

BUDGET BRIEF 2017: HEALTH

Key Messages:

- The Health Sector was allocated MT 21.1 billion (US\$ 300.1 m) in the 2017 State Budget. This represents 7.8 percent of the total value of the State Budget (or a 10.1 percent share of the State Budget less financial operations and debt servicing).
- Mozambique spends nearly the same as other low income countries on 'health as a percentage share of total government expenditure', but slightly less than sub-Sahara African countries. It spends slightly more than both on 'health as a share of GDP'. However, on a per person basis, it spends slightly more than low income countries, but substantially less than sub-Sahara African countries.
- Donor-provided resources to the Health Sector have been both inconsistent and declining in real value. According to the 2017 initial allocation to the sector, donors will provide just 3 percent of on-budget sector funding (although this is likely to be revised). Domestic resources are filling the gap. However, the growth in domestic resources are being applied disproportionally to recurrent functions instead of investment.
- Commitments and disbursements to the Prosaude common fund have declined significantly in recent years. Between 2008 and 2014, Prosaude financed approximately a quarter of all on-budget health spending. Since 2014, Prosaude funds have barely funded a tenth of sector spending. In 2017, donors committed just US\$ 23 million, far from the US\$ 84 million disbursed in 2014.
- Mozambique has shown substantial improvement relative to other low income and Sub-Sahara African peers in reducing child and maternal mortality; however, it lags considerably behind the same peers on all other health measures: HIV/AIDS, Malaria, TB, Nutrition, and Road/Traffic Mortality. The result is a life expectancy rate of 55, which is 4 years less than its regional peers and 6 years less than its income peers.

- On unannounced visits to the country's health facilities, surveyors found a quarter of health care providers were absent. Of those that were present, only around half could properly diagnose five common health conditions, and only a third could demonstrate they could follow clinical guidelines for treatment and respond to common maternal and neonatal complications. During the same visits, researchers found that only a third of health facilities had running water, electricity, and sanitation facilities and just two-infive had all medicines in stock. If the country hopes to improve its health outcomes, it must direct resources to improving the preparedness of health care personnel and facilities.
- Mozambique managed to translate increased per capita health spending into substantial improvements in the child mortality and life expectancy measures over the past 15 years. Empirical evidence suggests further increases in health spending may lead to improved outcomes; however, given the current fiscal environment, large spending increases are unlikely. Therefore, the country must focus on making efficiency gains using current resource levels.
- Rich, urban-based households in Mozambique have better access to and use of health facilities relative to poorer, rural households. Related to this, Zambézia province, which has one of the lowest access and usage rates in the country, receives a much smaller per person allocation than other provinces with higher access and usage rates. The Health Sector needs to prioritize investment in the provinces exhibiting the greatest need.

Please note: UNICEF does not have access to e-SISTAFE; therefore, all analysis was carried out with publicly available information. Where limitations were encountered, notes are made in the text. There are some minor discrepancies between the totals presented in the 2016 Health Budget Brief and those presented in the 2017 edition. As new data sources became available, UNICEF revised its calculations. In this respect, UNICEF publishes the values in this edition believing these to be most correct. The viewpoints expressed in the brief are those of the author and do not necessarily represent those of UNICEF.



Background

The 2017 State Budget and Economic and Social Plan were approved by Parliament on December 9, 2016 and entered into force on January 1, 2017. The State Budget and Economic and Social Plan (PES, by its Portuguese acronym) were promulgated by President Felipe Nyusi on December 20, 2016, then published as Law 10/2016 and Resolution 25/2016, respectively, on December 30, 2016.

The 2017 State Budget is worth MT 272.3 billion (US\$ 3.86 billion)¹; this represents an increase, in both nominal and real terms, relative to the 2016 State Budget and 2016 total government spending. The budget deficit amounts to an expected 10.7 percent. In nominal terms, the 2017 State Budget embodies a 12 percent increase relative to the 2016 State Budget and a 30 percent increase relative to the executed value of the 2016 State Budget². In real term, the 2017 budget is a 1 percent increase compared to last year's budget and an 18 percent increase compared to last year's expenditure. In fact, in nominal terms, the 2017 State Budget is the largest on record; however, in real terms, it is the third largest following the 2014 revised State Budget and the 2015 State Budget³.

The nominal increase observed in the 2017 State Budget reflects the planned spending increases on debt servicing and financial operations. These increases, in fact, are due to the country's now greater debt burden, devaluation of its currency, and increased inflation⁴. This contributes to an anticipated 10.7 percent budget deficit, which the country will finance through additional borrowing⁵. Nevertheless, the government is implementing certain austerity measures, including: limitations on new hires outside of the education, health, and agriculture sectors; spending restrictions on gasoline, travel, and personal communication; and postponement of new investment projects not initiated in 2016⁶.

The 2017 budget for priority Economic and Social Sectors (which includes the Health Sector) increased in both nominal and real terms and as a share of the entire State Budget. In nominal terms, the allocation to priority Economic and Social Sectors, as defined by the Government's Five-Year Plan (PQG), increased 18 percent relative to the allocation in the 2016 revised State Budget and 43 percent relative to the executed value of the priority sectors in 2016; however, in real terms, the increases were 7 and 30 percent, respectively. The share occupied by the priority sectors (as a percentage of the State Budget) increased from a 50 percent budgeted share in 2016 to a 53 percent budgeted share in 2017; nevertheless, the 2017 share is much lower than the historical high in 2012 and 2013 when spending on priority sectors represented 62 percent of total government spending. It is important to note here that the Government of Mozambique employs a different methodology when calculating priority sector shares of budgeting and expenditure: instead of using the entire State Budget or total expenditure as the denominator in the calculation, it deducts debt servicing and financial operations from the total. The result is a reported higher share. Using the Government's methodology, priority sectors represent 69 percent of the 2017 State Budget⁷.

¹⁾ This report uses the exchange rate: US\$ 1 = MT 70.45 since this was the average exchange rate for 2017 at the time of publication.

²⁾ Please note that at the time of publication, the CGE 2016 has yet to be released. For this reason, all expenditure references in the remainder of this brief, for the 2016 fiscal year, rely on the execution figures as documented in the REO IV 2016.

³⁾ Author's calculation based on expected 2017 inflation rate of 15.5 percent. LOE 2017, Documento da Fundamentação, page 11.

 ⁽i) Mozambique's Debt-to-GDP ratio grew from 40 percent of GDP in 2012 to 73 percent of GDP in 2015 to 130 percent of GDP by the end of 2016. (ii) Inflation increased from 4 percent in 2015 to 25 percent by the end of 2016, and is expected to increase by 15.5 percent by the end of 2017. (iii) The Mozambique Metical depreciated from US\$ 1 = MT 48 in January 2016 to US\$ 1 = MT71 in January 2017. Source: (i) World Bank, "Mozambique Economic Update", December 2016. (ii) World Bank, World Development Indicators. (iii) Instituto Nacional de Estatísticas, February 2017.

⁵⁾ LOE 2017. Documento da Fundamentação. Page 34.

⁶⁾ MEF. Circular No.1/GAB-MEF/2017. "Administração e Execução do Orçamento do Estado para 2017".

⁷⁾ For sake of international benchmarking, this brief reports shares calculated out of the *total* value of the budget, but also references the government-recognized share for sake of comparison.

21.1

billion MT is the amount allocated to the Health Sector in the 2017 State Budget. This represents a 7.8 percent share of the State Budget.

1. How is the Health Sector Defined?

The Health Sector refers to the group of health institutions that receive autonomous budget allocations through the State Budget. The sector is led at the central level by the Ministry of Health (MISAU) and supported by 11 Provincial Health Directorates (DPS) and 150 District Services for Health, Women, and Social Action (SDSMAS). The Sector composition also includes the Centre of Medicines and Medical Articles (CMAM), the National Council for the Fight Against HIV/AIDS (CNCS), four Central Hospitals, five General Hospitals, eight Provincial Hospitals, one District Hospital, and one Psychiatric Hospital.

In 2017, the Health Sector added a total of seven new autonomous budget holders to its sector composition: three at the provincial level and four at the district level. The three entities added at the provincial level are: Health Sciences Institute of Manica, Quelimane Central Hospital (Zambézia province), and Polana Caniço General Hospital (Maputo City). The four entities added at the district level are SDSMAS units, they include: Macate (Manica province), Matola (Maputo Province), Lichinga (Niassa province), and Luabo (Zambezia province). In 2016, the sector added 15 autonomous budget holders; they included the Matola Provincial Hospital and 15 SDSMAS units.

Health is one of seven priority sectors, and is governed by the Health Sector Strategic Plan 2014-2019. The sector's planning and budgeting is guided by the Health Sector Strategic Plan (PESS), which has seven strategic objectives: (1) augment the access and use of health services, (2) improve the quality of health services, (3) reduce geographical inequalities in the access and use of health services, (4) better the efficiency of health services provided, (5) strengthen health partnerships, (6) increase transparency and accountability in how public resources are used, and (7) strengthen the governance of the Mozambican health system⁸. This report describes how several of these strategic objectives are addressed by sector resource allocation.



2. What Trends Emerge from the Health Budget?

The Health Sector was allocated MT 21.1 billion (US\$ 300.1 million) in the 2017 State Budget. In nominal terms, the 2017 allocation represents a 7 percent decrease compared to last year's budget allocation, but a 4 percent increase compared to last year's expenditure (see Glossary of budget terminology). In real terms, it represents a 16 percent decrease compared to last year's budget allocation and a 5 percent decrease compared to last year's expenditure (see Figure #1A & B). The nominal and real decrease in the 2017 health budget vis-à-vis the 2016 health budget is principally due to the absence of on-budget donor funding (external investment) to MISAU, which, in 2016, was worth an executed value of MT 3.6 billion (b)⁹. This is mainly explained by the fact that Prosaude funding was not inscribed in the initial budget. From a historical perspective, the 2017 health allocation is the second largest of all time (after 2016) in nominal terms, but the sixth largest (after 2015, 2014, 2016, 2013, and 2009) placed in descending order) in real terms.

The 2017 health budget breaks a five-year nominal trend of increasing Health Sector budgets. Between 2011 and 2016, the initial budget allocation to health grew year-on-year from MT 8.3 b to MT 22.7 b. However, in real terms, the 2017 initial budget allocation decreased for a second year in a row, mainly due to the eroding effect of inflation on the real value of health resources.

⁸⁾ MISAU. Plano Estratégico do Sector da Saúde (PESS) 2014-2019. Page. XV, Tabela 2.

⁹⁾ It is important to mention that at the time of publication, the 2016 General State Account (CGE) has yet to be released. Expenditure totals presented for 2016 are from the REO IV 2016. Thus, it is possible that sector expenditure totals will be different in the 2016 CGE.



Nevertheless, the initial budget allocation to the sector is not indicative of the revised allocation, nor expenditure. The initial budget allocation is not a good indicator of how much will be spent in the sector. For example, in 2009, the initial budget was MT 3.2 b

greater than expenditure, while in 2013, expenditure was MT 5.3 b more than the initial budget. In fact, the large discrepancy between initial allocation, revised allocation, and expenditure reflects the challenge faced by government in tracking external donor resources in the budget. Donors, when formulating projects, decide whether to channel project funds through the single treasury account (CUT) and whether to inscribe the project budget on the State Budget. Donor project funds that are on-budget and on-CUT are automatically tracked through the e-SISTAFE (government's integrated financial management information system) and accounted for in budget and expenditure reports. Donors that decide to implement projects that are on-budget and off-CUT are expected to communicate project budgets to the Ministry of Economy and Finance (MEF) during the budget creation cycle and then report budget execution back to MEF on a guarterly basis. The difference between initial allocation and updated allocation is largely due to donors reporting project budgets late, after the formulation of the State Budget; similarly, the difference between revised allocation and expenditure is mainly due to incomplete reporting of budget execution at the end of the year¹⁰. Nevertheless, the narrowing variance between the initial allocation and revised allocation suggests improved up-front reporting by donors.

FIGURE 1 A & B Health Sector budgeting and expenditure



Source: Author's calculations from the CGE 2008-2015, REO IV 2016, LOE 2017. World Bank, World Development Indicators: Consumer Price Index (2010 = 100). Inflation adjusted data point for 2016 based on INE, *"Indice de Preços no Consumidor, Dezembro de 2016"* and data point for 2017 based on LOE 2017 *Documento da Fundamentação*. Note: (*) At the time of writing, the 2016 public expenditures account has yet to be finalized; in this regard, it is possible the expenditure total is slightly larger than shown. (**) Years 2008-2016 display expenditure; 2017 displays the initial budget allocation.

¹⁰⁾ Another reason for the difference between initial allocation and expenditure (or in other words "execution") is that not all donors disburse the full amount of their commitments to the Prosaude common fund. Additionally, the difference between the revised allocation and execution is due to the varying budget execution rates by institutions.

The Health Sector represents a 7.8 percent share of the 2017 State Budget. This is a decrease compared to last year's share of total government expenditure (see Figure #2A). Between 2008 and 2016, the share of spending on the Health Sector out of total government spending fluctuated from a 10.3 percent share in 2008, down to a 6.4 percent share in 2011, up to an 11.5 percent share in 2012, down to a 7.7 percent share in 2013, and back up to a 9.7 percent share in 2016. The large increase in share size from 2011 to 2012 is because 2012 was the first year in which SDSMAS units were officially included in the Health Sector's composition¹¹. The large decrease in share size from 2013 to 2014 is because of the significant decrease in donor funding to MISAU (external investment) which dropped from MT 10.1 b in 2013 to MT 1.7 b in 2014. Finally, the decrease in share size in the 2017 budget is, as was previously mentioned, due to the lack of any donor funding to MISAU. Again, it is important to note that the government employs a different methodology to calculate sector shares (see Background). Utilizing the government's methodology, the sector registers a 10.1 percent share for the Health Sector in 2017. No matter



which methodology utilized, Mozambique falls short of the 15 percent share committed to under the Abuja Declaration in 2001.



Source: Author's calculations from CGE 2008-2015, REO IV 2016, LOE 2017. The Lower Income Country (LIC) averages are WB WDI for "Health expenditure, public (% of government expenditure)" and "Health expenditure, public (% of GDP)".

Note: LIC and SSA are averages for all Low-Income Countries and Sub-Sahara Countries for which data is available. (*) At the time of writing, the 2016 public expenditures account has yet to be finalized; in this regard, it is possible the expenditure total is slightly larger than shown. (**) Years 2008-2016 display expenditure; 2017 displays the initial budget allocation.

¹¹⁾ This is not to say that SDSMAS did not exist pre-2012, in fact, it did. Rather, SDSMAS was only formally included in the institutional composition of the Health Sector starting in 2012.

is Health Sector's share of expected gross domestic product in 2017.



2.8%

The Health Sector is worth a 2.8 percent share of expected gross domestic product in 2017; this is a decrease compared to last year (see *Figure #2B*). The Health Sector's weight of gross domestic product (GDP) has declined in recent years from a 4.3 percent share in 2013 to a 3 percent share in 2016 to a budgeted 2.8 share for the current year. This declining share is in the context of near 7 percent GDP growth per annum. In short, GDP is growing faster than the recent growth in Health Sector expenditure.

Mozambigue spends, on average, nearly the same as other low income countries on health as a share of total government expenditure, but slightly less than sub-Sahara African countries. Considering health as a share of GDP, Mozambique spends slightly more than both low income and sub-Sahara African countries (see Figure #2A & B). Between 2008 and 2014, the most recent year for which there is comparable data for low income countries (LIC) and sub-Sahara African countries (SSA), Mozambique's Health Sector averaged a 9.1 percent share of government expenditure (10.0 percent according to the government's methodology), while LIC averaged 8.7 percent and SSA averaged 10.5 percent. Clearly, Mozambique spends nearly the same as LIC and slightly less than SSA. Considering health as a share of GDP over the same time period, Mozambique averaged 3.0 percent, while LIC and SSA averaged 2.5 percent, thus demonstrating that the country spends higher shares of GDP than its peers. The 2017 health budget suggests Mozambique will spend slightly less than both peer groups as a share of government expenditure and slightly more as a share of GDP.



Source: Author's calculations from CGE 2008-2015, REO IV 2016, LOE 2017. The Lower Income Country (LIC) averages are WB WDI for "Health expenditure, public (% of government expenditure)" and "Health expenditure, public (% of GDP)".

Note: LIC and SSA are averages for all Low-Income Countries and Sub-Sahara Countries for which data is available. (*) At the time of writing, the 2016 public expenditures account has yet to be finalized; in this regard, it is possible the expenditure total is slightly larger than shown. (**) Years 2008-2016 display expenditure; 2017 displays the initial budget allocation.

3. Where do Health Sector Resources Come From?

The Health Sector in Mozambique is financed with both internal and external resources. Internal resources are collected through taxes, tariffs, duties, and internal credits, and have been (up to 2015) complemented by General Budget Support (GBS), which is un-earmarked development aid to the Mozambican Government from a group of development partners. Unique to the Health Sector, internal resources are also supplemented by revenues from user fees applied at health facilities. External resources, on the other hand, comprise non-GBS foreign aid, donations, and external credits.

External resources applied to health fit into three categories: (i) "Prosaúde contributions", which are donations from development partners to the multi-donor common fund for Health; (ii) "Bilateral Project Funds", which are all other grants and credits from partners not channeled through Prosaúde; and (iii) "in-kind donations" of medicines and medical equipment. Prosaúde resources are categorized as external investment, however, they are managed by MISAU using national procedures: they are inscribed on the budget, channeled through the CUT, follow government procurement policy, but require external audit. On the other hand, bilateral project funds are -in theory-coordinated between the donor and MISAU and applied through a variety of modalities including: (i) direct government support with government-only or joint partner-government implementation, often "On-Budget, On-CUT"; (ii) partner or third party implementation, often "On-Budget, Off-CUT"; or (iii) partner or third party implementation, but "Off-Budget". One of the greatest challenges for MISAU, and for budget/expenditure analysis in the sector, is the inconsistent reporting by donors of their budgeting and expenditure on bilateral projects that are Off-CUT and Off-Budget¹².

In the Health Sector, resources are budgeted on a five-year basis through the Medium Term Fiscal Plan (CFMP) per the priorities laid out in the PESS; then, re-budgeted into single-year sector budget proposals in accordance with the proposed PES. The health budget proposal and health section of the PES proposal are then negotiated with the Council of Ministers and MEF before being submitted to Parliament. Parliament approves Health Sector resources as part of its approval of the State Budget, after which, the sector's institutions utilize the resources in accordance with the ministry's activities plan. Resources for the Health Sector in 2017 can be analyzed from the following four perspectives: The share of internal funding to the Health Sector has steadily increased over time.



3.1 Internally- versus Externally-Sourced Resources

General Budget Support, despite being a consistent source of financing over the years for priority sectors – including health– was suspended in 2016 and remains suspended. Whereas Mozambique's development partners committed MT 11.9 billion (b) in direct support to the State Budget in 2016, their support was later suspended in response to the country's secret loan scandal. This suspension has continued into 2017¹³.

Mozambique has increased the share of funding with own resources to the Health Sector in response to decreasing and inconsistent donor contributions. The portion of internal resources increased from a 48 percent share in 2008 to a 73 percent share in 2016 (see *Figure #3A & B*). Internal resources steadily grew, in nominal terms, from MT 3.4 b in 2008 to MT 14.7 b in 2016. Donor (or external) resources, on the other hand, in addition to fluctuating greatly, decreased as a percentage share of total health resources and in real value. In 2008, external resources were worth 52 percent of total health resources, then were worth 44 percent in 2010, 55 percent in 2013, 20 percent in 2014, and 27 percent in 2016.

¹²⁾ Major donors to the Health Sector such as the Global Fund and GAVI provide on-budget, on-CUT resources. The largest off-budget donor is the United States Government, principally through the PEPFAR program.

¹³⁾ See: LOE 2016 Revisto. Documento da Fundamentação. Page 18; LOE 2017. Documento da Fundamentação. Page 20.



are initial external resources allocated to the Health Sector.



According to the 2017 initial allocation to the sector, external resources are worth just 3 percent of the health budget, (not including external off-budget contributions). MISAU received zero external funding. For the first time, zero donor funding was inscribed in MISAU's initial budget allocation. There are multiple plausible, unconfirmed explanations for this. First, Prosaude commitments could not be included in the initial budget allocation because an updated memorandum of understanding was not completed. Second, there is an increasing disaffection by donors for using government systems and they are, thus, not channeling project funding through the CUT. Third, donors were slow to report off-CUT 2017 project budgets to MISAU and/or MISAU did not manage to inform MEF in time for the publication of the new State Budget. In the end, this does not necessarily signal a reduction in external support to the Health Sector, rather, it is, again, a reflection of the challenges faced in the registration and reporting of donor funding.

FIGURE 3 A & B

Health Sector resources by internal and external source



Source: Internal State Resources and External Resources: Author's calculations from the CGE 2008-2015; REO IV 2016; LOE 2017: *Quadro "Equilibrio Orçamental"*. Off-Budget: 2009-2012 World Bank Public Expenditure Review; 2008-2014 IFE; 2015-2017 estimates based on ODAMOZ projections and PEPFAR expenditure/commitments. Real Terms: World Bank, World Development Indicators: Consumer Price Index (2010 = 100). Inflation adjusted data point for 2016 based on INE, *"Indice de Preços no Consumidor, Dezembro de 2016"* and data point for 2017 based on LOE 2017 *Documento da Fundamentação*.

Note: (*) At the time of writing, the 2016 public expenditures account has yet to be finalized; in this regard, it is possible the expenditure total is slightly larger than shown. (**) 2017 is based on initial budget allocation and donor commitments. Off-budget total is the author's estimate based on available sources. It is expected that external resources for 2017 will increase with the updated allocation once Prosaude funds are inscribed on the budget. (***) The "Off-Budget Health Resources" category describes funding that is not tracked through Mozambique's State Budget.

3.2 Off-Budget Health Resources

Off-budget donor execution over the past near-decade has represented between one-third and one-half of total execution per annum in the Health Sector (see *Figure #3A & B*). Since 2008, the majority of donor support to the Health Sector has neither been inscribed on the State Budget nor channeled through the country's treasury. The largest source of off-budget financing is the United States Government through its President's Emergency Plan for Aids Relief (PEPFAR) program, which, for example, was responsible for executing more than US\$ 200 million (m) in 2016. As a share of total Health Sector execution, offbudget support has accounted for, on average, 40 percent over the past nine years, having represented as high as 51 percent in 2008 and as low as 32 percent in 2014. When coupling off-budget donor support with on-budget donor support (i.e. external investment), donors have accounted for, on average, 65 percent of health spending since 2008. At its lowest, the internal-to-external funding ratio stood at 23 percent internal: 77 percent external in 2008 and, at its highest, the ratio stood at 54 percent internal: 46 percent external in 2014.

Accurately tracking the volume of off-budget support has remained a challenge for the government. The ODAMOZ online platform is the country's official development assistance (ODA) database through which donor support across all modalities (including off-budget) and all sectors (including health) is to be tracked. However, because of inconsistent reporting by donors and website technical problems, among other reasons, the database is an unreliable source for off-budget support. As more donors choose to fund their Health Sector assistance off-CUT and off-budget in response to the undisclosed loan scandal, there will be an increased need for the government to coordinate donor support, including ensuring proper reporting of donor programming, as a way to reinforce the PESS strategic objective # 6.

3.3 Prosaude Resources

Prosaude contributions, which represented approximately a quarter of total on-budget health resources between 2008 and 2014, have decreased in value nearly two-thirds since 2014 (see *Figure #4*). Prosaude is the sector wide approach (SWAp) for health. Between 2008 and 2014, the basket fund was a consistent funding source for health. Since 2014, commitments decreased from US\$ 85 m in 2014 to US\$ 49 m in 2016 and execution dropped from US\$ 84 m to US\$ 29 m. The dwindling financial support to Prosaude reflects the emerging donor preference to fund the sector through alternative, indirect modalities in the wake of the undisclosed loan scandal.

In 2017, Prosaude commitments are worth US\$ 23.4 million; more commitments, however, are expected over the course of the year. On April 24, 2017, the government and donors signed a new memorandum of understanding for Prosaude. The initial group of donors that offered commitments to Prosaude for 2017 include: Canada, Ireland, Switzerland, Denmark, Belgium/Flanders, Spain, UNICEF, and UNFPA¹⁴. Further commitments from other donors are expected over the remainder of 2017.



Source: Author's compilation from CGE 2008-2015; REO IV 2016 Health, Table 2.1, Pg. 7; and 2017 Health REO I, Table 7.4, pg. 24.

Note: (*) At the time of writing, the 2016 public expenditures account has yet to be finalized; in this regard, it is possible the execution total is slightly larger than shown.

¹⁴⁾ Prosaude Donor Commitment Letter. Dated March 7, 2017.

3.4 Health Sector Revenues

The Health Sector collects approximately MT 300 m, on average, per year, in revenues. The majority of this comes from user fees and medicines purchased at the Maputo Central Hospital. There is, however, much room for improvement in the way sector revenues are tracked and reported (see Figure #5). According to the World Bank's recent Health Service Delivery Indicator (SDI) survey, nearly all health facilities in the country charge user fees¹⁵. But, over the past five years, the only health institutions that report revenues are the Maputo Central Hospital (HCM) and CMAM¹⁶. Together, they account for around MT 300 m in revenues per year and an estimated MT 600 m for 2017. These revenues, once collected, are then executed back in the Health Sector. To improve the transparency of this funding source (in line with PESS objectives #6 and #7), the sector needs to do a better job tracking and reporting revenues across all health facilities. Presently, according to the same SDI survey, just a tenth of health facilities disclose financial information¹⁷.





Source: Author's compilation based on the CGE 2008-2015, REO IV 2016, Mapa II-4 *"Receitas Proprias Segundo a Classificacao Organica".*

Note: (*) 2016 is an aggregated estimate of revenues, whereas 2008-2015 are actual revenues. (**) CMAM and Maputo Central Hospital are the two institutions from which revenues currently flow. Revenues come largely from user fees, but also from the sales of medicines and other specialized medical services.

4. How are Health Sector Resources Spent?

The Ministry of Economy and Finance releases initial funds (*dotação inicial*) via the CUT to each autonomous budgetholding health institution and subsequently updates the allocation based on budget execution rates and available resources (*dotação actualizada*). The institutions track spending (*execução*) through the e-SISTAFE, which sources quarterly budget execution reports (*REOs*) and the annual General State Account (*CGE*). The way the 2017 health budget will be spent can be analyzed from the following four perspectives:

4.1 Recurrent versus Investment Spending

The State Budget divides health expenditures into two categories: Recurrent and Investment. Recurrent describes spending on salaries/remunerations, goods and services, operating costs, transfers, and financial operations. Investment (i.e. capital expenditure) describes spending aimed at improving access to health services and quality care (i.e. construction of clinics and hospitals, training of doctors and nurses, purchase of medical devices, etc).

Recurrent expenditure is exclusively financed through internal resources, whereas Investment is both funded internally and externally. However, it is necessary to point out that all external funding is recorded in the budget as "external investment", when in fact, it might have a portion dedicated to recurrent functions. Considering the fact that e-SISTAFE is now able to track external recurrent spending, it is important for MEF to utilize the separate accounting categories to improve the understanding of investment spending levels in health and other priority sectors.

Investment in the Health Sector has mainly become the work of donors. Increases in domestic resources for health, in real terms, have predominantly gone toward recurrent spending. In the 2017 budget, 88 percent of resources are committed to recurrent spending while 12 percent are committed to investment spending (see *Figure #6*). Between 2008 and 2016, internal investment hardly showed any growth in real terms. Meanwhile, over the same period, recurrent spending grew, in real terms, more than 150 percent.

¹⁵⁾ The report also notes that many categories of users are exempt from paying, such as individuals with chronic disease, the elderly, and children under-5 years. Source: World Bank. "Service Delivery Indicators: Health Service Delivery in Mozambique". June 2016. Section L, Page 32.

¹⁶⁾ Health Sector revenues (receitas próprias) are tracked in the Health Sector REOs and the CGE in Mapa II-4.

¹⁷⁾ World Bank. "Service Delivery Indicators: Health Service Delivery in Mozambique". June 2016. Section L, Page 33.

is 2017 budgeted investment-torecurrent ratio.

During the same years, the investment-to-recurrent ratio decreased from 56 percent investment : 44 percent recurrent in 2008 to 33 percent investment : 67 percent recurrent in 2016. Shockingly, the 2017 budgeted ratio stands at 12 percent investment : 88 percent recurrent; however, this is due to the fact that Prosaude funding was not yet inscribed on the budget. The average investmentto-recurrent ratio between 2014 and 2016 was 65 percent recurrent: 35 percent investment; this is nearly on par with the often cited 70:30 rule for sustainable investment. It is, however, important to note one distortion in the ratio: since a large portion of medicines are donor-provided often as in-kind donations- they are thus inscribed in the budget as investment. Nonetheless, it is imperative that MISAU prioritizes donor coordination to ensure that donor assistance addresses sector priorities, as is relevant for PESS strategic objective #5.

Several large investment projects have been prioritized for 2017. According to the 2017 PES, the following are the sector's main investment projects for the year: continue rehabilitation of urban health center in Beira (Sofala); continue construction of district hospitals in Montepuez and Mocimboa da Praia (Cabo Delgado), Cuamba (Niassa), Machaze (Manica); initiate construction of a district hospital in Jangamo (Inhambane); initiate construction of extension to district hospitals in Gile (Zambezia) and Manhiça (Maputo Province); continue with construction of Maxixe (Inhambane) provincial hospital; and initiate the construction of the Nacala-Porto Health Science Institute in Nampula¹⁸. However, as mentioned in the Background Section, large construction projects not already initiated in 2016 remain -at the time of publication- on hold.



12% to 88%

Source: Author's calculations from the CGEs 2008-2015, REO IV 2016, and LOE 2017. World Bank, World Development Indicators: Consumer Price Index (2010 = 100). Inflation adjusted data point for 2016 based on INE, "Indice de Preços no Consumidor, Dezembro de 2016" and data point for 2017 based on LOE 2017 Documento da Fundamentação. Note: The External Investment category does not include off-budget funding. (*) At the time of writing, the 2016 public expenditures account has yet to be finalized; in this regard, it is possible the expenditure total is slightly larger than shown. (**) Years 2008-2016 display expenditure; 2017 displays the initial budget allocation.

¹⁸⁾ Government of Mozambique. Plano Económico e Social (PES). 2017. Page 84.



4.2 Resource Use by Health Institution

MISAU received the largest allocation in the 2017 health budget, followed by the collective allocations for SDSMAS and DPS. This is the same breakdown as 2016 (see *Figure #7*). According to the Organic Classification, in 2017, the MISAU (at the central level) was budgeted MT 9.9 b, equal to 47 percent of the health budget. The ministry's presence at the district level, through the SDSMAS units, was budgeted MT 3.9 b, equal to 19 percent of the budget, and its presence at the provincial level, through the DPS units, was budgeted MT 3.0 b, equal to 14 percent of the budget. While this is the same as the 2016 executed breakdown, it marks a departure from the pre-2016 trend of the DPS units holding the second largest share of the budget (after MISAU). In 2012, SDSMAS was officially included in the Health Sector combination, after which it steadily grew, in both real and nominal terms, until 2016, when it overcame DPS as a share of the budget. This demonstrates the further decentralization of funding from the provincial to the district level (see further explanation in Section 6).

Numerous health institutions still require deconcentration from the MISAU and DPS budgets. For improved budget and expenditure transparency, the sector needs to assign autonomous budget holder status (UGB) to the remaining health institutions still concentrated in the central MISAU and provincial DPS budgets. According to the Health REO IV 2016, 30 institutions still need to be deconcentrated: National Laboratory of Hygiene, Water, and Food; Center for the Regional Development of Health; Maputo Institute of Health Sciences; National Health Institute; as well as 12 district and 14 rural hospitals¹⁹. The deconcentration of these institutions has been a top priority listed in the Health Sector REOs for several years. Each year, one or two institutions are deconcentrated; however, much work remains to be done with MEF to ensure the 30 are assigned UGBs. In doing so, the sector will also be addressing PESS strategic objective # 6.



Source: Author's calculations from the CGE 2008-2015, REO IV 2016, LOE 2017.

Note: DPS, SDSMAS, and Central, General, Provincial, and District hospitals are composites of all hospitals in Mozambique belonging to the hospital category. (*) At the time of writing, the 2016 public expenditures account has yet to be finalized.

¹⁹⁾ MISAU. REO IV 2016, Sector da Saúde. Page 28.

4.3 Resource Use by Functional Area

In 2017, the majority of health resources will be used on medicines and medical equipment (see *Figure #8*). Like the Organic Classification (see Section 4.2), health budgeting and expenditure is also tracked by a Functional Classification, which categorizes resource usage by functional (or thematic) health areas. According to the Functional Classification, "medicines and medical devices" are budgeted to receive the largest amount of health resources in 2017. Historically, "Public Health Services" and "Medicines and Medical Devices" have utilized the majority of health resources, with the former occupying the largest share between 2009 and 2015, and the latter occupying the largest share in 2016. It is important to note that Functional Budgeting does not include off-budget health resources.

The Functional Classification needs to be adapted to track preventative versus responsive health intervention. The Functional Classification would benefit from being reorganized by level of care, i.e. preventative, primary, secondary, tertiary, restorative, and continuing care, in order to track prevention versus responsive health intervention. Also, each year, anywhere between onethird and one-half of all accounted health budgeting and spending remains unclassified (see "Health Services, not elsewhere classified"). If the Functional Classification is to be a useful reporting tool, MISAU financial management



staff need to be better trained at classifying line items according to the functional categories. Additionally, the sector would benefit from a Programmatic Classification as a way to understand how health budgeting and expenditure aligns with PESS and PQG strategic objectives.



Source: Author's calculations from the CGE 2009-2015, REO IV 2016, REO I 2017.

Note: Figure does not include off-budget health budgeting or expenditure. (*) At the time of writing, the 2016 public expenditures account has yet to be finalized; in this regard, it is possible the expenditure total is slightly larger than shown.

110

thousand children live with HIV in Mozambique. HIV spending has accounted between one-third and one-half of total health spending.



4.4 Resource Use in the HIV/AIDS Sub-Sector

Spending on HIV/AIDS has accounted for between one-third and one-half of total health expenditure (including off-budget resources). Donors, such as the United States Government and the Global Fund, are responsible for the largest share of the resources provided (see Figure #9). Mozambique has the eighth highest HIV prevalence rate in the world, corresponding to 10.6 percent of adults aged 15-49 years (2015). Of the 1.5 m people living with HIV in Mozambique, 110 thousand, or 7 percent, are children²⁰. In response to the epidemic, between one-third and one-half of total health resources are devoted to the HIV/AIDS sub-sector. Of the total funds spent on HIV/AIDS, the United States Government's PEPFAR program has contributed, on average, more than 70 percent and the Global Fund has contributed more than 15 percent. Domestic spending, on the other hand, has averaged just 4 percent of total expenditure in the sub-sector.



Source: Author's compilation from 2010-2011, 2014 (NASA 2014); 2015-2015 (GAM 2017).

Note: Expenditure data for 2010-2011 and 2014-2016 utilizes accrual method for tracking value of consumption per year. There is no expenditure data for 2012 and 2013 utilizing this same methodology. The GARPR (2015) has data for 2012 and 2013; however, it was calculated utilizing a different methodology (i.e. procurement per year -cash balance-compared to the consumption per year -accruals- represented in other years). The 2017 HIV/AIDS budget is not possible to determine since PEPFAR funding for FY2017 had yet to be appropriated by the American Congress at the time of publication

²⁰⁾ UNAIDS. Mozambique Country Profile. 2015.

5. How Well Has the Health Sector Executed its Past Budgets?

The Health Sector has executed, on average, 81 percent of its budget between 2008 and 2016, which is considerably lower than the average State Budget execution rate of 87 percent over the same time period (see *Figure #10*). In 2016, the sector provisionally executed a weighted 76 percent of its budget; however, this will be confirmed with the release of the CGE later in the year. Nonetheless, the 2016 execution rate could possibly be the lowest by the sector in the past near-decade. At fault is the poor execution of the investment budgets. The lower execution rate for internal investment in 2016 is due to the low individual budget execution by DPS units (28 percent average), provincial hospitals (56 percent average), The lower execution rate for external investment is due

to the low execution of external resources provided to CMAM (12 percent) and MISAU (62 percent); however, this is mainly a reflection of poor donor reporting of onbudget/off-CUT health programming.

Aggregate Health Sector execution rates are dragged down by incomplete disbursements and partial reporting of on-budget/off-CUT projects by donors. The government executes, on average, 98 percent of the recurrent health budget and 95 percent of the internal investment budget, while donors execute, on average, a mere 67 percent of the external investment budget. Low donor execution rates are due to tardy and incomplete disbursements as well as incomplete donor reporting on projects inscribed on-budget but funded off-CUT. Health Sector donors need to commit to raising the external investment execution rate by improving their Prosaude disbursement rate as well as by adhering to reporting expectations.



Source: Author's calculations from the CGE 2008-2015; and REO IV 2016.

Note: (*) At the time of writing, the 2016 public expenditures account has yet to be finalized; in this regard, it is possible the execution rates are slightly larger than shown.

6. To What Extent has the Health Sector Decentralized?

Total health spending is very centralized. Since (at least) 2008, the majority of health resources have been executed at the central level (see *Figure #11A*). In the 2017 health budget, 59 percent of resources were allocated to the central level, 22 percent were allocated to the provincial level, and 19 percent were allocated to the district level. Health resources have followed the Central-Provincial-District hierarchy since 2012, when SDSMAS was first included in the sector's composition at the district level.

Health Sector spending when disaggregated by internal and external source demonstrates that donor disbursements and spending have historically been very centralized. Government spending, on the other hand, albeit centralized as well, has been more balanced in comparison (see Figure #11B). Since 2012, when SDSMAS were included in the sector's composition, donors have executed (i.e. disbursed to Prosaude and spent), on average, 71 percent of external resources at the central level, 29 percent at the provincial level, and 0 percent at the district level. The government, meanwhile, has executed, on average, 49 percent of internal resources at the central level, 28 percent at the provincial level, and 23 percent at the district level. In 2017, donors have allocated 0 percent of resources to the central level, 95 percent to provincial level, and 5 percent to the district level; however, as mentioned in Section 2, it is important to interpret this with caution. The government has allocated 59 percent to the central level, 22 percent to provincial level, and 19 percent to district level. In order to facilitate targeted donor support at sub-national levels, the Government should prioritize strengthening the capacity of the DPS/SDSMAS units to be able to implement larger investment projects with external funding.

FIGURE 11 A Health expenditure by territorial level



Source: Author's calculations from the CGEs 2008-2015, REO IV 2016, and LOE 2017.

Note: Figures only represent on-budget spending. (*) At the time of writing, the 2016 public expenditures account has yet to be finalized; in this regard, it is possible the expenditure total is slightly larger than shown.

FIGURE 11 B

Health expenditure by territorial level disaggregated by internal and external source



Decentralization of Health Resources Disaggregated by Internal/External Source

Source: Author's calculations from the CGEs 2008-2015, REO IV 2016, and LOE 2017.

Note: Figures only represent on-budget spending. (*) At the time of writing, the 2016 public expenditures account has yet to be finalized; in this regard, it is possible the expenditure total is slightly larger than shown.

7. How Has the Health Sector Performed?

Translating resource inputs into improvements in health outcomes is the focus of Health Sector resource management. This section explores how the Health Sector –given the level of resources applied over past years– is performing relative to its peers on major health indicators and quality service measures, in response to PESS strategic objective #2.

7.1 Trends in Health Sector Outcomes

Mozambique has outperformed LIC and SSA peers in reducing child and maternal deaths (see *Figure #12*). The country has cut child and maternal deaths at a faster rate over the past 15 years than its peers in other low income and sub-Sahara African countries. (i) With regards to child mortality, Mozambique reduced the mortality

rate from an average 171 deaths per 1,000 live births in the year 2000 to an average 79 deaths in the year 2015 (most recent data available), equivalent to a decrease of 92 deaths per thousand. Over the same time period, LIC decreased from an average 155 deaths per thousand to 83, equal to a decrease of 72; SSA decreased from 150 to 76, equal to a decrease of 74. (ii) With respect to maternal mortality, Mozambique reduced the mortality rate from an average 915 deaths per 100,000 live births to an average 489 deaths, a decrease of 426 deaths per 100,000 between the years 2000 and 2015. Concurrently, LIC decreased from 838 to 496, equal to a drop of 342 deaths per 100,000; SSA decreased from 846 to 547, equal to a drop of 299 deaths per 100,000. Despite the significant drops in the child and maternal mortality rates, the rates are still very high compared to the developed world: middle income countries show an average child mortality rate of 40 per thousand and an average maternal mortality rate of 180 per 100,000; high income countries show an average child mortality rate of 6 per thousand and an average maternal mortality rate of 10 per 100,000.













Source: Author's compilation from World Bank, World Development Indicators (WDI).

Note: For "Physicians" most recent data for SSA is 2011, for LIC is 2011, and for Mozambique is 2012. For "Nurses" most recent data for SSA is 2009, for LIC is 2010, and for Mozambique is 2012. For "Hospital Beds" most recent data for SSA is 2010, for LIC is 2011, and for Mozambique is 2011.









However, Mozambique is still far behind its peers in addressing the challenges posed by Malaria, Tuberculosis, Malnutrition, HIV/AIDS, and Road/Traffic Accidents. The result is a life expectancy of just 55 years, four years less than its SSA peers, and six less than its LIC peers. Evaluating the major causes of death in Mozambique, the country lags behind both its income level peers and regional peers on all indicators. Mozambique is reducing vulnerabilities on certain indicators, but is regressing on others. Specific to Malaria and Nutrition, the country has shown improvement by reducing its incidence levels considerably since the year 2000; however, despite the gains, Mozambique remains far from reaching average levels observed in LIC and SSA countries. Specific to Tuberculosis (TB) and Road/Traffic Mortality -not only is Mozambique far from reaching the levels of its peersthe situation is becoming worse: between 2000 and 2015 (most recent data available), TB incidence and Road/ Traffic Deaths have both increased. Concerning HIV/AIDS, Mozambique's prevalence grew between 2000 and 2009 and then began to decrease through 2015 (most recent data); yet, its incidence of 11 percent of the population is 6 percentage points higher than the average of SSA peer countries. The disproportionate vulnerability of Mozambique's population to health threats, relative to its peers, is reflected in its life expectancy measure, which is several years below that of the same peers.

Mozambique has struggled to provide the conditions, in terms of infrastructure and personnel, to confront these challenges, relative to its peers. In order to respond

FIGURE 13

to the aforementioned health threats, it is important for the country's health system to have adequate health facilities and trained personnel. However, Mozambique has much fewer doctors and nurses per thousand people, relative to its peers, and does not appear to be improving the ratios. The same is true of the number of hospital beds. The lack of conditions relative to its peers, again, helps explain its lower relative measures on certain key indicators.

7.2 Health Sector Service Delivery

In 2014, the World Bank conducted a survey of health facilities in Mozambique to measure service delivery performance in the Health Sector; results were published in June 2016 ²¹.

Health outcomes in Mozambique are limited by illequipped and under-stocked health facilities (see Figure #13). On unannounced visits to a sample of the country's health facilities, surveyors found that just 34 percent were properly equipped with running water, electricity, and sanitation facilities; just 43 percent of facilities had all drugs in stock; and 80 percent of facilities had all medical equipment present. Relative to peer African countries, where the same survey was conducted, Mozambique presented the second-lowest (after Nigeria) level on the preparedness of facility, the lowest-level on drug availability, but was near the average for presence of medical equipment.

FIGURE 13 Health Sector service delivery													
		Mozambique (2014)	Moz. Rural	Moz. Urban	Moz. South	Moz. Central	Moz. North	Kenya (2013)	Senegal (2012)	Tanzania (2014)	Uganda (2013)	Togo (2014)	Nigeria (2014)
Patients per day (per provider)		17,4	17,4	17,3	17,2	17,7	17,1	15,2	N/A	7,3	6,0	5,2	5,2
Absence from health facility (percent of providers)		23,9	23,1	28,3	22,9	19,4	30,5	27,5	20,0	14,3	46,7	37,6	31,7
Diagnosis accuracy (percent of clinical cases)		58,3	58,5	57,1	54,6	59,7	60,4	72,2	34,0	60,2	58,1	48,5	39,6
Adherence to clinical guidelines (percent of guidelines followed)		37,4	37,4	37,2	38,4	37,2	36,8	43,7	22,0	43,8	41,4	35,6	31,9
Management of materal/ neonatal complications (percent of guidelines followed)		29,9	30,5	27,5	28,9	31,0	29,8	44,6	N/A	30,4	19,3	26,0	19,8
Drug availability(percent of drugs)		42,7	42,6	43,9	44,5	41,1	43,3	54,2	78,0	60,3	47,2	49,2	49,2
Medical equipment availability (percent of facilities)		79,5	78,8	82,8	79,3	82,9	74,1	76,4	53,0	83,5	21,9	92,6	21,7
Water, electricity, sanitation at health facility (percentage of facilities will all three present)		34,0	32,1	54,3	36,7	46,0	15,7	46,8	39,0	50,0	63,5	39,2	23,8

Source: Author's compilation from: World Bank. Service Delivery Indicators. "Health Service Delivery in Mozambique". Table 1: "SDI At-A-Glance"; Table 2: "SDI Country Comparisons".

²¹⁾ World Bank. "Health Service Delivery in Mozambique". June 2016.

Health outcomes are also constrained by absent, under-prepared, yet over-loaded health care providers. On the same unannounced visits, 24 percent of health care providers were absent from the facility. Although this is around the average for the African countries surveyed, it is a contributing factor to the present care providers being relatively over-worked, measured by caseload. Per day, each health care provider would see, on average, 17 patients, which is 10 patients more than the average of the other countries surveyed. This is likely to mean longer wait times. . When measuring health care providers' basic knowledge, just 58 percent were able to correctly diagnose five tracer conditions (three child & two adult conditions), only 37 percent demonstrated they were able to adhere to clinical guidelines for treatment of the five tracer conditions; and only 30 percent were able to properly respond to maternal and neonatal complications. Although each of these quality service measures was near the average of the other African countries surveyed, it is a telltale sign that the Health Sector must address both the preparedness of its health facilities and care providers, under the PESS's strategic objectives #2 and #7, before significant progress can be expected on key health indicators.

The quality of Health Sector service delivery varies by Rural versus Urban and by the South-Central-North divides. When disaggregating the service delivery indicators by demographic characteristic, the most observable difference is the variance in facilities equipped with running water, electricity, and sanitation facilities. No surprise is the fact that only 32 percent of rural health facilities have these three conditions present while 54 percent of urban facilities do. More surprising is the large discrepancy by geographic zone: 46 percent of facilities in the Center of the country have the three conditions present, while 37 percent of facilities in the South have the three, and just 16 percent of facilities in the North have the three. Remarkably, the demographic distinctions show little difference in medicine or equipment availability and quality of health care provider.

8. How Efficient is Health Expenditure?

Mozambique spends less on health, on a per capita basis, compared to its SSA peers, but slightly more than its LIC peers. Mozambique spends US\$ 79 per person on health, purchasing power parity (PPP). By comparison, SSA averages US\$ 163 per person and LIC averages US\$ 68 per person. To summarize, (i) on a per person basis, Mozambique spends slightly more on health than LIC peers and less than SSA peers; (ii) as a share of USD is what Mozambique spends per person on health.



total government expenditure (see Section 2), it spends, on average, nearly the same as LIC peers and slightly less than SSA peers; and (iii) as a share of GDP, it spends, on average, slightly more than both LIC and SSA peers. Whereas the "share of GDP" is a signal for the Health Sector's size relative to the size of the country's economy, and the "share of total government expenditure" is a signal of the government's desire to fund the sector vis-à-vis other sectors, "per person expenditure" is the true proxy, among the three, for the benefit a population can receive from resources allocated to the sector. While Mozambique's per person health expenditure may be more than LIC peers and less than SSA peers, it is substantially less than the average for middle income countries (US\$ 576 PPP) and for high income countries (US\$ 5,193 PPP)²², which explains Mozambique's comparatively weaker ability to address its health challenges.

Relative to what the country spends on health, it has lower health outcomes compared to its peers. Given the US\$ 79 that Mozambique spends per person on health, it has a child mortality rate (CMR) of 79 deaths (per 1,000 live births)²³ (see *Figure #14A*). This is a moderately efficient outcome (i.e. health result for given resource input) relative to its peers. Mozambique spends less to have a lower CMR compared to SSA (which spends US\$ 163 for CMR of 83), but spends more and has a higher CMR compared to LIC (which spends US\$ 68 for CMR of 76). In other words, Mozambique has a more efficient outcome than SSA, but less efficient outcome than LIC. Still, there are many countries that have more efficient results than LIC and Mozambique with respect to child mortality. For

22) World Bank. World Development Indicators. "Health expenditure per capita, PPP (constant 2011 international \$)". 2014 (most recent data available).

example, Rwanda spends the same per person on health as Mozambique, yet has a CMR of 42, equal to 37 few deaths per thousand live births. Bangladesh demonstrates the most efficient result, spending US\$ 58 for a CMR of 38. In Africa, the most efficient is Eritrea, which spends US\$ 47 for a CMR of 47. Concerning life expectancy at birth (LEB), Mozambique spends US\$ 79 per person on health for an LEB of 55 years²⁴ (see Figure #14B). This is an inefficient outcome. LIC spends less (US\$ 68) to have a higher LEB of 62 years, but SSA spends more (US\$ 163) to have a higher LEB of 59 years. In other words, again, Mozambique has a more efficient outcome than SSA, but less efficient outcome than LIC. Like child mortality, there are many countries with more efficient outcomes than Mozambique and its income and regional peers. For example, again, Rwanda spends the same per person amount on health as Mozambique, yet has a LEB of 65, ten years more than Mozambigue. The most efficient, in terms of spending for LEB, are DRC with US\$ 19 for 59 years, Ethiopia with US\$ 44 for 65 years, and Myanmar with US\$ 44 for 66 years.

As Mozambique increased health spending over the past decade and a half, it reduced child mortality and raised life expectancy at birth (see *Figure #14A & B*).

Regarding child mortality, in 2000, Mozambique spent US\$ 28 and had a CMR of 171. By 2007, it was spending US\$ 41 and had a CMR of 120. And in 2015, as stated above, it spent US\$ 79 and had a CMR of 79. This trend shows that as the country increased its health spending, it improved its CMR. In fact, for each additional dollar spent per capita on health, it trimmed, roughly, 1.6 lives from its CMR²⁵. Regarding life expectancy, in 2000, Mozambique spent US\$ 28 and had a LEB of 49; by 2007, spending increased to US\$ 41 and LEB increased to 52; and then in 2015, spending was US\$ 79 and LEB increased again to 55 years. In short, as spending increased, LEB increased. For each additional dollar spent per capita on health, life expectancy increased, roughly, 1.5 months²⁶.

Evidence suggests that further increases in health expenditure may lead to improved health outcomes; however, given the current fiscal environment, large spending increases are unlikely. Therefore, Mozambique must focus on making efficiency gains using current resource levels. Higher per capita health spending is associated with lower child mortality and higher life expectancy. This is especially true at low levels of expenditure (see trendline): small increases in per



Source: Author's compilation from World Bank. World Development Indicators. "Mortality rate, under-5 (per 1,000 live births)", 2015. "Health expenditure per capita, PPP (constant 2011 international \$)", Average 2000-2015. "Life expectancy at birth, total (years)", 2015.

Note: Discontinuous y-axis on both figures. Not all countries are shown in the figure in an effort to concentrate on distribution of Mozambique, LIC, SSA.

- 24) World Bank. World Development Indicators. "Life expectancy at birth, total (years)". 2015 (most recent data available).
- 25) Author's calculation based on World Bank World Development Indicator. "Mortality rate, under-5 (per 1,000 live births)" and "Health expenditure per capita, PPP (constant 2011 international \$)". Years 2000, 2007, 2015.

²³⁾ World Bank. World Development Indicators. "Mortality rate, under-5 (per 1,000 live births)". 2015 (most recent data available).

capita spending is related to relatively large improvements in health outcomes. However, given Mozambique's increased debt burden, which will constrain spending in the coming years, large increases in health spending are unlikely. Thus, the sector must prioritize efficiency gains in line with PESS strategic objective #4. Efficiency gains can be made by focusing resources on preventative care (e.g. bed nets, immunization), improving the professional capacity of health workers, establishing community-based health interventions, utilizing mobile health units to break down geographical barriers, and strengthening donor coordination to better target existing resources to address key sector problems and reduce transaction costs²⁷.

9. To What Extent is Health Expenditure Equitable?

Understanding the distribution of health resources, and how the distribution relates to the access and use of health facilities by recipients of the resources is essential to measuring the equity of health resource allocation.

9.1 Allocation Equality by Spatial Distribution

Zambézia province receives less than half the allocation of Nampula, the province with the highest allocation (see *Figure #15*). Considering solely the district and provincial allocations (for lack of data on the decentralization of central-level resources to provinces), Zambézia province receives the second highest gross allocation, but on a per person basis, receives the lowest allocation²⁸. In fact, Zambézia's per person allocation of MT 245 is less than half of Nampula's per person allocation of MT 513. The average per person allocation of the three lowest funded provinces (Zambézia, Manica, and Tete) is approximately 40 percent less than the average of the three highest funded provinces (Nampula, Inhambane, and Maputo City).

9.2 Equality in Access and Use of Health Facilities

Of the eleven provinces, Cabo Delgado has the lowest access to health facilities and Zambézia shows the lowest use of health facilities (see *Figure #15*). In Cabo



FIGURE 15 Non-central per person health funding by province

Source: Author's calculations from LOE 2017. District population figures come from Mozambique's Instituto Nacional de Estatistica (INE). Access and use of health services from INE. "Relatorio Final do Inquerito ao Orcamento Familiar -IOF- 2014/5". Quadro 7.1, Pg. 80.

²⁶⁾ Author's calculation based on World Bank World Development Indicator. "Life expectancy at birth, total (years)" and "Health expenditure per capita, PPP (constant 2011 international \$)". Years 2000, 2007, 2015.

²⁷⁾ World Bank. 2014 Mozambique Public Expenditure Review. September 2014. Page 81.

²⁸⁾ Off-budget health funding is not included.

Delgado, just 39 percent of households have access to a health facility (hospital, health post, etc.) within 30 minutes walking from their residence. And in Zambézia, only 57 percent of households report having used health facilities. These rates are much different than the 96 percent access rate in Maputo City and the 81 percent use rate in Inhambane.

The richer the household, the better access and use of health facilities. Similarly, urban households demonstrate better access and use of health facilities (see *Figure #16*). The richest segment of the population has an access rate of 84 percent and a use rate of 79 percent, while the poorest segment of the population has an access rate of 66 percent and a use rate of 61 percent. With respect to the urban/rural divide, urban households have an access rate of 77 percent and a use rate of 80 percent²⁹, while rural households have a much lower access rate of 64 percent and use rate of 64 percent.

Health Sector investment needs to prioritize the underserved provinces exhibiting the greatest need. Clearly, resource allocation decisions have created a condition in which richer, urban-based households from certain provinces have better access to health services than the poor. In line with PESS strategic objective #3, it is essential for both the government and donors to cooperate in the targeting of resources to the underserved provinces and demographics in order to promote greater equity in Mozambique's health system.



Source: Access and use of health services from INE. "Relatorio Final do Inquerito ao Orcamento Familiar -IOF- 2014/5". Quadro 7.1, Pq. 80.

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29) It is possible to have a higher "use rate" than "access rate" due to the fact that the "access rate" measures only those households with a health facility within 30 minutes from their residence, while "use rate" measures households that use health facilities at any distance from their residence.

Glossary of Budget Terms

Initial Allocation (Dotação Inicial): The first allocation of funds, approved by Parliament

Revised Initial Allocation (Dotação Rectificativa): A revised allocation of funds, approved by Parliament

Updated Allocation (Dotação Actualizada): The total funds that arrive at the disposal of a given health institution

Expenditure (Despesa Realizada): Allocated funds spent on health investment and recurrent costs

Budget Execution (Execução do Orçamento): Percentage of allocated funds spent out of the total allocation

Nominal Values; Current: Numbers not corrected for the effect of inflation

Real Values; Constant: Numbers corrected for inflation

Acronyms

b	Billion
GE	General State Account (Final Budget Report)
FMP	Medium-term Fiscal Plan
MAM	Centre of Medicines and Medical Articles
:MR	Child Mortality Rate
INCS	National Council for the Fight against HIV/AIDS
UT	Single Treasury Account
)PS	Provincial Health Directorate
-SISTAFE	Financial Management Information System
C	Common Fund
iDP	Gross Domestic Product
ICM	Maputo Central Hospital
MF	International Monetary Fund
EB	Life Expectancy at Birth
IC	Low Income Country
.OE	State Budget Law
AISAU	Ministry of Health

EF	Ministry of Economy and Finance
1	Million
T	Mozambican Metical (Local Currency)
DAMOZ	Mozambique Official Development Assistance data platform
ES	Economic and Social Plan
ESS	Health Sector Strategic Plan
PP	Purchasing Power Parity
QG	Government Five Year Plan
EO	State Budget Execution Report (Budget Update Report)
DI	Service Delivery Indicator
DSMAS	District Service for Health, Women, and Social Action
SA	Sub-Sahara Africa
B	Tuberculosis
GB	Autonomous Budget Holder Code
S\$	United States Dollar (Currency)
B	World Bank
DI	World Development Indicators







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