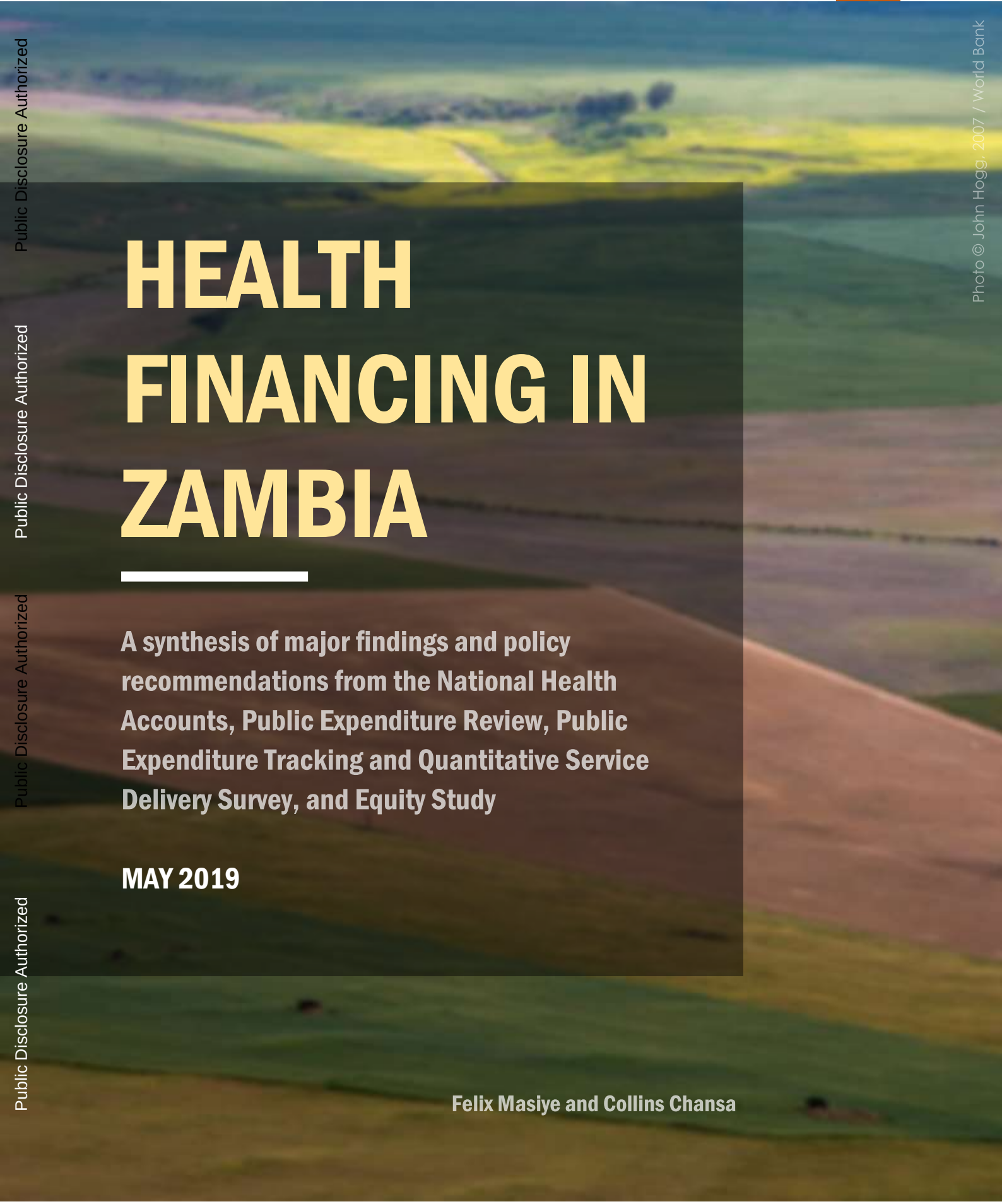

HEALTH FINANCING IN ZAMBIA

A synthesis of major findings and policy recommendations from the National Health Accounts, Public Expenditure Review, Public Expenditure Tracking and Quantitative Service Delivery Survey, and Equity Study

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1. PAST AND RECENT DEVELOPMENTS IN THE HEALTH SECTOR IN ZAMBIA

The 2012 national health policy is the overarching health policy framework in Zambia. The policy takes a human rights approach to health care provision, where all citizens are entitled to basic health care (Ministry of Health 2012). The policy is actualized through successive five-year national health strategic plans. Operationally, Zambia's health system is centralized, with delegated responsibilities from the center to lower levels of the health care delivery system. The Ministry of Health plays a dual role of policy formulation and strategic planning and delivery of health services, with provincial and district health offices being upwardly accountable to the Ministry of Health headquarters. Provincial health offices oversee a number of districts, and are responsible for providing guidance in planning and budgeting, service delivery, financial management, procurement, and monitoring and evaluation. Delivery of primary health services is undertaken at district hospitals, health centers, and health posts while district health offices are responsible for district-level planning and budgeting, fiduciary management, and monitoring and evaluation.

Between 2006 and 2018, a number of institutional and health financing reforms have been implemented within and outside the health sector in Zambia. Foremost, the Central Board of Health (CBoH)—which operated as an autonomous public organization responsible for provision of health services through a provider-purchaser arrangement for 11 years was abolished in 2006. The Ministry of Health took over the functions of the CBoH. In 2011, the primary health care (PHC) function (including the mother and child health program) was transferred from the Ministry of Health to the Ministry of Community Development and Social Welfare, and this Ministry was renamed Ministry of Community Development Mother and Child Health. However, in 2015, the decision was reversed and the PHC function was reverted to the Ministry of Health.

The other set of institutional reforms commenced in November 2016 aimed at enhancing operational efficiency and improving health service delivery. This reform has led to an increase in the number of departments at the Ministry of Health headquarters from five in 2016 to 12 by the end of 2018. Further, the Ministry of Health now has three permanent secretaries—one responsible for health services, another one responsible for administrative services, and the third one for human resources for health training. In addition, the University Teaching Hospital now constitutes five specialized hospitals—Adult Hospital, Women and New-born Hospital, Cancer Diseases Hospital, Children's Hospital, and Eye Hospital. Outside the health sector, several new districts have been created leading to an increase in the total number of districts in the country from 72 in 2011 to 116 in 2018.[1] Implementation of the aforementioned health reforms in a short period of time coupled with the creation of more districts have affected the planning process, resource allocation, and flow of funds to districts and health facilities in the health sector.

[1]At least five of the new districts were not fully functional at the time of this study.

With regards to health financing, user fees were abolished in rural areas in April 2006, peri-urban areas in mid-2007 and the entire PHC level in January 2012. PHC facilities in Zambia include health posts, health centers, and district hospitals. All services provided under these facilities are provided free of charge. Further, patients referred from the PHC facilities to secondary and tertiary level hospitals are supposed to be treated free of charge in line with the user fees removal guidelines (Ministry of Heath 2007). A bypass fee is charged to patients who present themselves for treatment at a higher-level health facility without being referred from a lower-level health facility except for emergency cases. As an exception, secondary- and tertiary-level hospitals (and some district hospitals in a few districts) are allowed to generate revenue from patients who want express services or better outpatient or in-patient services than those provided at the free (or low-cost) sections of the hospital. In addition, some hospitals also operate some prepayment medical schemes where employers/companies, households, and individuals make contributions to access a predefined package of health services when they get sick. However, there are no guidelines nor consistency across hospitals on how much to charge, and how the revenues generated should be utilized. Further, though revenues are retained and used at the health facilities, there is no legislature in support of this practice.

"To implement future reforms and progress towards universal health coverage, adequate preparations and resources will be required. Given that Zambia is a lower middle-income country, there is need to urgently develop a strategy on how the country will transition from donor support and sustain health service delivery by using domestic resources."

Going forward, Zambia is in the process of launching two major reforms which will further affect the organization of the health sector. These are (a) implementation of the National Decentralization Policy, and (b) introduction of a National Health Insurance (NHI) scheme. The PHC function (including transfer of PHC staff to local government authorities) is among the front runner for decentralization. If national decentralization is fully implemented, it will affect the manner in which health services are organized, delivered, and financed in the country. Thus, adequate preparations in the health sector are required to minimize challenges. Secondly, Zambia enacted the NHI Act in April 2018 which provides the legal mandate to establish the NHI management authority, and the NHI scheme. At the time of this study, it was envisaged that implementation of the NHI scheme will be done in a phased manner with a view of covering the entire population in the medium to long term. However, depending on the final design and implementation process, the NHI will have a substantial effect on the financing and delivery of health programs and services in Zambia. One of the immediate challenges will be providing insurance cover to the informal sector and indigent people in rural areas. About 84 percent of the labor force in Zambia works in the informal sector (Central Statistics Office 2015) with very low paying jobs[2] while 77 percent of the people in rural areas were living below the national poverty line[3] in 2015 compared to 23 percent in urban areas (Central Statistics Office 2016).

[2] Average monthly earnings in the formal sector is ZMW 3,009 (US$284) while in the informal sector it is ZMW1,214 (US$115). *Source:* Central Statistics Office (2015).

[3] The national poverty line comprises food and nonfood items to meet a minimum standard of living. The poverty line per adult equivalent per month was estimated at ZMW 214 per month or ZMW 7.13 per day in 2015. This is equivalent to US$29.32 per month or US$0.98 per day in 2015 terms.

2. HEALTH FINANCING ANALYSES

The Ministry of Health in collaboration with the World Bank and the U. K. Department for International Development (DFID) commissioned a series of studies that provide a comprehensive review of health financing, expenditure, and service delivery in Zambia over the period 2006–2017. The level of financing, how the finances are mobilized, allocated, and spent, all affect service delivery and health outcomes. Thus, a review of health financing and expenditure is crucial to progress toward improving health outcomes and achieving the country's universal health coverage (UHC) goals (that is, access to essential health services and financial risk protection). This brief summarizes findings from four reports, namely the National Health Accounts (NHA) 2013–2016; the Public Expenditure Review (PER) which covers the period 2006–2016; the Public Expenditure Tracking and Quantitative Service Delivery Survey (PET-QSDS) which covers the year 2017; and the equity study which is a repeated cross-section analysis of financing and benefit incidence from three population-based surveys.[4] Collectively, these papers were prepared to address the following policy issues:

(a) Estimate the level of health spending by various sources;

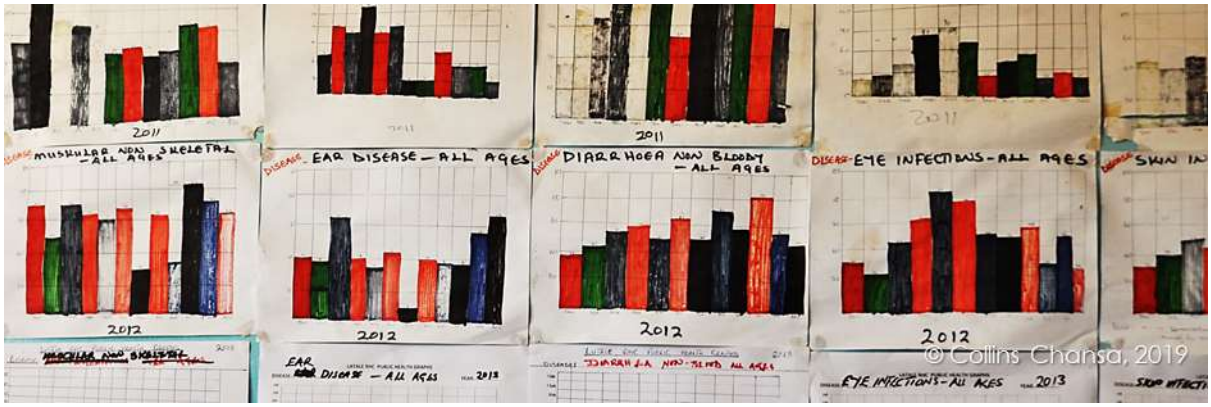
(b) Describe patterns of resource allocation in relation to health priorities;

(c) Assess efficiency and equity of current health spending;

(d) Examine public health provider capacity, service availability, quality of services, and budget execution; and

(e) Evaluate sustainability of health financing.

In this bulletin we present a synthesis of the key findings, distil the policy implications, and provide policy options for addressing challenges in health financing and the health system in Zambia. In developing this policy note, we augmented findings from the four reports highlighted above with findings from in-depth interviews with key Ministry of Health officers, health sector Cooperating Partners, academics, and other stakeholders. These interviews focused on soliciting feedback from policy makers on the main findings from the reports, relevance, and applicability of the recommendations.



[4]Raw data from the Zambia Central Statistical Office 2010 and 2015 Living Conditions Monitoring Survey and the 2014 Zambia Household Health Expenditure and Utilization Survey.

3. SUMMARY OF KEY FINDINGS AND POLICY HIGHLIGHTS

3.1 Tepid macroeconomic context provides constrained fiscal space for increasing domestic resource mobilization

There is a realization that recent successes in improving health service coverage and health outcomes will be threatened by fiscal constraints which the country is likely to face now and in the near future. This is because the context for domestic resource mobilization and health financing is set by the country's macroeconomic and fiscal outlook. The country's macroeconomic performance has over the past five years been modest, and this will make it difficult to mobilize significant increases in public health spending. Core macro-fiscal indicators point to limited capacity by the government to significantly increase domestic resource mobilization in the near future. Notably, economic growth prospects are projected to be modest in the region, 3–4 percent, and this implies low tax revenue collections. Further, the high public debt repayments will likely undermine domestic resource allocations to health and other social sector

3.2 Overall health financing landscape shows inadequate level of domestic health spending, heavy reliance on donor funding, fragmentation in financing sources, and limited pooling

Data from the NHA provides answers to four key aspects of health financing in Zambia, namely: (i) How much does Zambia spend on health care? (ii) Who pays for health spending? (iii) How are health care expenditures mobilized? (v) How are health expenditures distributed among health providers?

3.2.1 *How much does Zambia spend on health care?*

The NHA and PER both show that total government health expenditure (GHE) has increased, although at a fluctuating rate. Table 1 shows that, cumulatively, nominal GHE increased by 86 percent between 2013 and 2016. On average, nominal GHE in kwacha (ZMW) has increased by 21 percent per year, while the increase in inflation-adjusted GHE was 10–12 percent per year. However, when converted into nominal U.S. dollar terms, total health expenditure has not increased over the period 2013–2016. GHE in nominal U.S. dollar terms declined by 13 percent over the entire four-year period (or average of 3 percent per year), largely because of exchange rate losses. Further, donor health expenditure declined by nearly 50 percent over the same period (average of 13 percent per year). Per capita total current health expenditure (CHE) in Zambia during the period 2013–2016 averaged US$70 in nominal U.S. dollar terms, with the notable exception of 2013 when it was US$90 (Table 1). Consequently, per capita total current health spending declined from US$90 in 2013 to US$59 in 2016, reflecting declines in expenditure by both government and donors.

Four points are crucial to highlight for policy:

- **The health sector still requires additional financial resources.** GHE as a share of total government spending was 7.1 percent in 2016, which corresponds to ZMW 3.1 billion (US$302 million) below the Abuja target in monetary terms. Furthermore, total health spending as a share of the economy (GDP) at 4.5 percent (Table 2), is lower than what many countries with similar income level in the region spend. Zambia's government spending on health as a share of total public spending is comparable to Ghana, Zimbabwe, and Mozambique, but is lower than countries with much lower GDP per capita such as Tanzania, Ethiopia, and Malawi.

- **The level of total CHE per capita in Zambia (US$59) is below the estimated minimum level of per capita health spending required to progress towards achieving UHC** (US$86 per capita) (McIntyre, Meheus, and Røttingen 2017). The third edition of the Disease Control Priorities (DCP3) initiative further estimates the total cost per person of sustaining an essential UHC package at full coverage at US$110 in lower middle-income countries like Zambia (Watkins et al. 2017).

- **Notwithstanding the above, cross-country comparisons and international benchmarks are not universally accepted, and it is more useful to compare a country against what is fiscally feasible, what the country is trying to achieve, and how much is needed to cover an essential benefit package.** For Zambia, one critical issue worth noting is that the cost of service delivery is far much higher than most countries in the region. It is not surprising, therefore, that cost estimates for 33 priority areas outlined in Zambia's National Health Sector Strategic Plan 2017–2021 (Ministry of Health 2017) show that total per capita CHE has to more than double to US$149 to meet the needs of the health sector. However, given the shrinking fiscal space, this is overly unrealistic.

- **Zambia can still achieve more with the available resources.** There are countries with better health indicators than Zambia that spend less than half the level of health spending as Zambia. Moreover, as pointed out later in this document, there are problems with budget execution, procurement, and absenteeism. Therefore, in the short-term, efforts could be directed to addressing these challenges while also advocating for additional money.

Table 1: Selected health expenditure indicators for Zambia, 2013–2016

	2013	*2014*	*2015*	*2016*	*Average*
Nominal total CHE (ZMW, millions)	7,098.90	6,396.78	8,134.79	9,674.31	7,826.20
Nominal total capital heath expenditure (ZMW, millions)	296.92	500.09	304.48	521.30	405.70
Nominal total CHE plus total capital spending (ZMW millions)[a]	7,395.82	6,896.87	8,439.27	10,195.61	8,231.89
Nominal total CHE (US$, millions)	1,317.05	1,040.13	942.62	938.34	1,059.54
Government CHE (ZMW, millions)	1,982.20	3,163.70	3,833.80	3,704.60	3,171.08
Donor CHE (ZMW, millions)	4,056.80	2,082.07	2,977.06	4,115.03	3,307.74
Households - Out of Pocket (OOP) Expenditure (ZMW, millions)	810.00	884.00	996.00	1,177.00	966.75
Employers CHE (ZMW, millions)	235.60	265.90	321.00	673.80	374.08
NPISH CHE (ZMW, millions)	11.60	0.40	3.90	4.30	5.05
Other institutions CHE (ZMW, millions)	2.30	0.90	0.90	1.00	1.28
Total CHE per capita (US$)	90.33	69.23	60.92	58.87	69.84
Government CHE per capita (US$)	25.22	34.24	28.71	22.54	27.68
Donor CHE per capita (US$)	51.62	22.53	22.29	25.04	30.37
Government CHE % total CHE	27.9	49.5	47.1	38.3	40.7
Donor CHE % total CHE	57.1	32.5	36.6	42.5	42.2
Total CHE % gross domestic product (GDP)	4.7	3.8	4.4	4.5	4.4
Government CHE % GDP	1.3	1.9	2.1	1.7	1.8
Government CHE % General Government Expenditure (GGE)	6.1	8.2	7.4	7.1	7.2
OOP Expenditure % total CHE	11.4	13.8	12.3	12.2	12.4
OOP Expenditure % GDP	0.5	0.5	0.5	0.5	0.5
Corporations CHE % total CHE	3.3	4.2	4.0	7.0	4.6

Source: Ministry of Health (2018c).
Note: a. Total health expenditure is no longer allowed in NHA. However, this indicator is included for continuity reasons with respect to System of Health Accounts (SHA). See page 347 of the SHA 2011 Manual: OECD, Eurostat and WHO (2017).

3.2.2 *Who pays for health care expenditure?*

The government and donors are the two biggest sources of health expenditure in Zambia, accounting for about 80 percent of total health expenditure. For example, in 2016, donor CHE constituted 43 percent of the total health expenditure, while government CHE accounted for 38 percent of total CHE. Households through OOP expenditure were responsible for 12 percent of total CHE. The contribution from private companies through medical and insurance schemes was about 9 percent in 2016. One major policy issue from this data is the fact that donor funding flows have stagnated and become increasingly verticalized. Since 2014, the level of donor funding has stagnated at about US$23 per capita in nominal U.S. dollar terms. Further, about 30 percent of the total CHE in Zambia is channeled through aid agencies and nongovernmental organizations (NGOs) while government institutions only handle about 50 percent of the total CHE. This situation has occurred at a time when perceptions about weaknesses in the country's public finance management and accountability systems have become commonplace, and caused significant uncertainty among donors. It was highlighted during interviews that there is need to address

the causes for the implicit diminished enthusiasm in health policy and planning in the country. The changed dynamics among stakeholders in the health sector has made the environment for health financing more complex, especially the role of donors. There is a need for all stakeholders to agree on the contentious issues in the health sector that are somehow affecting financing.

It should be stressed that much of the progress that has been recorded in recent years in maternal and child health in Zambia is the result of close collaboration of the Ministry of Health with donors and other stakeholders; and high levels of donor funding. Therefore, there is no doubt that to sustain recent improvements in service delivery and performance, the Zambian health sector has to continue with effective health sector collaboration and donor funding. Thus, increased verticalization of donor funding will bring forth major challenges at a time when the level of donor funding is increasingly less available. For example, vertical support is harder to capture and account for, which makes any effort at planning and forecasting fiscal space for health much harder. Additionally, planning processes for donor funding which are not harmonized with district or provincial health offices can undermine allocation of donor resources to priority areas or integration of donor programs for greater effectiveness and sustainability. About 70 percent of the total funding from donors in the health sector in Zambia is earmarked to HIV/AIDS and sexually transmitted infections (STIs), and this needs to be addressed.

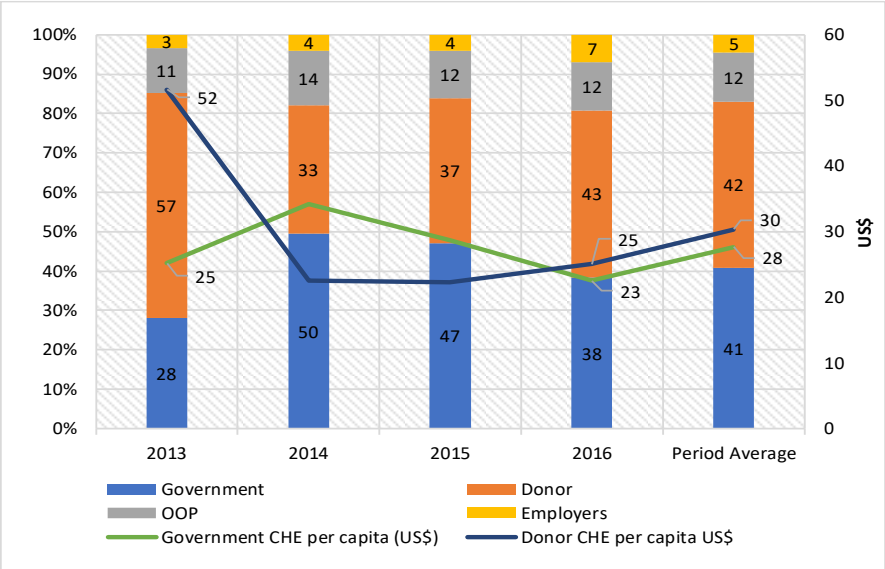
Finally, it must be pointed out that excessive reliance on external funding to finance health service provision is unsustainable because Zambia is a lower middle-income country which is expected to transition or graduate from donor financing in the near future. Ironically, it appears that there is no strategy in place to transition from donor support even though several prominent donors in the health sector in Zambia have indicated that they will wind up their support in the near future.

Table 2: Total CHE in Zambia and selected other countries

Country	*CHE as % of GDP*	*CHE per capita*
Lesotho	8.4	90.85
Swaziland	7.0	232.72
Sudan	6.3	151.79
Ghana	5.9	79.59
Côte d'Ivoire	5.4	75.45
Kenya	5.2	70.06
Cameroon	5.1	63.63
Zambia	**4.5**	**58.87**
Nigeria	3.6	97.31
Congo, Rep.	3.4	58.79
Angola	3.0	108.56
Sub-Saharan Africa (excl. high income)	5.4	84.84
Lower middle-income countries	4.1	81.71

***Source*:** All data from World Development Indicators as complied in World Bank (2018c).

Figure 1: CHE by financing source, 2013–2016



Source: Ministry of Health (2018c).

3.2.3 *How are health care expenditures mobilized?*

One of the important functions of a health financing system is to ensure that financing is mobilized in line with the principles of maximizing revenue and pooling, financial progressivity, and minimizing financial burden on patients. Different methods of raising health revenue have different impacts on the distribution of the financial burden, and access to health care. Therefore, it is important to know the contribution from general taxes and other forms of financing mechanisms; and the extent to which households are protected from OOP spending. Figure 1 shows that about 41 percent of the total CHE was provided by the government through the public allocation. Over the four-year period 2013–2016, the government share of total current spending has increased from 28 to 41 percent, although the level of actual government health spending in per capita dollar terms has declined marginally from US$25 in 2013 to US$22 in 2016. Donors remained the second-largest financing scheme despite a decline from 57 percent in 2013 to 42 percent in 2016. In dollar terms, donor spending has declined by half.

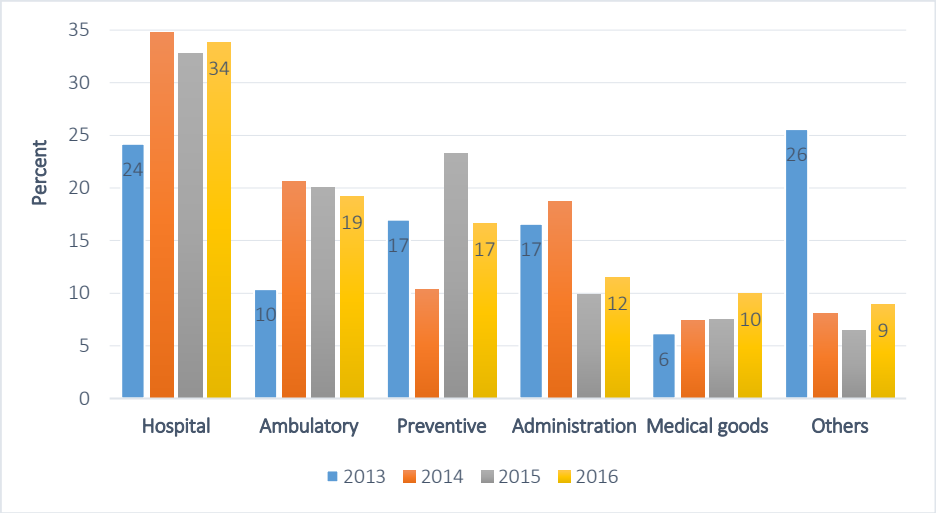
About 12 percent of the total CHE was mobilized through OOP payments by households at the point of seeking health care. It is notable that even with low public spending, OOP spending has also remained low. Some context can explain this apparent paradox. Secondary analysis in recent studies shows that the removal of fees on primary health care in Zambia did not increase access or overall health service utilization (Lépine, Lagarde, and Le Nestour 2018; Masiye, Kaonga, and Kirigia 2016). That is, there has been no reduction in the proportion of the population that fail to seek care due to cost barriers. Rather, as patients (mostly the non-poorest) shifted from private facilities to free public health care, household OOP health spending declined significantly. But it is also plausible that low level of public spending could also imply that patients are receiving inadequate or poor quality of care. These findings indicate that a significant section of the population in Zambia is still vulnerable to financial or impoverishing health care expenditure due to inadequate prepayment and risk pooling mechanisms in mobilizing health care financing.

Finally, the NHI scheme was brought up during interviews as one of the options that the Ministry of Health is expected to implement in 2019, following enactment of the NHI legislature in 2018. Details about how the NHI scheme will function, its benefit package, contribution rate, and revenue potential are still being worked out.

3.2.4 *How are health expenditures distributed among health providers?*

There are many providers of health services and products in Zambia including hospitals, nursing and residential care providers, ambulatory health care providers, retail sale and medical goods providers, and public health program providers. Figure 2 shows the distribution of health expenditures accounted for by each of these providers for the period 2013–2016. On average, about 30 percent of the total CHE was spent on hospitals during the period under review. On the other hand, providers of ambulatory health care accounted for about 10 percent of the total CHE in 2013 rising to 19 percent in 2016. The increase in the share of expenditure on providers of ambulatory health is in line with government's primary health care approach. However, there has also been an upward trend in the share of total CHE on hospitals which increased from 24 percent in 2013 to 34 percent in 2016. This suggests that the Zambia health system is still focused on hospital level care rather than ambulatory care. The results also explain why a large proportion of total CHE in Zambia is concentrated on curative care which has progressively increased from 30 percent (ZMW 2.1 billion) in 2013 to 53 percent (ZMW 5.1 billion) in 2016; while expenditure on preventive care has been low (Ministry of Health 2018c).

Figure 2: Distribution of expenditure by health care providers, 2013–2016



Source: Ministry of Health (2018c).

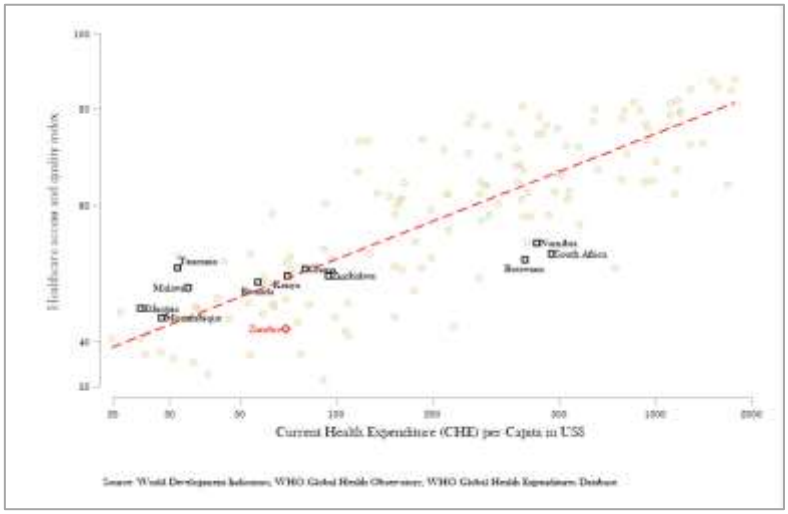
3.3 Improvements in budget performance, efficiencies in spending, and management of key inputs could help increase availability and quality of health service delivery even at current levels of health spending

Besides financing, the goal of UHC is to put in place efficient health service delivery systems and invest in critical health service inputs. Getting more from available health spending through measures such as improving resource allocation, reducing waste in procurement of drugs and management of human resources, and reducing the cost of administration would increase service outputs and quality. Comparing cross-country spending and a composite index of access and quality,[5] shows that Zambia

[5] The health access and quality (HAQ) index (Fullman et al. 2018) was used in this analysis. The HAQ index incorporates 32 causes of disease and injury considered amenable to health care. In other words, death is not supposed to occur from the 32 causes if there is effective care.

fares poorly relative to several countries (Figure 3). In other words, Zambia has high cost per health service output which implies that there is room for more health care from available public health spending. This analysis suggests that the health system delivers its health services at a higher cost, mainly through higher wages and operational costs.

Figure 3: Level of health expenditure, health access, and quality



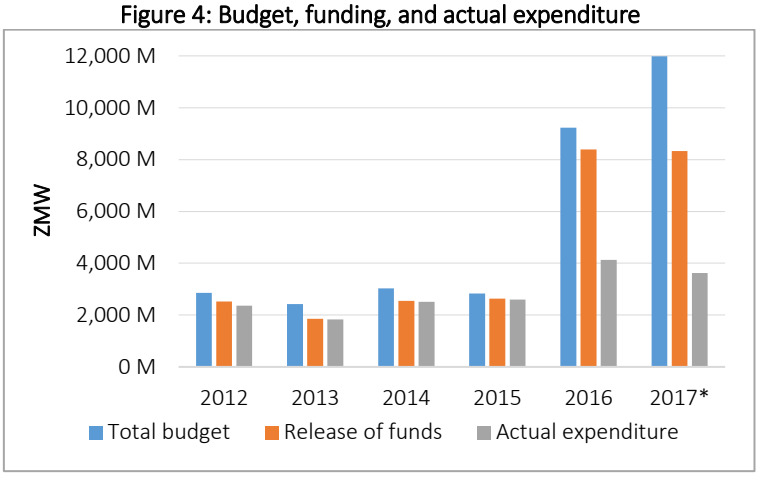
Source: World Bank (2018c).

3.3.1 *Weaknesses in budget execution exemplified by low disbursement rates and absorption capacity at district level*

In 2016 and 2017, the Ministry of Health experienced a significant variance between budgetary allocations and actual disbursements, and between actual disbursements and actual expenditure, with actual expenditure falling below half of budgeted amounts (Figure 4). As observed in the PET-QSDS, a key contributor to the poor budget execution is the erratic funding from the Ministry of Finance which often fails to remit the full budgeted amounts or remits budgeted amounts with delays. And while personnel emoluments tend to be predictable and are released in full, releases for operational grants are erratic, which affects service delivery negatively. Delays in the transfer of funds from District Health Offices (DHOs) to district hospitals and health centers are more prolonged than disbursements from the Ministry of Finance to DHOs. Bottlenecks in disbursements of funds between the various levels of administration in the public health system results in considerable amounts of unspent funds being returned to the treasury. From a service delivery perspective, it implies that activities or programs in delivering health services are not undertaken.

"While the health sector still requires additional financial resources, much more can still be achieved with the available resources. Efforts could be directed to addressing inefficiencies in the health system while also advocating for additional money."

Figure 4: Budget, funding, and actual expenditure



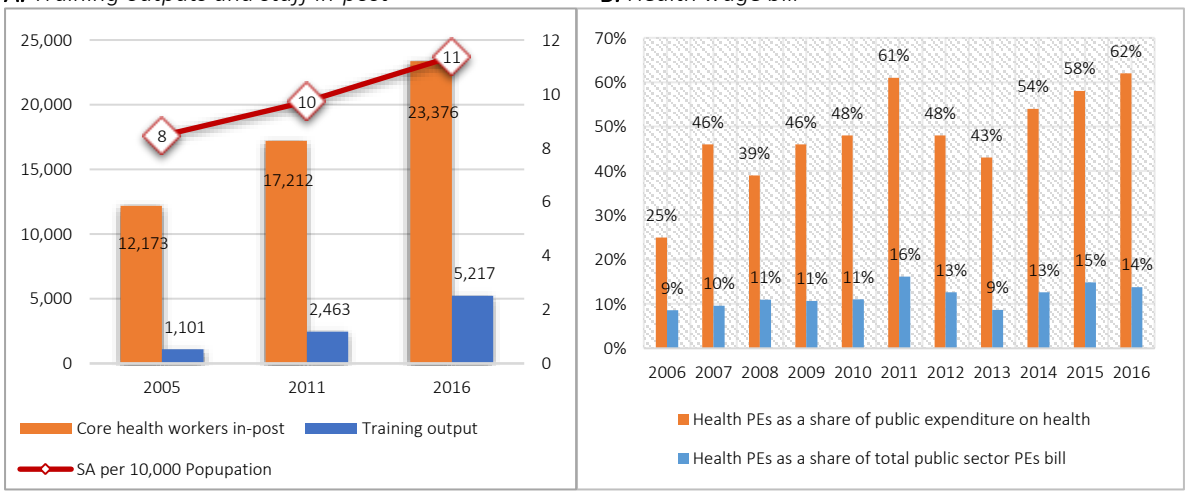
Source: World Bank (2018c).
Note: * 2017 data were only available until November 2, 2017.

3.3.2 *Investments in recruitment of health human resources are laudable though more effort is needed to address mal-distribution of health workers*

Since 2014, the government has given high priority to increasing the health workforce by allocating an increasing share of public health spending to new human resource recruitment. In Figure 5, it is shown that the number of health workers have increased in both absolute terms and in terms of staff per population. The increase in staffing at facilities is also evident from the Service Availability and Readiness and Assessment (SARA) (WHO 2017). As a result, the health sector has witnessed a reduction in the overall staffing deficit of core health staff from 69 percent in 2005 to 43 percent in 2016 (World Bank 2018c). However, more investments in human resources are still needed to ensure that the acute mal-distribution of health personnel across regions is addressed. For example, about half of all the medical doctors in Zambia are based in Lusaka which has a population of 16 percent, while 80 percent of all the medical doctors in Zambia are in the four most urbanized provinces, namely: Lusaka, Copperbelt, Southern, and Central. But despite Lusaka Province having the largest number of doctors and the highest population density, the province also has the lowest number of admissions.

Figure 5: Trends in the health wage bill, training outputs, and staff in-post

A: *Training outputs and staff in-post* ***B:*** *Health wage bill*



Source: World Bank (2018c).
Note: SA=skilled attendants (doctors, midwives, medical licentiates, clinical officers, and nurses), PE=personal emoluments.

3.3.3 *While the number of graduates from health training institutions has increased, there is need for an innovative recruitment and retention strategy*

The Ministry of Health has performed very well in increasing the number of graduates from health training institutions through the public and private sectors. However, it will be increasingly challenging to recruit all the graduates due to budgetary constraints. For instance, the Ministry of Finance only provided treasury authority to recruit 1,000 health workers in 2018 (Ministry of Finance 2017) despite the annual training output of 5,217 (Figure 5). As a matter of fact, the Zambian government is currently implementing measures to cut public expenditure on personal emoluments. This is because personal emoluments as a share of domestic revenues at 47.1 percent in 2018 is high and the government intends to reduce it to 40 percent by 2021 so that the total public wage bill does not constrain other developmental expenditures (Ministry of Finance 2018). In other words, there are plans to reduce public expenditure on personal emoluments over the period 2018–2021 from 8.3 percent of GDP in 2018 to 7.7 percent of GDP in 2021 (Ministry of Finance 2018). To achieve this, new recruitments have been restricted to frontline personnel (including health workers), and only positions critical to frontline service delivery that fall vacant during the period 2018–2021 are being replaced (Ministry of Finance 2018). This suggests that the majority of the 20,868 health workers who will be trained over the period 2018–2021 will most likely not be employed by the government without the assistance of Cooperating Partners. This leaves room for the private sector in Zambia and other countries in the region to recruit them. Considering that a lot of taxpayers' money is being used to train these health workers, the government must come up with viable options of how to retain these health workers in Zambia and/or how to ensure that those leaving the country are reabsorbed back to Zambia as soon as possible. Government-to-government contractual obligations could be another option.

3.3.4 *Recurrent spending needs to increase to match spending on human resources to support adequate service provision*

The increase in budgetary allocations to human resource, justified as it is, seems to have come at the expense of other important service delivery inputs such as expenditure on drugs, medical supplies, operational grants, and maintenance of infrastructure which have reduced in the last few years. According to the PET-QSDS, the public health system has started to witness evidence of the strain of limited operational funding manifested in form of long queues at facilities, long waiting lists for critical diagnostic and therapeutic services such as CT scan, MRI, dialysis, surgery, physiotherapy, and other services (World Bank 2019). Finally, because of the already high share of the budget allocated to the wage bill, even the ability of the government to meet its future human resource targets contained in the national Human Resources for Health Strategic Plan 2018–2024 (Ministry of Health 2018a) will depend on an increase in the share of the total public spending that is allocated to the health sector.

3.3.5 *Despite improvement in recruitment of health staff, significant human resources hours are lost to absenteeism and idle human resources*

The PET-QSDS observes that there is absenteeism and tardiness among health workers at public health facilities for several hours each month. The number of hours lost due to absenteeism and tardiness amounts to 437 days per month which is equivalent to 11.5 full-time equivalent staff per month. This implies that human resources enough to manage three to four rural health facilities are lost to absenteeism and tardiness each month. About 54 percent of the staff who missed work were absent on account of sickness, 21 percent had official permission or were on leave, while 25 percent of the employees were absent mainly on sanctioned official duties (such as outreach services and working elsewhere within the government sector), while others were absent without permission. Further, an average of 37 percent of the health workers reported late for work at least once a month. Absenteeism has direct adverse consequences for health service provision. When health staff hours are lost, patients are denied timely services and quality of care is compromised. For example, where staff absenteeism is high, patient satisfaction is poor mainly because of long waiting times and short contact time with available staff, all of which affect the quality of service delivery. Perceptions on quality are proven drivers of decisions to seek health services, which means that absenteeism is likely to send patients away from health services. Due to the lack of a system to monitor staff absenteeism on a regular basis, the problem of absenteeism is overlooked. The PET-QSDS report shows that there is no system for monitoring staff absenteeism at the facility level, and no system in place to discipline erring staff.

3.3.6 *Inadequate expenditure, wastage, and stock-outs of essential drugs are symptomatic of poor-quality service delivery*

Drug stock-outs were common in 2017, which is attributed to inadequate funding for drug procurement, and wastage of available drugs due to poor prescribing and management systems. The first problem is that the current budgetary allocation for drugs (16 percent of total public health spending was on drugs) is too low to guarantee an adequate supply of drugs in the health system. The inadequacy of expenditure on drugs is exemplified by the fact that this share is only about half the African average. Although both the PET-QSDS and PER report that the amount allocated to drugs has increased over the years, there is evidence that

the allocation is not enough. The 2019 budget shows a reduced allocation to the drug budget, a situation exacerbated by an increased debt on drugs that have been supplied to the public sector in previous years through framework contracts.

Secondly, the PER report shows that significant resources are being wasted through poor procurement practices, delayed payments, and expiry of drugs. The real value of the drug budget is vulnerable to fluctuations in the exchange rate, and this exacerbated the budget deficit in the drug budget in 2017 (Chansa, Sundewall, and Östlund 2018). The implication is that poor patients who cannot afford to buy their own drugs go untreated or under-treated. Hence, there is need to provide an adequate allocation for drugs, and to settle the outstanding public debt on drugs.

Third, poor and inappropriate prescribing practices cause the health sector to lose significant resources in drugs and medicines. The 2018 Zambia National Rational Use of Medicines Study shows that on average, only 44 percent of the facilities follow the standard treatment guidelines (STGs) for malaria, with a wide variation ranging from 6.7 to 76.7 percent across facilities (Ministry of Health 2018b). For cases with a diagnosis of acute respiratory infection (ARI)/pneumonia, adherence to STGs averaged only 31.0 percent (Ministry of Health 2018b). Policy attention is needed to minimize the irrational prescribing of medicines which only work to invariably increase health care costs and reduce health service coverage. Overall, inadequate allocation for procurement of drugs, inappropriate prescribing practices, and challenges in the supply chain management contribute to stock-out of essential drugs for considerable periods of time (Table 3). For example, facilities experienced lengthy periods of stock-outs, with about 10 percent of the hospitals not having Coartem, the first line antimalarial drug, continuously for 10 months.

Table 3: Percentage of health facilities reporting stock-out of essential drugs

Drugs	*Rural Health Centers*		*Urban Health Centers*		*Hospitals*	
	% reporting drug not available today	*Average duration of stock-outs (weeks)*	*% reporting drug not available today*	*Average duration of stock-outs (weeks)*	*% reporting drug not available today*	*Average duration of stock-outs (weeks)*
Coartem	5.6	9.0	2.5	12.0	10.0	44
Panadol	18.8	7.2	7.5	8.7	10.0	2
Septrin	25.6	36.0	30	13.7	26.7	29
ORS	7.5	19.8	10	2.3	10.0	2
Vitamin A	11.3	31.9	7.5	18.7	10.0	14
Ferrous Sulphate	11.9	7.4	10	5.5	13.3	21

Source: World Bank (2019).

3.3.7 *Service delivery has improved but much more needs to be done to remove existing gaps and to attain full coverage*

Evidence from the PET-QSDS and the SARA (WHO 2017) portrays general improvement in the range of services provided and availability at health facilities. However, the reports also point to significant bottlenecks and constraints on the supply side in a range of core health services. With the exception of HIV testing and counselling, PMTCT, and malaria treatment, most facilities were assessed to have an overall readiness to provide services in the range of 60–70 percent which implies that there are significant gaps in service delivery. Further, there are considerable differences in the magnitude of service delivery gaps across provinces. To address these challenges, evidence shows that service coverage can be

extended by integrating service delivery arrangements at district and facility levels. One such strategy is joint use of health care inputs when delivering services. For instance, service delivery in some districts and health facilities is fragmented, and replicated across health interventions. These gaps in service delivery often translate into unmet needs for patients.

Finally, the PET-QSDS (World Bank 2019) shows that health facilities using results-based financing (RBF) performed relatively better in some measures of perceived quality of health care but had limited or no effect on staff satisfaction and absenteeism. This demonstrates how complex the issue of human resource management is. However, considering that facility managers in the RBF districts have financial and managerial autonomy, a major lesson is that RBF offers some promise in improving staff satisfaction and service delivery in the long term.

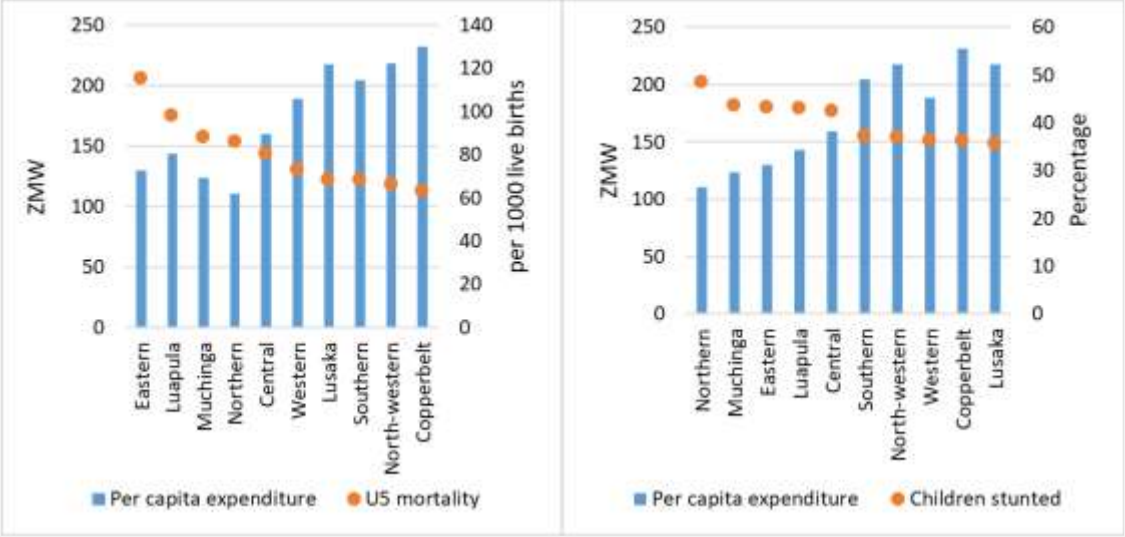
3.4 There is need to improve resource allocation across the regions and districts to move closer to UHC targets

3.4.1 *The gap between health outcomes and expenditure has widened across provinces*

Results from the PER (Figure 6) show wide differences in per capita expenditures at the provincial level, with provinces that are already well-endowed continually spending more. Generally, provinces with lower spending (Eastern, Luapula, Muchinga, and Northern) have worse health outcomes; and this suggests that public funding is exacerbating inequalities in health outcomes across the provinces. This could be attributed to inadequacy of the existing needs-based formula for distributing operational grants to districts. As highlighted in the PER, the district resource allocation formula has facilitated an equitable distribution of operational grants to districts but not the distribution of salaries and wages which is dictated by the distribution of health workers. This suggests that continued use of the formula could help in allocating operational grants at the district level equitably, but not salaries and wages. The maldistribution of health workers exacerbates inequities in the geographical allocation of financial resources. Henceforth, moving health workers into more remote areas (given that the wage bill is the largest component of health spending) would help to distribute resources equitably. Further, the district resource allocation formula has become redundant with the proliferation of new districts since 2011, and there is need to revise it.

"Provinces with lower spending have worse health outcomes largely due to inadequacy of the existing formula for allocating financial resources to the districts."

Figure 6: Provincial health expenditure and under-five mortality rate and stunting



Source: World Bank (2018c).

3.4.2 *Equity in financing and consumption of health benefits*

"There are some improvements in financial risk protection and consumption of health benefits by the poor but more effort is required to move closer to UHC targets."

The overall incidence of financing of health care shows that methods of mobilizing health care payments are generally progressive (World Bank 2018a), keeping with the principle that those with higher incomes contribute proportionately more to health care expenditure. However, alcohol and tobacco taxes were found to be generally regressive because the poor tend to consume more tobacco and alcohol than the rich. However, the tax system could be considered equitable if the poor reduce their consumption of harmful products, and gain larger health benefits (Bird 2015). Further, the national incidence of households facing catastrophic OOP payments (or payments beyond 40 percent of their non-food expenditure) has been reducing across all household income groups. For instance, the percentage of households incurring catastrophic OOP payments reduced from 10 percent in 2010 to 3 percent in 2015, indicating a high degree of financial protection.

Findings from other equity studies also confirm that the removal of user fees on primary health care, as well as the predominance of general tax and donor funding to fund health care makes the Zambia health system more financially progressive (Masiye, Kaonga, and Kirigia 2016). As compared to other lower middle-income countries, Zambia records a relatively low incidence of financial hardship and ill-health-induced impoverishment. Having said this, access to health care among the poorest still remains a key challenge. This is because analyses on financial protection and benefit incidence do not consider the population who fail to report illness or who do not report expenditure. Further, even though there have been improvements in the receipt of total health care benefits in comparison to need for health care at household level between 2010 and 2015, the poorest 20 percent of the population still received lesser health benefits in comparison to their needs as compared to richer households (World Bank 2018

4. CONCLUDING REMARKS

The four papers and other supplementary evidence collectively highlight various areas of progress in health financing, expenditure, and service delivery in Zambia between 2006 and 2017. We observe that government schemes became an increasingly important channel for pooling resources, the overall incidence of financing health care is pro-poor, and the country has a low incidence of catastrophic health payments as compared to other lower middle-income countries. These achievements in financial risk protection in Zambia could be attributed to the free health care policy and predominance of government (general tax revenue) and donor funding. The reports also show improvements in the range and availability of health services, increasing share of expenditure on ambulatory health care (which aligns to government's primary health care approach and health vision), and a remarkable increase in the training and recruitment of health workers.

Despite the above successes, the reports also highlight a number of challenges. In particular, the overall level of health spending in Zambia at US$59 per capita is not sufficient to meet the cost of attaining UHC. Further, the modest increase in inflation-adjusted total CHE in the past four years has been counteracted by stagnating donor health expenditure, and a decline in the share of total public spending allocated to health. Despite low levels of funding, there are weaknesses in budget execution particularly at the primary health care level while the high cost per health service output suggests that more health services can be obtained from the available resources through improved efficiency in spending. Further, significant human resources hours are lost due to absenteeism and idle health workers while there is inadequate expenditure, wastage, and stock-outs of essential drugs. All these factors contribute to provision of poor-quality services and health outcomes. Lastly, there is urgent need for the government to come up with a viable strategy of recruiting and retaining the rising pool of unemployed health workers through contractual arrangements with Cooperating Partners and the private sector; or at the least, to facilitate their recruitment in foreign countries so that they can acquire more experience while the country can also benefit from foreign transfer payments.

The data contained in the NHA, PER, PET-QSDS, and equity reports provide a useful backdrop for developing a fiscally sustainable, equitable, and efficient strategy for financing health care in Zambia. In the next section, we present some policy recommendations that could be used to address the challenges in the short to long term.

5. POLICY RECOMMENDATIONS

INTERVENTION	*HIGH PRIORITY: SHORT TERM (1–3 YEARS)*	*MEDIUM TO LONG TERM PRIORITY (3–5 YEARS)*
Improve domestic resource mobilization	• Revise the existing national health financing strategy to provide for innovative means of sustainable and equitable health financing through domestic sources. The strategy should identify and set specific and actionable targets for domestic resource mobilization for the health sector in the short to long term. • At the highest level of the Ministry of Health, lobby for increased government allocation to the health sector in line with the Abuja target of allocating 15 percent of total public resources to the health sector. • Develop a clear framework for re-engaging donors with a view to reducing the current uncertainty surrounding donor financing. • Given that most donor funds are increasingly targeted at specific programs or regions, it is recommended that a framework of common planning be implemented to ensure that allocation of all health sector resources is harmonized.	• Develop a strategy on how the country will transition from donor support and sustain health service delivery by using domestic resources.
Resource allocation	• Revise the district resource allocation formula for operational grants to take into account new districts, and underlying inequalities in human resources, health infrastructure, population density, and mode of transportation. The existing district formula is not sufficient as districts with more staff and health facilities tend to get more funding per capita. • Develop a robust resource allocation for funding hospitals based on intervention set and disease burden to more accurately reflect cost of hospital care. • Enforce implementation of the free user fees policy to foster financial protection. Evidence from the PET-QSDS shows that some user fees are still being charged at primary health facilities. • Conduct an assessment of priority package of benefits to be included in the proposed NHI based on cost-effectiveness, high financial burden, and equity.	• Devise and implement a new resource allocation formula to optimize the allocation of resources by level of health care and impact on the disease burden. • Improve monitoring systems for deployment of health human resources in rural facilities to ensure that staff are not migrating from rural to urban facilities.
Improve predictability of funding, efficiency and use of	• Consider direct disbursement of operational grants from the Ministry of Finance to district hospitals and health centers. This would improve timeliness of disbursement of grants while also providing for managerial autonomy for health facility managers.	• Conduct a comprehensive assessment of resource management in public health facilities to improve

available resources	• Conduct regular monitoring and assessment of grant allocations and public health expenditure. • Develop a harmonized, cost-effective and sustainable RBF model that could be scaled-up countrywide using government systems and finances.	efficiency of public health spending. • Transform the government operational grant into a RBF grant, and scale-up RBF to all parts of the country.
Improve planning for drug procurement and prescribing	• Increase budgetary allocation to drugs through a special drug fund. • Minimize costly accumulation of arrears by signing contracts in the Zambian Kwacha, price locking, payment of suppliers in full at the start of the financial year, and effective management of framework contracts. • Explore efficient and cost-effective options for national procurement of drugs. • Investigate magnitude and causes of wastage of drugs in health institutions. • Develop a strategy to address irrational prescription of medicines, such as overuse of antibiotics and injections.	• Establish policy and guidelines for purposes of comparing prices of all drug commodities to a reference standard to obtain the best value for money from available drug budget. • Develop capacity in more cost-effective medicine prescribing practices.
Effective management of human resources	• Come up with viable options of how to recruit the growing pool of unemployed health workers. • Devise a strategy for monitoring how health worker absenteeism is reported and managed at district and facility levels. • Distribute human resources based on where they would be most productive.	• Develop a system for monitoring productivity of all types of health personnel to get more health services out of available health staff.
Physical infrastructure and medical equipment	• Increase budgetary allocation for maintenance of existing infrastructure (buildings and medical equipment). • Standardize equipment listing to benefit from negotiated prices from service contracts for equipment maintenance. Buying same model of medical equipment will lead to savings from routine maintenance.	• Construct new health facilities in rural areas to increase physical access, and reduce waiting and travel time.
Improve public finance management	• Improve financial reporting by harmonizing the various financial management software in the health sector. • Institutionalize the NHA to provide data routinely for more effective planning and budgeting.	

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