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Ministério da Saúde

BILL & MELINDA
GATES foundation

Mozambique Health Accounts 2015



Preface

The National Health Accounts (NHA) are a fundamental tool to describe and measure the flow of health expenditure resulting from public and private institutions, as well as from households. The tool follows the System Health Accounts (SHA) 2011 methodology, a standard that has been tested and accepted internationally.

In Mozambique, the first use of the NHA was in 1999, and covered the period of 1997-1998. The second was in 2008 covering the period 2004 to 2006, the third in 2013, covering the period 2007 to 2011 (MEGAS), the fourth in 2015, covering the period 2012, the fifth in 2017, covering the period 2015. The sixth will be for analyzing the NHA results of 2016 and 2017.

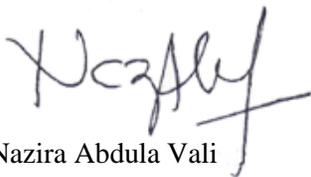
The production of the NHA reports has challenged the country to institutionalize National Health Accounts as a routine health planning activity. The report has three main content approaches: the National Health Accounts Methodology in 2015, the Policy Implications for National Health Accounts, and the Immunization Policy in Mozambique. Its four chapters are the following: I. Introduction on Financing Health in Mozambique, II. Methodology of preparation of National Health Accounts, III. Results of National Health Accounts 2015 and IV. Consideration for the Institutionalization of National Health Accounts in Mozambique.

This report allows us to measure and characterize the country's health expenditures, thus allowing for more effective planning and improving the provision of health services in Mozambique. The Government of Mozambique remains committed to quality health care, and we hope that this analytical exercise can contribute to making decisions for better health services in the country.

Thus, we express our warm thanks to singular and collective entities that directly or indirectly devoted a considerable part of their time and energy in the finalization of this report.

Maputo, 26 October 2018

Minister of Health



Nazira Abdula Vali

Table of Contents

Acknowledgements	iii
Technical Sheet	iv
Acronyms	v
Executive Summary	vi
2015 Health Accounts Results Summary	vi
Observations for Policy and for Health Accounts Institutionalization.....	vi
1. Background: Health Financing in Mozambique	1
2. Health Accounts Methodology	3
2.1 Successes.....	3
2.2 Challenges	4
3. 2015 Health Accounts Results	5
3.1 Health Spending Per Capita	5
3.2 Presentation of 2015 Health Accounts Results by Policy Question.....	6
3.2.1 How is health spending financed and what does this mean for sustainability of health financing?	6
3.2.2 How are health resources pooled to provide health care to those most in need? ..	10
3.2.3 Which levels of the health system receive health resources?	11
3.2.4 Which health goods and activities are purchased?	12
3.2.5 How is health spending distributed by disease/ health priority area?.....	13
4. Considerations for Institutionalizing Health Accounts in Mozambique	16
4.1 Invest in Regular Production and Dissemination of Health Accounts Analysis	16
4.2 Harness, and Help to Refine, Existing Health Data to Simplify Health Accounts Production	16
4.3 Continue to Engage with Public and Private Sector Stakeholders	17
Bibliography	18

Tables

Table 1: Mozambique’s Key Health Expenditure Indicators	5
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Figures

Figure 1: 2015 Health Accounts Results Summary.....	viii
Figure 2: Mozambique Total Health Spending, 2005-2014	1
Figure 3: Per Capita Health Spending Benchmarks	6
Figure 4: Current Health Spending by Source of Financing, 2015	6
Figure 5: Health Spending by Source of Financing, 2012 and 2015.....	7
Figure 6: Government Health Spending as Percentage of Total Government Spending	8
Figure 7: Mozambique and Regional Estimates of Out-Of-Pocket Payment for Health.....	9
Figure 8: Health Goods and Services Paid for by Households Out Of Pocket.....	9
Figure 9: Current Health Spending by Health Financing Scheme, 2015	10
Figure 10: Current Health Spending by Health Provider, 2015	11
Figure 11: Current Health Spending by Type of Health Goods and Services, 2015.....	13
Figure 12: Current Health Spending by Disease or Priority Health Area, 2015	14
Figure 13: Mozambique 2016 Burden of Disease, DALYs	15

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Acronyms

DALY	Disability-adjusted life year
DPC	<i>Direção de Planeamento e Cooperação</i> (Directorate of Planning and Cooperation)
IFE	<i>Inquérito de Fundos Externos</i> (Database of External Funds)
INE	<i>Instituto Nacional de Estatística</i> (National Statistics Institute)
INSS	Instituto Nacional de Segurança Social de Moçambique (National Social Security Institute)
OECD	Organization for Economic Co-operation and Development
SIS-MA	<i>Sistema de Informação de Saúde de Moçambique para Monitorização e Avaliação</i> (Mozambique Health Information System for Monitoring and Evaluation)
SISTAFE	<i>Sistema de Administração Financeira do Estado</i> (Government Financial Administration System)
THE	Total Health Expenditure
WHO	World Health Organization

Recommended citation: Ministry of Health. 2018. Mozambique Health Accounts 2015. Maputo: Mozambique Ministry of Health.

Executive Summary

This report summarizes the results of Mozambique's 2015 Health Accounts exercise. These Health Accounts measure total health spending for residents of Mozambique, and track this spending by dimensions such as source of funds, type of provider, type of goods and services purchased, and by disease/health priority areas. The Mozambique Health Accounts team developed the Health Accounts using the System of Health Accounts 2011 framework and a World Health Organization (WHO)-recommended methodology.

2015 Health Accounts: Key indicators

- *Total Health Expenditure (THE)* : **MZN 46.1bn/ USD 1.2bn**
- *THE per capita*: **MZN 1,647/ USD 42**
- *THE/Gross Domestic Product*: **10.2%**
- *Current spending/THE*: **93%**

These results provide key information necessary for the Ministry of Health to understand its own health financing performance. They provide insights into the sustainability of health financing, equity of health financing, and efficiency of health spending. They can also serve as useful evidence in negotiating for increased domestic resources for health, and providing insights into where further analysis may be required.

2015 Health Accounts Results Summary

Figure 1 provides a summary of the 2015 Health Accounts results. Fifty-five percent of current health spending is financed by external donors, down from 58% in 2012. Government financing for health increased from 24% in 2012 to 27% in 2015. Household spending represented 11% of health spending in 2015.

Half of current health spending is pooled to provide services to the general population and managed by the government. Schemes that mobilize funding and are designed abroad, represent 17% of spending. Approximately one third of spending is through private financing schemes, i.e., NGO, household, employer-based or insurance schemes.

Primary care providers, defined as health facilities that predominantly offer outpatient services, and providers of preventive services, account for over one third of current health spending. At least 2% of spending is by community-level providers, 6% by secondary-level care providers, and 2% by tertiary-level care providers.

Inpatient and outpatient curative care accounted for 40% of spending in 2015; 26% was spent on preventive care, and slightly less (24%) on support for health sector coordination and stewardship. At least 46% of spending was for infectious diseases (35% HIV/AIDS, 7% malaria, and 4% for other infectious disease), 6% for reproductive health, and 4% for nutritional deficiencies.

Observations for Policy and for Health Accounts Institutionalization

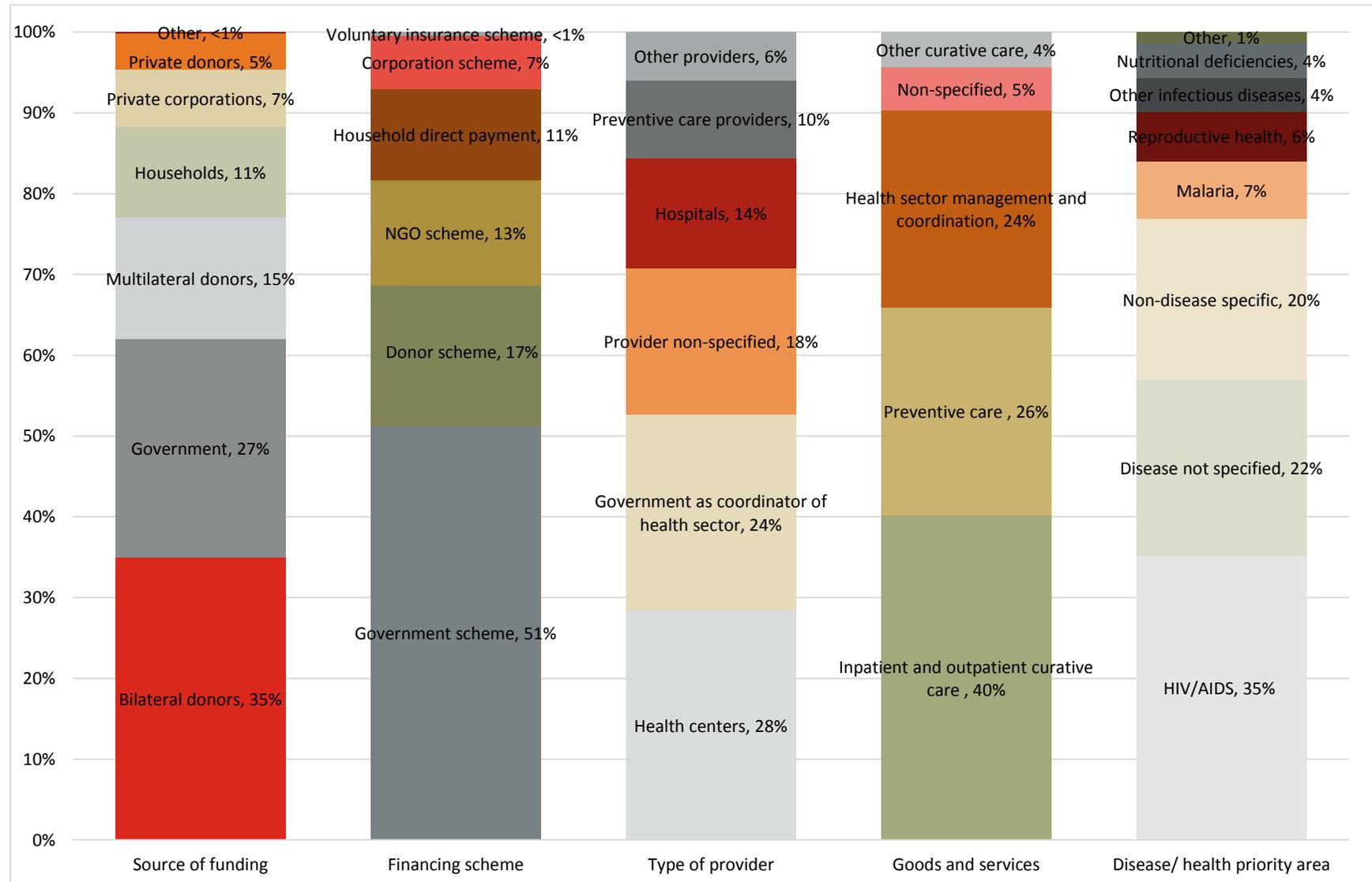
The sustainability of health financing remains a challenge in Mozambique since the last Health Accounts in 2012 (Ministry of Health, 2015a). The burden of two-thirds of health spending is borne by external donors and households. These are two problematic sources of financing to rely on. Donor financing can be unpredictable, is on a decreasing trend globally, and faces competing pressures from

other sectors. Household spending on health risks impoverishment or, worse, households not seeking care due to financial barriers. The 2015 Health Accounts also provide insight into areas that may merit further analysis: for example, low spending at the community level, how drug spending is allocated between different providers and for which diseases/ conditions, and trend analysis of spending by disease.

Mozambique benefits from a large amount of secondary data, such as regular household surveys, databases that capture donor spending in the health sector, and the Mozambique Health Information System for Monitoring and Evaluation (SIS-MA) for capturing health utilization data. These data not only help to reduce the data collection costs of producing Health Accounts, but also help produce Health Accounts more rapidly, so they can feed into annual planning and budgeting cycles. The success and accuracy of future Health Accounts relies significantly on improving the quality of these existing data. Other secondary data could also benefit from better compilation. For example, much data now compiled at the provincial or district level, such as information on drugs distribution, would be useful if also compiled at the national level. For example, compiling pharmaceutical spending by provider and drug at the national level, will help to ensure that future Health Accounts can analyze drug spending, a priority issue for the Ministry of Health.

The 2015 Health Accounts exercise was coordinated by the Ministry of Health's Directorate of Planning and Cooperation. The team has benefitted from classroom-based training on, and practical experience in, the Health Accounts methodology. Empowered with this knowledge and experience, the Directorate should continue to track its health spending to inform planning and budgeting. A key way to achieve this is to continue to engage with stakeholders to improve the quality of data so that the accuracy of Health Accounts can improve with subsequent rounds.

Figure 1: 2015 Health Accounts Results Summary



1. Background: Health Financing in Mozambique

The vision of Mozambique’s Health Financing Strategy is to have “an equitable, sustainable and efficient financing system that enables the delivery of quality health care to all Mozambicans without discrimination” (Ministry of Health 2015b). The strategy has put forth three key measures to realize this vision: increasing the sustainability of health financing; improving the efficiency of resource allocation; and improving the efficiency of the use of resources in the health sector (Ministry of Health 2015b).

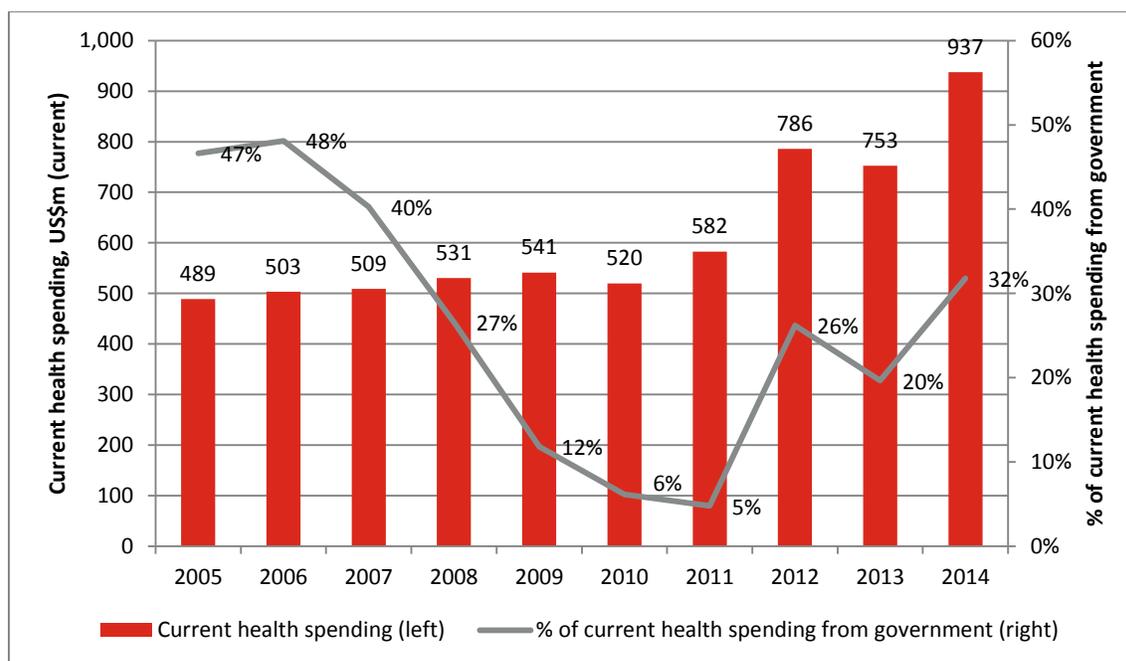
Current spending for health in Mozambique has steadily increased over the last decade, with larger increases in 2012 and 2014. Total health spending nearly doubled between 2005 and 2014. The proportion of current health spending from government has been volatile over this period—for example, it ranged from 48% in 2006 to 5% in 2011 (WHO 2017).

2015 Mozambique indicators

- Life expectancy at birth = 57.6 years
- Fertility rate = 5.3
- Total population = 28,010,691
- HIV prevalence (% of population ages 15-49) = 12.7
- Poverty headcount ratio at national poverty lines (% of population) = 46.1 (2014)

Source: The World Bank Databank.
<http://databank.worldbank.org/data/report.aspx?source=world-development-indicators>. Accessed December 2017.

Figure 2: Mozambique Total Health Spending, 2005-2014



Given the need for evidence to inform implementation and monitoring of the strategy, the Ministry of Health with the support of partners has conducted Health Accounts for fiscal year 2015, considered a base year for monitoring. This exercise is the third Health Accounts conducted in Mozambique (earlier exercises were conducted for fiscal years 2002-2006 and 2012). Health Accounts are an important expenditure tracking tool to support decision-makers to manage health spending and make informed health financing decisions. Health expenditure tracking can be used to:

- Measure the performance of health systems, e.g., equity, sustainability and efficiency considerations
- Provide evidence to inform reforms, e.g., to negotiate increased domestic financing for health, to introduce risk-pooling mechanisms
- Monitor health financing reforms over time

Based on the policy needs identified at the start of the exercise, the 2015 Health Accounts was driven by five policy questions:

- How is health spending financed and what does this mean for sustainability of health financing?
- What are the roles of government and households in health spending?
- How are health resources pooled to provide health care to those most in need?
- Which levels of the health system receive health resources?
- Which health goods and activities are purchased?
- How is health spending distributed by disease/ health priority area?

This report summarizes the results of the 2015 Health Accounts through the policy questions identified above, and their implications. The report concludes with recommendations for institutionalizing Health Accounts in Mozambique.

2. Health Accounts Methodology

Health Accounts track how much is spent on health for residents of a country over a 12-month period. The 2015 Mozambique Health Accounts is based on the System of Health Accounts 2011 framework developed by the Organization for Economic Co-operation and Development (OECD), WHO and Eurostat (OECD, WHO, Eurostat 2011). This framework is internationally accepted and has been used by over 75 countries to track their health spending. This report provides results for health spending for the 2015 fiscal year. It was led by the Ministry of Health's *Direção de Planeamento e Cooperação* (DPC, Directorate of Planning and Cooperation), with support from the Bill and Melinda Gates Foundation and Abt Associates. The exercise was conducted between March 2016 and March 2018.

A summary of the key strengths and challenges experienced in the 2015 exercise is provided below. Further details on the methodology, and the detailed Health Accounts tables, can be found in the Methodology Report (Ministry of Health 2018).

2.1 Successes

The 2015 Health Accounts was the first Health Accounts exercise led and coordinated by the DPC. The DPC team was trained on the System of Health Accounts 2011 framework and received technical assistance throughout the Health Accounts exercise. This team now has the **technical knowledge and experience to produce Health Accounts** in the future.

Health Accounts use data on health spending, and other complementary data including human resources for health, health utilization, and service unit cost. To the extent possible, Health Accounts use existing data that is collected through government systems. In Mozambique, a **large amount of existing data** on health spending, and complementary data, is available. For example, spending by households is available in

- Mozambique's *Instituto Nacional de Estatística* (INE, National Statistics Institute) household survey;
- government spending in the electronic *Sistema de Administração Financeira do Estado* (e-SISTAFE, the government financial administration system);
- donor spending in the Inquérito de Fundos Externos (IFE, Database of External Funds) and the Official Development Assistance to Mozambique (ODAMoz) database, and
- Social Security spending in the *Instituto Nacional de Segurança Social de Moçambique* (INSS, National Social Security Institute) Annual Report.

The existence of large amounts of existing data is a significant advantage for Mozambique, and helps to make the Health Accounts exercise faster and more cost-effective by preventing the need for primary data collection.

The DPC engaged with many stakeholders—for example, the INE, INSS, Mozambique Association of Industry, and Ministry of Finance—to explain the importance of monitoring health spending, and the vital role that these stakeholders play in providing health data. This continued **engagement with key stakeholders** will not only help to improve coordination within the sector, but will also help to produce more accurate Health Accounts in future rounds, by helping to improve response rates during data collection and strengthen the data validation process.

2.2 Challenges

The **rate of response for private sector stakeholder groups** was lower than expected, which affected the accuracy of health spending data among these groups. Certain estimation methods (e.g. weighting health spending for private employers by spending per employee, and insurance firms by spending per insurance policy holder) can be used to weight for non-responses, but this does not compensate for the shortfall in raw data. In order to capture spending by NGOs, the team attempted to use responses from their respective donors to estimate spending for health to the extent possible. However, this was not always feasible, so low response rates are likely to lead to underestimation of spending for this group. However, the Health Accounts team is confident that spending by the largest NGOs in the health sector were captured, helping to get a more accurate picture of total health spending by NGOs.

Improving the **quality and completeness of existing data** will significantly help the Ministry of Health to produce more-accurate Health Accounts in the future and to do this faster. A lack of compiled health information at the national level also makes data collection for Health Accounts—and central planning—more difficult.

Health Accounts data are most useful when they are sufficiently recent to inform decision-making—e.g., by feeding into annual planning and budgeting cycles. The 2015 Health Accounts production took approximately two years, due to the limited availability of the DPC team. Expenditure tracking is an important decision-making tool for the Ministry, and it is important for the Ministry of Health to commit team members that can **allocate sufficient time to produce and analyze Health Accounts** on a regular basis.

3. 2015 Health Accounts Results

Total health spending in 2015 was MZN 46.1 billion (USD 1.2 billion). Ninety-three percent of spending (MZN 42.8 billion) was current health spending, i.e., spending for goods and services consumed in 2015.

Without adjustments for inflation, health spending grew by 65%, but this growth decreases significantly to a 9.1% real growth rate between 2012 and 2015. Table 1 provides key indicators for health spending between the 2012 and 2015 Health Accounts. In this table, total health spending has been used

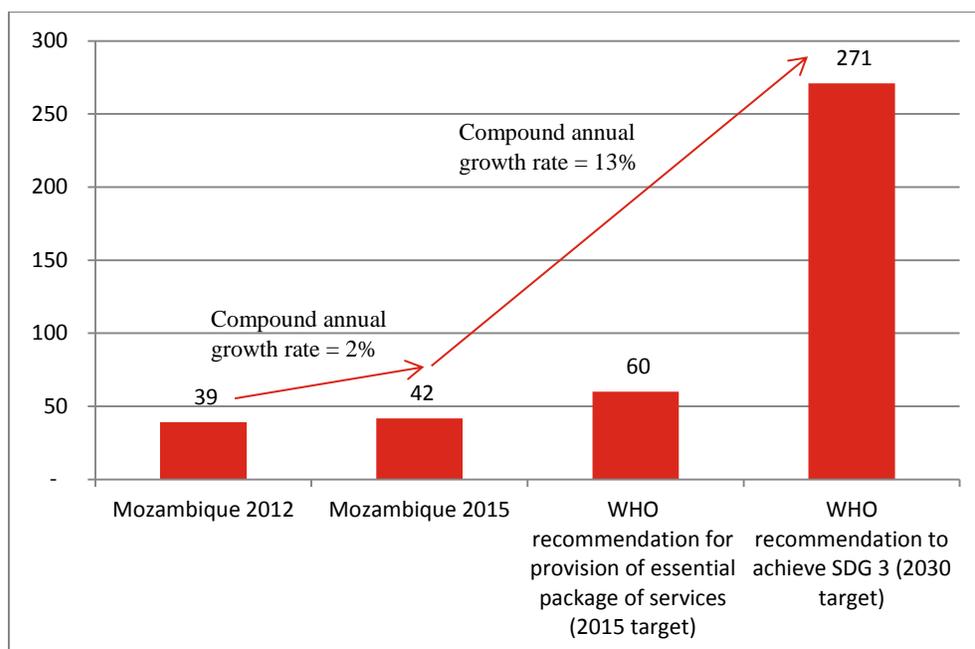
Table 1: Mozambique's Key Health Expenditure Indicators

Indicator	2012	2015
THE	MZN 28.0bn/ USD 1.0bn	MZN 46.1bn/ USD 1.2bn
Current health expenditure	MZN 24.3bn/ USD 872m	MZN 42.8bn/ USD 1.1bn
THE per capita	MZN 1,089/ USD 39	MZN 1,647/ USD 42
THE as % Gross Domestic Product	7.6%	10.2%

to be able to compare with the 2012 Health Accounts. However, *current* spending is the indicator that is typically used to compare with other countries that have also used the System of Health Accounts 2011 framework to produce Health Accounts.

3.1 Health Spending Per Capita

Since 2008, the Taskforce on Innovative International Financing for Health Systems has produced estimates of the cost of strengthening health systems in the 49 lowest-income countries to provide an essential package of health services to their population. In 2009, their first analysis estimated that \$60 per capita would be needed by 2015 to achieve this target (Taskforce on Innovative International Financing for Health Systems 2009). This analysis was updated in 2017, and estimated that \$271 per capita would be needed by 2030 to achieve Sustainable Development Goal 3, *Ensure healthy lives and promote well-being for all at all ages* (Stenberg, 2017). For Mozambique to achieve this goal by 2030, an average annual growth rate of 13% would be needed (Figure 3). This is significantly larger than the average annual growth rate achieved between 2012 and 2015 of 2%.

Figure 3: Per Capita Health Spending Benchmarks

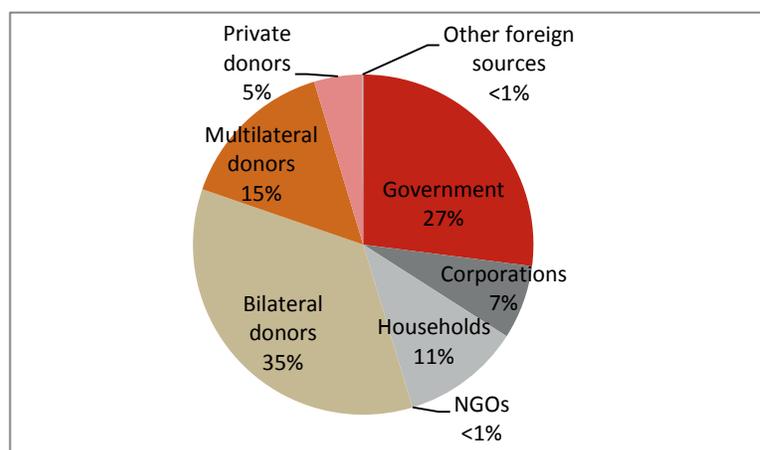
3.2 Presentation of 2015 Health Accounts Results by Policy Question

3.2.1 How is health spending financed and what does this mean for sustainability of health financing?

Over half of health spending (55%) in 2015 was financed by external donors (bilateral, multilateral and foundations). Government provides the second largest source of funding for health, representing 27% of total health spending in 2015 (Figure 4). Households contribute to 11% of health spending, although this is likely underestimated.

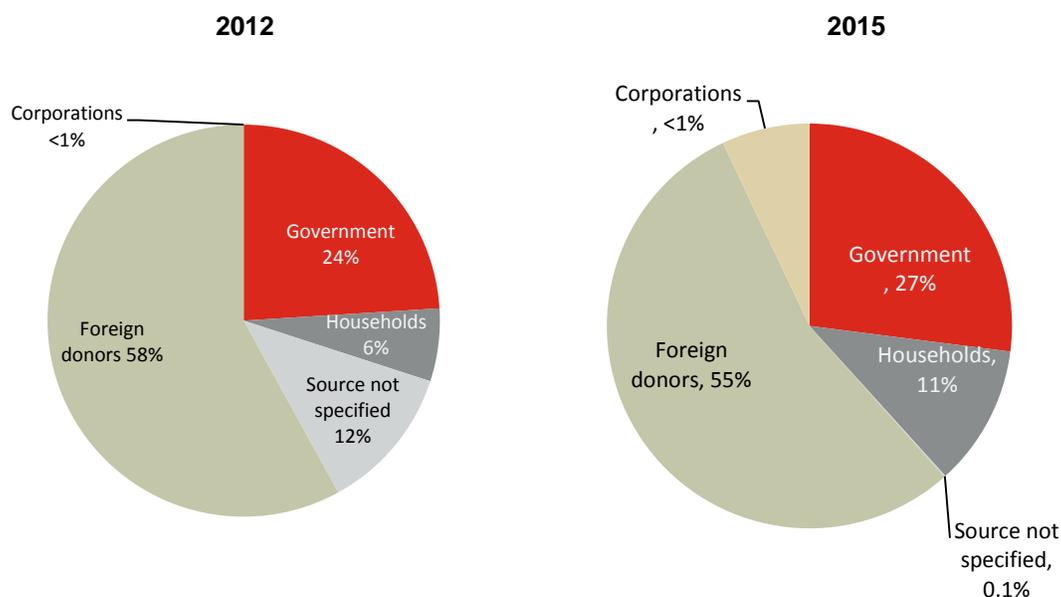
The nature of external sources of financing causes concern about the **sustainability of health spending** going forward. Tighter aid budgets in donor countries

increase uncertainty about how resources will be allocated between recipient countries; the health sector faces competition from other sectors for aid money and even when aid for health is committed, this does not always translate into real disbursements.

Figure 4: Current Health Spending by Source of Financing, 2015

The proportion of health spending from donors remained stable since the last Health Accounts (58% of health spending in 2012 vs. 55% in 2015) (Figure 5). The same is true for government, whose proportion of health spending was 24% in 2012 and 27% in 2015. However, one needs to consider the comparison with a caveat, given the shift in methodology to estimate the household spending.¹

Figure 5: Health Spending by Source of Financing, 2012 and 2015

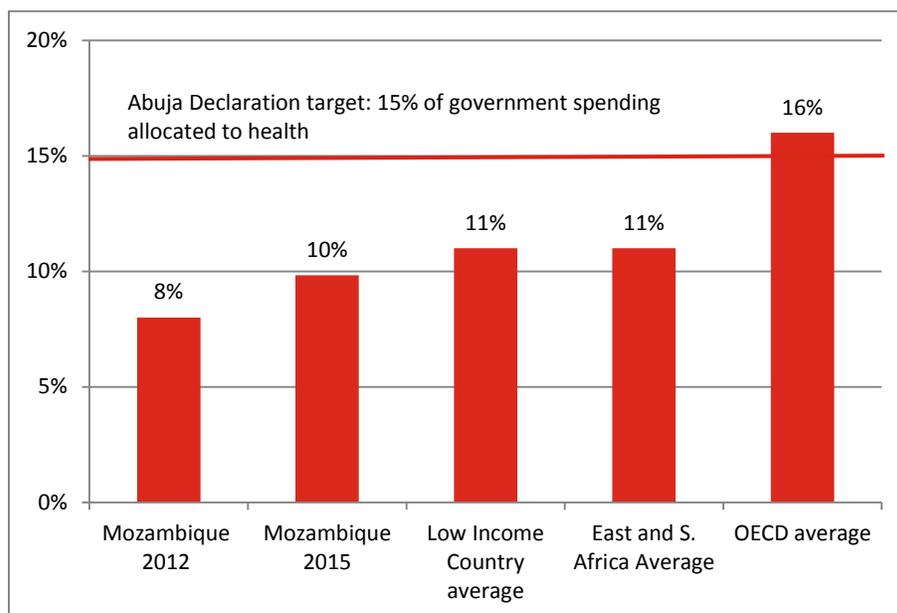


The role of government in health spending: the Abuja declaration

In 2001, African Union countries pledged to allocate at least 15% of their total government spending to health (WHO 2011). This benchmark has served as a useful target for African countries to gauge whether they are contributing sufficient resources for health. As Figure 6Error! Reference source not found. shows, Mozambique's Abuja Declaration indicator (10%) is slightly lower than the low-income country and regional average, but falls significantly below the Abuja Declaration.

¹ The 2012 Health Accounts extrapolated data from the 2007/2008 household survey to estimate household health spending. In contrast, the 2015 Health Accounts used the 2014/2015 household survey data i.e. data from the same year of the Health Accounts analysis. More details are available in the Methodology Report and Health Accounts Tables (Ministry of Health 2018).

Figure 6: Government Health Spending as Percentage of Total Government Spending

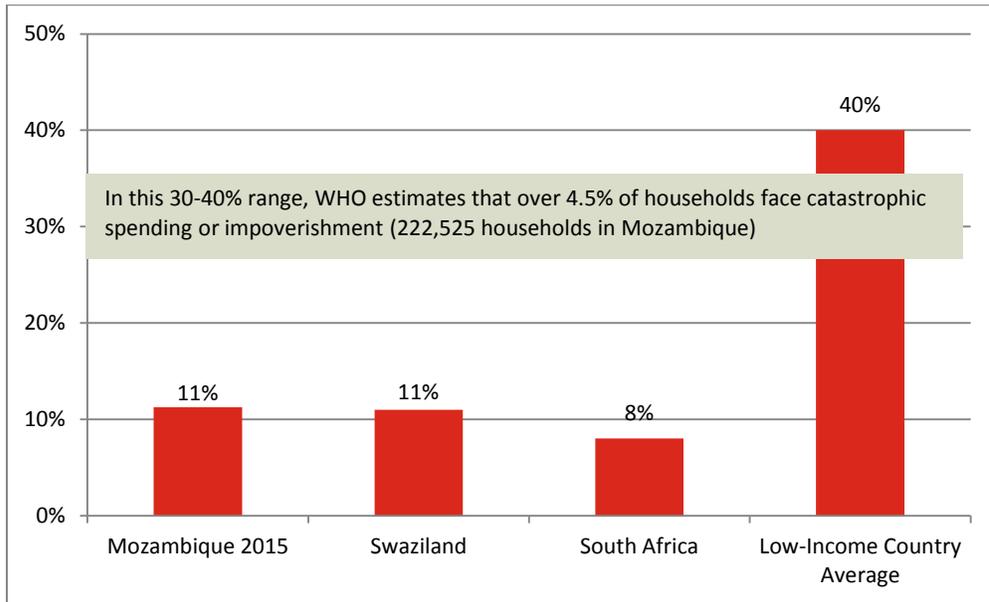


The role of households in health spending

Direct payments made by households out-of-pocket for essential health services are inefficient and risk impoverishing households. By bearing the burden of the total cost of health services at the time of need, direct payments pose a financial barrier to accessing health care. They can impoverish households who seek care or prevent them from seeking care when they need it. The contribution of household out-of-pocket payment to total health spending is used as a benchmark for equity in health financing. Mozambique's estimation of out-of-pocket spending is underestimated using currently available household survey data (Ministry of Health 2018). While Figure 7 shows low out-of-pocket spending for Mozambique in 2015 (11% of current health spending), the reality may be more in line with that of other low-income countries (40% of current health spending).²

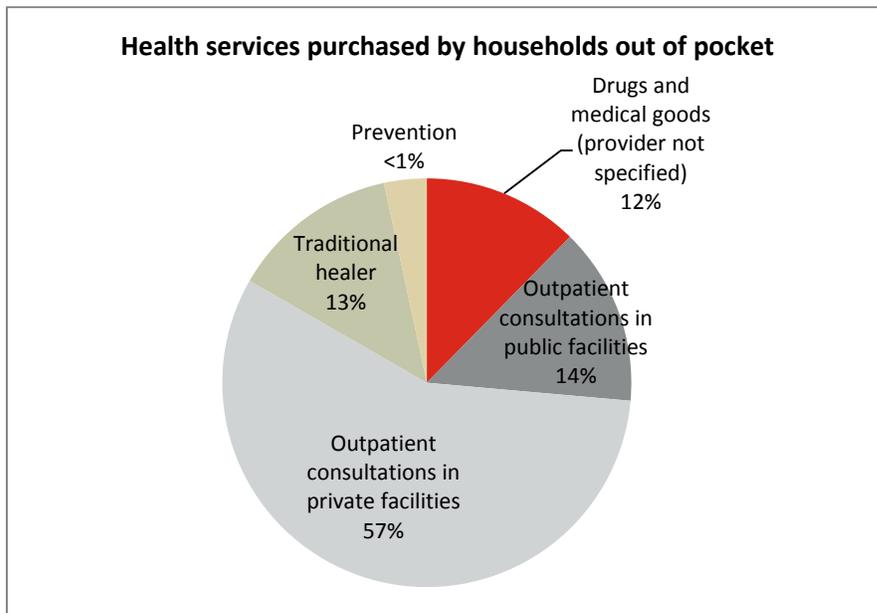
² WHO has estimated that when out-of-pocket spending is greater than 20% of total health spending, the risk of catastrophic spending and impoverishment increases significantly. When out-of-pocket is between 15 and 20% of total health spending, less than 0.5% of households incur catastrophic spending. When this ratio is between 30 and 40%, which is in line with the low-income country average, approximately 3% of households face catastrophic spending and 1.5% face impoverishment (WHO 2010).

Figure 7: Mozambique and Regional Estimates of Out-Of-Pocket Payment for Health



Further analysis of household spending from the Health Accounts shows which goods and services households are paying for out-of-pocket, and where. Further in-depth studies can help in understanding the underlying causes for this. Over half of out-of-pocket payments are made in private facilities for outpatient consultations (Figure 8 **Error! Reference source not found.**). Households spend approximately the same amount on goods and services from traditional healers and from outpatient services in public facilities (13% and 14% of household spending respectively).

Figure 8: Health Goods and Services Paid for by Households Out Of Pocket



Policy Implication: Health financing in Mozambique remains dependent on donors and households.

Approximately two-thirds of current health spending comes from external donors and households. This is the same situation as in 2012. This demonstrates Mozambique’s continued dependency on one source of financing that can be unpredictable and is at risk of declining; and another source that risks impoverishing households as they seek health care.

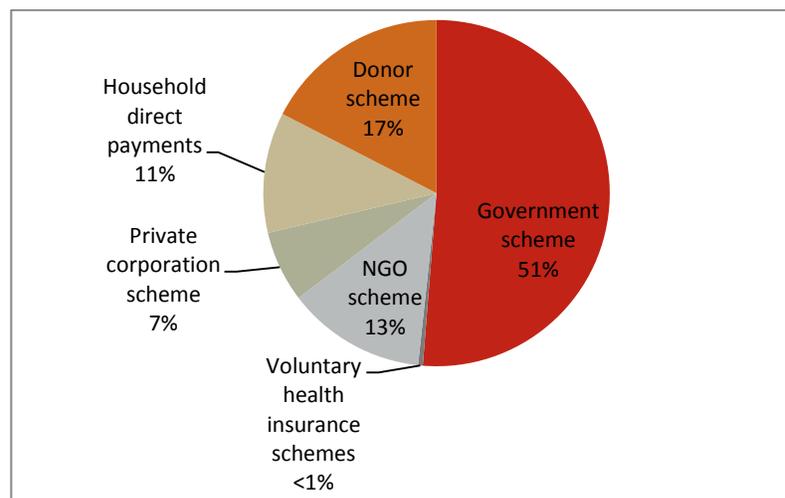
The proportion of spending by households is likely even higher in reality, and warrants discussions with INE to improve the accuracy of health expenditure questions in the household survey to help improve the accuracy of future Health Accounts. In-depth fiscal space analysis could help identify opportunities to increase domestic resources for health—e.g., taxes on cigarettes, currency transactions earmarked to health, or increased proportion of general tax revenues for health (in line with the Abuja Declaration). Countries that have introduced “health” taxes—e.g., on sugary food and drinks—have also seen increased government revenues and health benefits (via reduced consumption of sugary food and drinks) (Theodore 2017, Wright et al. 2017).

3.2.2 How are health resources pooled to provide health care to those most in need?

The Health Accounts analyze spending by financing scheme, or the “arrangements through which health services are paid for and obtained by people” (OECD, WHO, Eurostat 2011). The categorization of health spending by financing scheme helps health planners to understand how funds are being raised and collected, how they are pooled to provide services, and who is entitled to those services. A country can have multiple juxtaposing schemes, and there is no “ideal” benchmark for how spending should be allocated to these schemes. However, some schemes are more equitable than others: e.g., schemes with a large proportion of out-of-pocket spending are less equitable than contributory schemes. National-level government schemes can also have the advantage of a large unified risk pool that can collect funds from a broad group of payers and allocate them to those most in need.

Just over half of current health spending (51%) supports government schemes; these schemes are funded by different sources (e.g., donors and government tax revenues), but funds are pooled at the national level to provide services to the entire population through the government system (Figure 9). Donors channel 44% of their funding through the government scheme, for example, through the *PROSAUDE* health-sector basket fund. The government

Figure 9: Current Health Spending by Health Financing Scheme, 2015



also serves as the agent, or the “manager,” of the funding for this scheme. This demonstrates that the government has programmatic influence over at least half of health spending in Mozambique.

Donor schemes are another important mechanism for providing health services (17% of current health spending). These schemes are generally those whose resources are pooled abroad and managed by a foreign organization that designs the benefits of the scheme, e.g., where donor headquarters design projects that are implemented in Mozambique in coordination with the government. Where donors disburse money to local NGOs, who design the benefits of the scheme, the scheme is considered an NGO scheme (these received 13% of health spending in 2015).

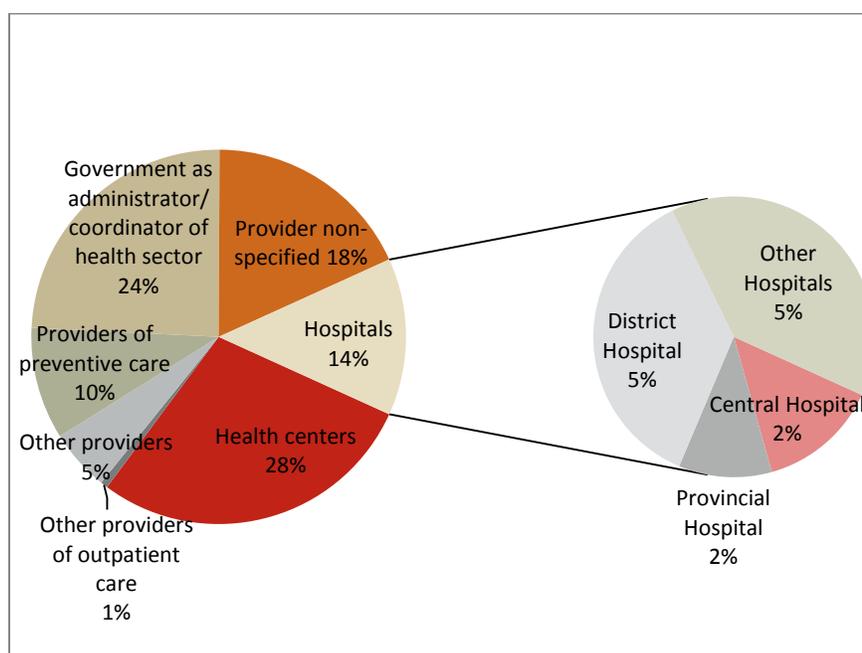
Direct payment schemes (or out-of-pocket spending) by households account for at least 11% of health spending. Studies have shown that high levels of spending by households risk impoverishment and catastrophic spending (Ke Xu et al. 2010). Mozambique’s commitment to Universal Health Coverage will require close monitoring of household spending for health to reduce financial barriers for households attempting to access health care services.

3.2.3 Which levels of the health system receive health resources?

Public non-specialized health centers represent the largest proportion of health spending (28% in 2015), followed by hospitals (14%). All health facilities who predominantly offer outpatient services (public non-specialized and specialized health centers) and providers of prevention services together account for approximately 38% of health spending. Therefore, it could be said that over one third of health spending is allocated to primary care. “Other” providers includes at least 2% of spending by community-level providers (e.g., community-health workers, traditional healers). Secondary-level care providers (district and provincial hospitals) represent 6% of spending, and tertiary-level care providers (central hospitals, mental health and other specialized hospitals) 2%. These proportions are likely underestimated, as payments made by households could not be classified by health provider.

Figure 10 shows which health providers provide health care goods and services. The analysis by provider type reflects the nature of the organization providing the goods and services, and not necessarily the services they provide. Therefore, the curative care, preventive care and administrative spending by hospitals are all classified as “hospital provider.” The category of preventive care provider represents

Figure 10: Current Health Spending by Health Provider, 2015



organizations whose primary purpose is to provide prevention services. Providers of preventive care are most typically NGOs and government priority programs, such as immunization.

Eighteen percent of current health spending could not be allocated to a specific provider type: this spending is by households (the Health Accounts team did not receive the raw data from the household survey to break down spending in this way), and by corporations and donors whose responses did not include sufficient detail by provider type.

The category of government as administrator and coordinator of the health sector represents government units who provide planning and policy for health, and other health system strengthening support. These are typically central government units (e.g., DPC; Finance Unit; *Central de Medicamentos e Artigos Médicos* (Central Medical Stores)) as well as some activities by the Provincial Health Directorates. This category does not include administrative costs of providers of direct health care goods and services such as hospitals and health centers, whose administration costs are classified as “hospital” or “health centers.” Nearly one quarter of health spending in Mozambique is by government units in their role as stewards. Health system strengthening is an important role that the government plays, and investment of resources in this area is commendable. While there is no benchmark for proportion of spending for this category, a further analysis is warranted to understand whether any potential efficiency gains could free up resources to provide direct health care goods and services.

Policy Implication: Spending analysis by level of health care warrants further study into provision of care at the community level.

Spending at the community level was approximately 2% in 2015, including spending on traditional practitioners. Given the importance of prevention activities in preventing conditions from becoming more serious and costly, there may be opportunities for greater investment in community-level provision of care. Investment in community-level provision can help reduce the burden on overstretched staff at health centers and hospitals. It can also reduce financial barriers for households by reducing time and transport-related costs in accessing health goods and services.

A 2013 analysis of over 20 studies measuring the impact of community health workers providing HIV/AIDS services found improved behaviors among patients, increased use of prevention and curative services, and better retention of HIV/AIDS patients in care (Mwai et al. 2013). In Ethiopia, investments in Health Extension Workers and Community Health Promoters since 2004 are considered as a significant contributor to reductions in under-five mortality and maternal mortality (Perry et al. 2017).

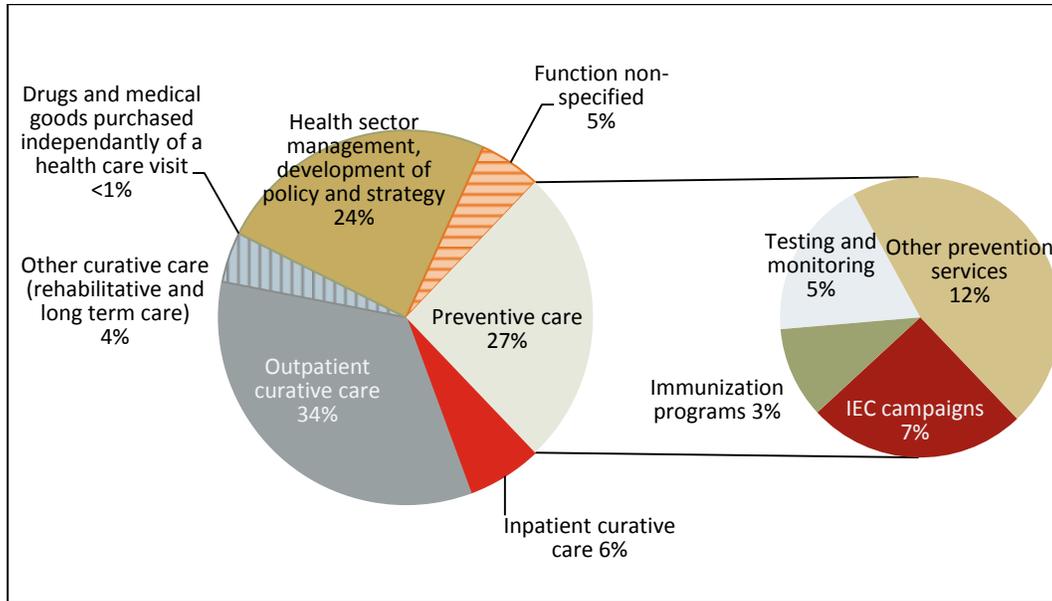
It is possible that spending by community health workers is also included in spending by health centers. More-detailed monitoring of spending by community health providers and traditional healers, who play an important role in Mozambican society, will help the Ministry of Health to better understand the key players and coordinate health services. Modifications to the household survey can also help policy-makers to better understand the role of these providers.

3.2.4 Which health goods and activities are purchased?

Forty-four percent of current health spending is used to provide curative services to the population—34% outpatient services, 6% inpatient services, and 4% other curative services such as home-based, rehabilitative and long-term care (Figure 11). Over one quarter of current health spending (27%) is used to provide health prevention and promotion services. Information, education and

communications campaigns (e.g., nutrition or HIV/AIDS) represent 7%, testing 5%, immunization programs 3%, and 12% could not be classified with the data provided.

Figure 11: Current Health Spending by Type of Health Goods and Services, 2015



Policy Implication: Spending on prevention, curative care and management should be monitored to ensure an optimal balance. More data is needed to understand drug spending and opportunities to improve efficiency.

The high proportion of health spending for prevention is commendable and should be maintained. Equally important is the need to continue monitoring the proportion of preventive vs. curative care spending, as there is a risk that curative care spending increases as demand and costs for more sophisticated treatments increase. Continuous efforts to monitor and improve the coordination and management of the health system in Mozambique will be important to ensure that the proportion of health spending for direct health goods and services is maximized.

The 2014/15 household survey asks households about their spending for drugs, but not which provider drugs were bought from, or if the drug spending was related to a curative care service or for self-medication. Government spending for drugs could not be disaggregated for further analysis. Recording the distribution of drugs by districts and by type of facility, with better compilation of drug spending at the national level, will help the Ministry of Health to understand how drugs are being used. Drugs are often a key cost driver of health services, and closer monitoring could identify opportunities for improving efficiency. In addition, having a better understanding of drug spending and demonstrating efficient use will be useful when negotiating for increased resources for health from the Ministry of Economy and Finance.

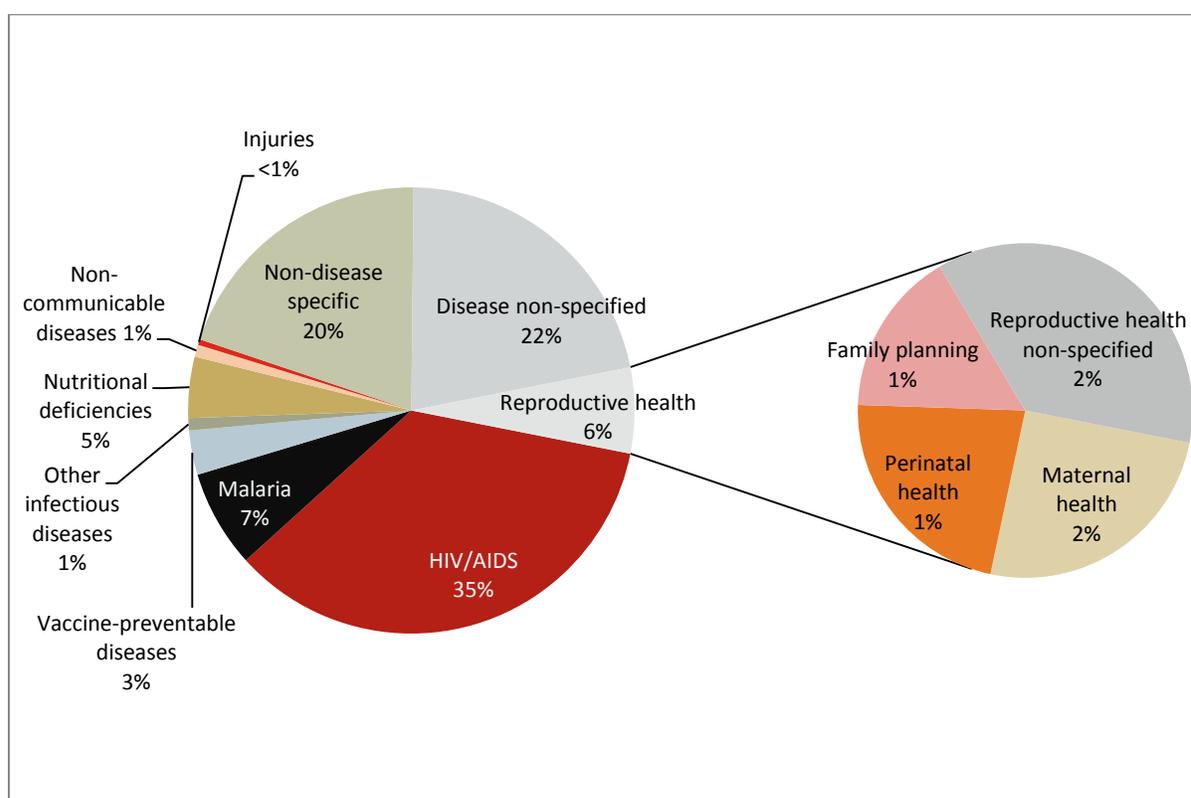
3.2.5 How is health spending distributed by disease/ health priority area?

The 2015 Health Accounts represents the first exercise that analyzes health spending by disease or priority health area. This analysis followed the WHO-recommended methodology that uses utilization

data weighted for intensity of resource use (or unit cost) to calculate “allocation keys” that allocate total health spending by disease or priority health area. Figure 12 shows the results of this analysis.

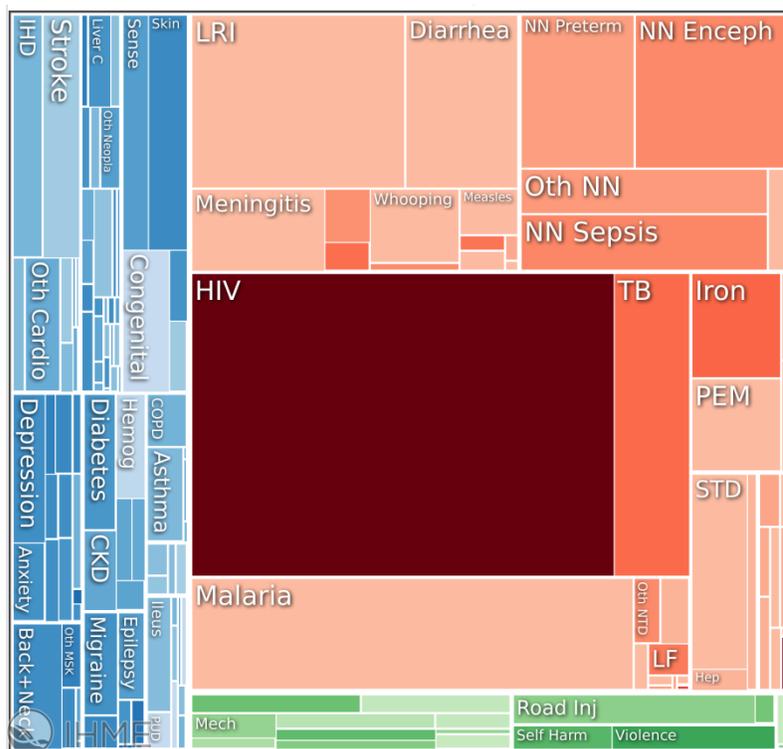
In 2015, infectious disease received the largest proportion of health spending (46%), followed by reproductive health (6%) and nutritional deficiencies (5%). For some spending, a distribution by disease can be less useful and in these cases, spending was classified as “non-disease-specific” (20%). This category includes spending by the central government for overall stewardship of the sector, or for health system strengthening activities that support all disease-fighting efforts and priority health areas. The team lacked sufficient data to analyze 22% of current health spending by disease or health area. With improved utilization and costing data, future Health Accounts exercises could classify total spending by disease or priority health area.

Figure 12: Current Health Spending by Disease or Priority Health Area, 2015



The burden of disease for Mozambique, measured by disability-adjusted life years (DALYs), one year following the health spending analyzed above is shown in Figure 13. Blue represents non-communicable diseases, red - infectious diseases and green - injuries. Darker shades represent larger increases in DALYs. For 2016, the majority of the burden of disease is from infectious diseases. A point-in-time comparison of health spending and mortality or DALYs is not sufficient to make decisions about resource allocation. However, analyzing these trends over time can help to assess whether health spending is aligned with Mozambique’s disease burden. In addition, analysis of utilization data with spending can also help to assess whether health spending is improving health care utilization and health behavior.

Figure 13: Mozambique 2016 Burden of Disease, DALYs



ASD: Autistic spectrum disorders, CKD: Chronic kidney disease, CMP: Cardiomyopathy and myocarditis, COPD: Chronic obstructive pulmonary disease, HTN HD: Hypertensive heart disease, IHD: Ischemic heart disease, Iron: Iron-deficiency anemia, LF: Lymphatic Filariasis, LRI: Lower Respiratory Infections, Mech: Exposure to mechanical forces, MSK: Musculoskeletal disorders, NN: neo-natal, PEM: Protein-energy malnutrition, PUD: Peptic ulcer disease, SIDS: Sudden infant death syndrome, RHD: Rheumatic heart disease.

4. Considerations for Institutionalizing Health Accounts in Mozambique

4.1 Invest in Regular Production and Dissemination of Health Accounts Analysis

Health Accounts are a useful tool in helping the government to understand the health spending landscape for Mozambique. Institutionalizing Health Accounts helps to ensure that health expenditure data is available to decision-makers on a timely basis to support more-informed decision-making about raising money for health, pooling and managing health resources, and how to allocate those resources. Health Accounts must be produced quickly to feed into annual planning and budgeting cycles. Regular production of Health Accounts data is necessary but not sufficient. The data must be packaged to be user-friendly, and widely disseminated to those who need it. It is important to maintain a regular cycle of production and use. This requires a commitment to **allocate sufficient time to produce and analyze Health Accounts** on a regular basis. This also necessitates a stable team in place who have the necessary knowledge and experience in expenditure tracking. It is important that the Health Accounts team that was trained in the Health Accounts methodology, and whose members now have practical experience, be maintained for future rounds.

4.2 Harness, and Help to Refine, Existing Health Data to Simplify Health Accounts Production

The large availability of health and health financing data in Mozambique provides an excellent opportunity to make the production of Health Accounts cheaper and quicker. INE's household budget survey (INE, 2017) is the key source of information to estimate household out-of-pocket spending, but in its current format it likely underestimates health spending and renders large amounts of its data unusable for Health Accounts. The existence of the Official Development Assistance to Mozambique Database and the IFE database, which capture donor health spending, enables Mozambique to avoid primary data collection from individual organizations, but these databases are in great need of recent and complete data. Drug distribution data is not compiled at the central level, which renders it difficult to analyze drug spending by region or by type of provider. The SIS-MA database is a vital source of data for calculating "allocation keys" to disaggregate spending. The SIS-MA had not been fully implemented in 2015, and utilization data had to be compiled from several sources. But for future Health Accounts exercises, this system will be the national health information system, and should compile utilization data quickly and accurately.

In order for the large amount of existing data to be useful for the production of Health Accounts, it is in the interest of the DPC to engage with the owners of this data. First, the DPC should work with organizations such as INE, *Central de Medicamentos e Artigos Médicos*, the Ministry of External Affairs and Cooperation, and SIS-MA to request the needed data so that data collection can be adapted to those needs—for example, by adding or refining questions in the household budget survey, or simplifying the IFE database to improve the quality of data provided by respondents. Second, by engaging with the owners of data so they understand the Health Accounts cycle, the DPC can help ensure that they receive the data they need in a timely manner and in the format required.

4.3 Continue to Engage with Public and Private Sector Stakeholders

Throughout the 2015 Health Accounts exercise, the DPC engaged with many stakeholders—for example, INE, INSS, the Mozambique Association of Industry, and the Ministry of Finance—to explain the importance of monitoring health spending, and the vital role that these stakeholders play in providing health data. It is important to continue this engagement to instill mutual accountability. The DPC should continue to **engage with these stakeholders** to increase their response rates during data collection, increase their involvement during the data validation process, and engage them to help identify the pressing policy issues that Health Accounts can help understand. It will also be important to disseminate results back to the stakeholders so they can also use these for their decision-making.

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