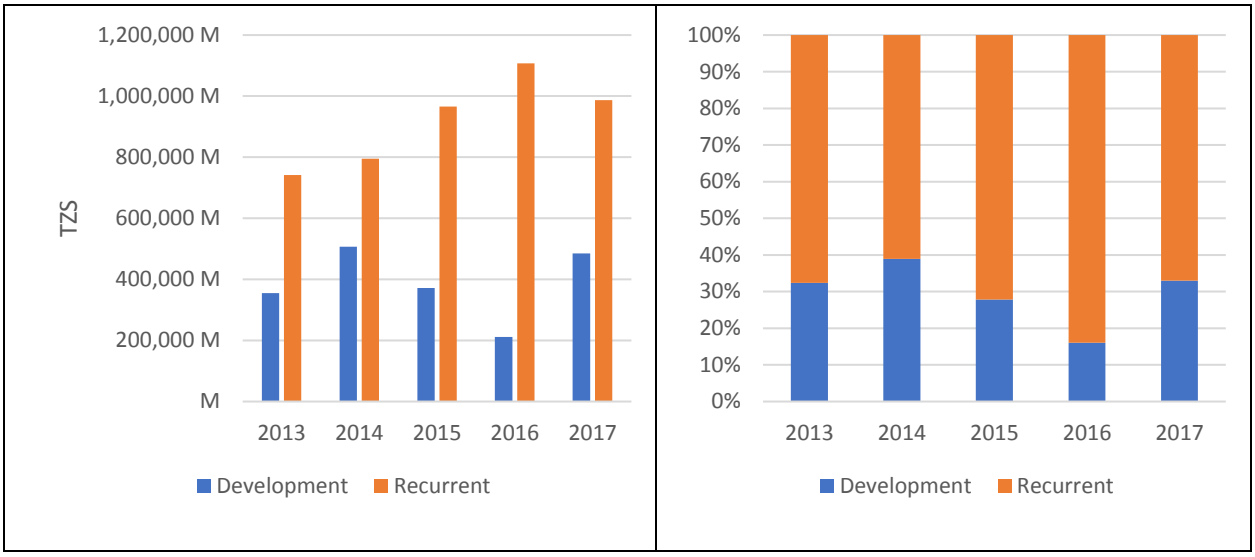
Source: WHO GHED, 2019.

Annex Figure 7: A Change in Priorities for Health, GHED Estimates



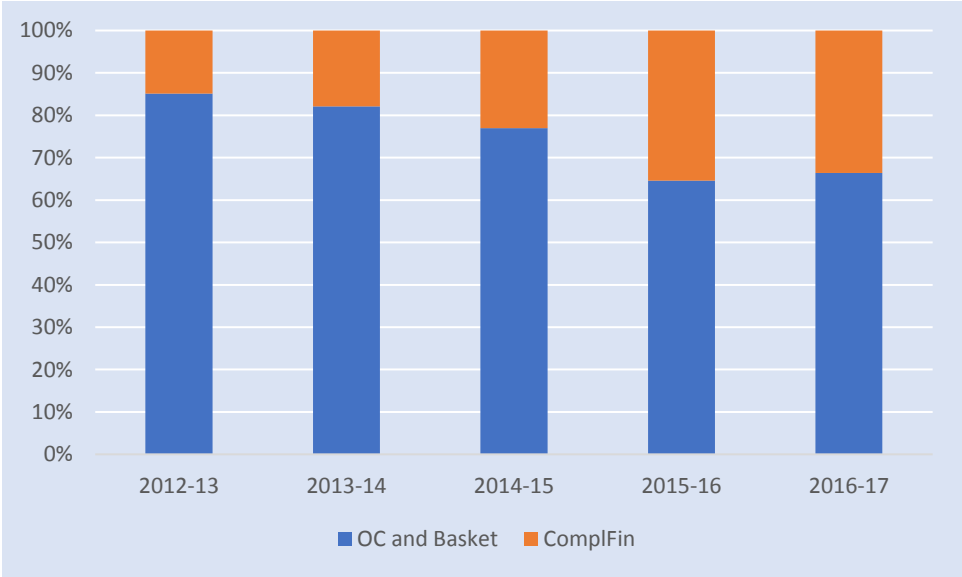
Source: WHO GHED, 2019.

Annex Figure 8: Composition of Development and Recurrent Spending



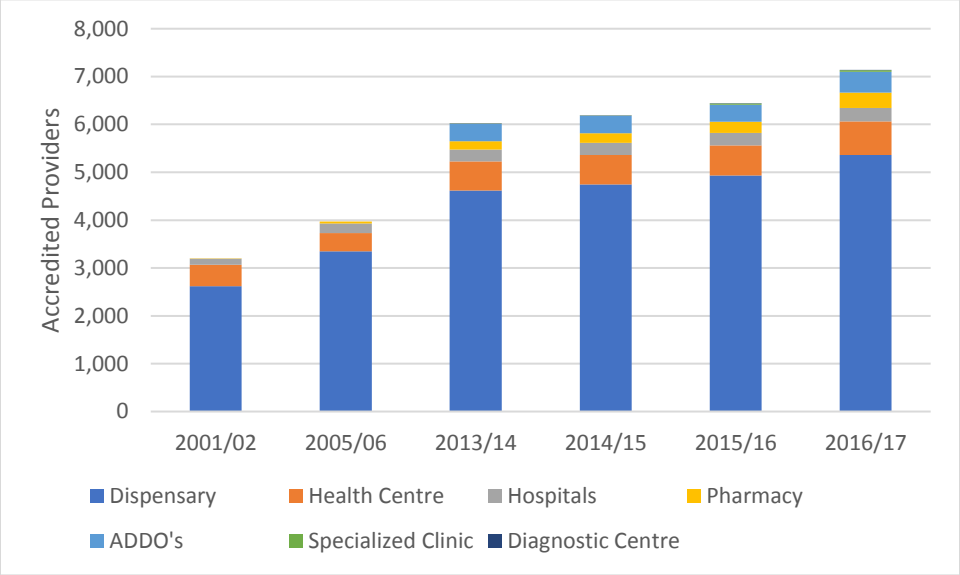
Source: Government FMIS and Boost.

Annex Figure 9: OC and Basket Compared to Complementary Financing Mechanisms

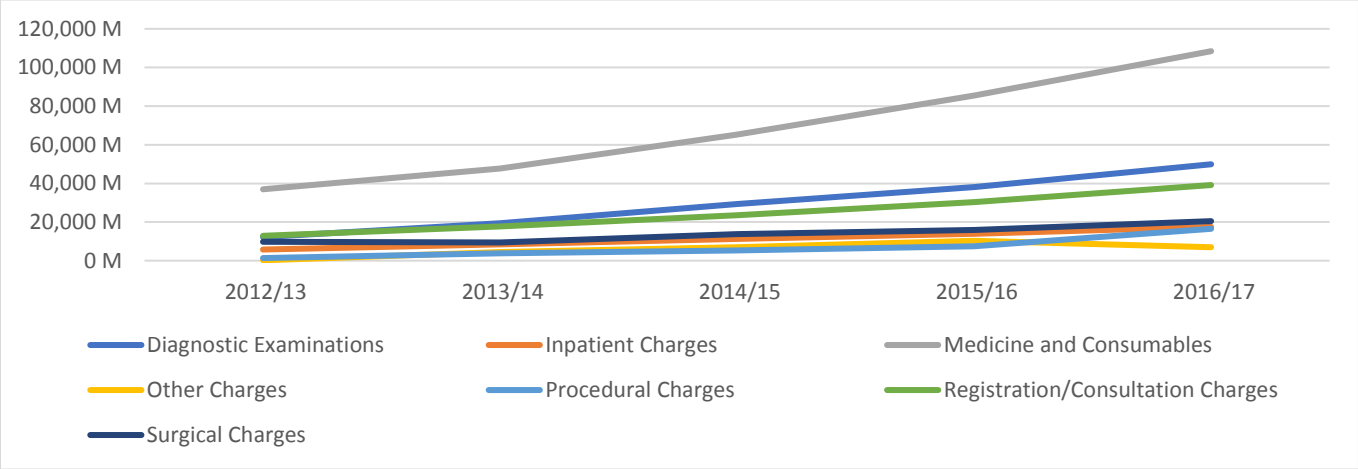


Source: PlanRep.

Annex Figure 10: Trends in Accredited Providers

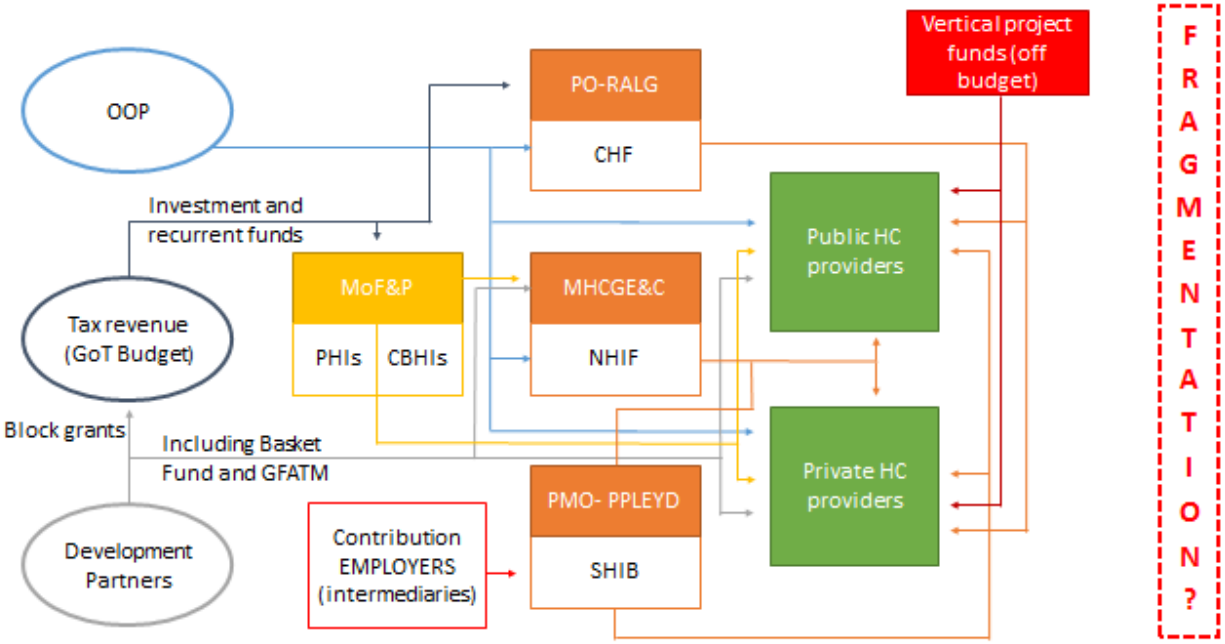


Annex Figure 11: NHIF Expenditure Categories



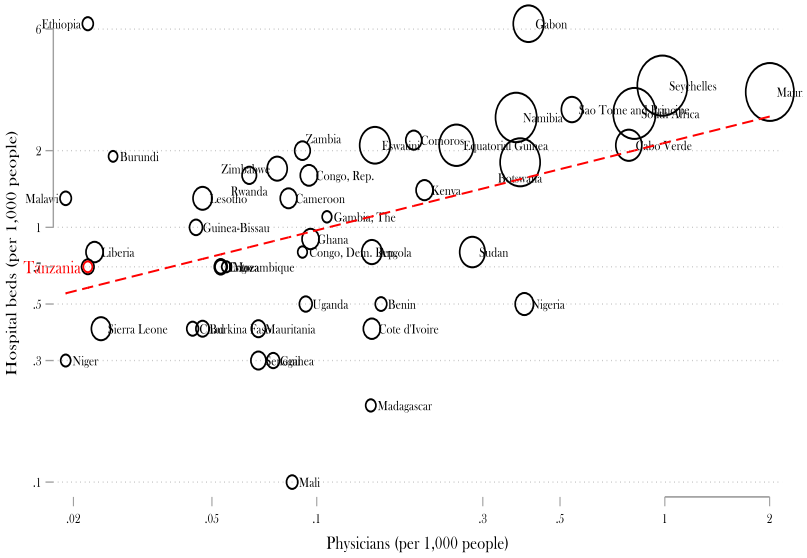
Source: Authors, based on NHIF (2019).

Annex Figure 12: Health Financing Architecture and its Fragmentation



Source: Government of Tanzania (2016).

Annex Figure 123 Distribution of Physicians and Hospital Beds



Note: Bubble size represents the CHE per capita, Tanzania was at $ US 35 in 2017.
Source: World Development Indicators; WHO Global Health Observatory; WHO Global Health Expenditures Database.

Sources: WDI, 2019; GHED, 2019; and Government of Tanzania (2012)