

**Federal Democratic Republic of Ethiopia**



**Ministry of Health**

# **ETHIOPIA HEALTH ACCOUNTS 2016/17**

**SEPTEMBER 18, 2019**

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**Federal Democratic Republic of Ethiopia  
Ministry of Health**

# **ETHIOPIA HEALTH ACCOUNTS, 2016/17**



## Foreword

The Government of Ethiopia (GoE) is currently implementing the first Health Sector Transformation Plan (HSTP I). HSTP I is part of the second country Growth and Transformation Plan (GTP II) and is aligned with the Sustainable Development Goals (SDGs). Ethiopia has achieved substantial progress in improving many health indicators in the past two decades. These achievements were made possible mainly due to the scale-up of primary health care services through the full-scale implementation of the Health Extension Program (HEP). This very successful flagship program for the health sector has been instrumental in empowering and making communities, households and individuals the owners of, and major players in, their own health.

Resources have also been committed by the GoE and its partners to expand training, deployment and the retention of key health professionals, such as medical doctors, midwives and nurses, in accordance with the Ministry of Health's 10-year human resource development strategy (2016–2025). In addition to strengthening the health workforce, the government continued the construction and operationalization of health posts, health centers and primary hospitals.

Ethiopia has been implementing a Health Care Financing Strategy for the past two decades. In this period, the strategy made an unprecedented contribution to mobilizing financial resources to improve access to health services and health outcomes. The revised Health Care Financing strategy (2017–2025) builds upon the successes and challenges of the earlier strategy to accelerate progress towards Ethiopia's vision of attaining universal health coverage through primary health care. The new strategy focuses on implementing innovative financing mechanisms to increase domestic resource mobilization and sustainable health financing of essential health services to make them accessible and affordable to all people who need them. The GoE has promoted increasing domestic financing for the health sector by increasing the allocated budget for health and providing financial protection to citizens through health insurance, with the aim of ensuring both sustainability and equity in health care financing. Based on encouraging results in pilot woredas, the government scaled-up implementation of community-based health insurance (CBHI) to about 440 woredas, which constitutes about 20% of the country's population.

In order to sustain the incremental resource allocation and financial protection, MoH generates and uses evidence on the magnitude and flow of health sector resources using the Health Accounts (HA) methodology. The HA estimate informs how total health expenditure (THE) flows from financing sources to end users. The current seventh round of HA charts Ethiopia's steady progress in increasing health expenditure and expanding understanding of where investments are made. The findings of this HA study provide critical information that MoH and partners can use to jointly assess the sector's performance. The findings will also enable us to clearly see how, where, and for what purposes the health sector funds were spent during the study year. In addition to information on overall health sector expenditure, findings on priority diseases and program areas, such as HIV/AIDS, reproductive health, child health, malaria, tuberculosis, non-communicable diseases (NCDs) and nutrition, provide more specific and in-depth information on how resources flow into each of these areas. This report also shows that the burden of out-of-pocket (OOP) spending is still significant (31%), underlining the need and importance of the health insurance program in the country. The study reveals that government health spending has risen remarkably over time, but has not yet reached the anticipated amount to make

Ethiopia less dependent on external donor assistance. The MoH has developed various approaches to mobilize more resources from domestic sources and improve efficient utilization of available resources.

The MoH has used the findings of HA studies to gauge expenditure trends, helping to redirect investments, harmonize efforts with development partners, and foster private sector engagement and contributions to the health sector. Cognizant of the importance of such studies, the Ministry has, for the first time, conducted the HA exercise within the Health Economics and Financial Analysis (HEFA) unit of its Partnership and Cooperation Directorate.

The successful completion of this HA study would not have been possible without the committed efforts and vital contributions of a wide range of stakeholders. Special thanks go to the WHO and USAID Health Financing Improvement Program for their financial assistance. The technical leadership role played by the National Health Accounts Technical Working Group is also highly appreciated. Finally, I would like to acknowledge all stakeholders who supported this survey, and take the opportunity to request that all of you use the evidence contained here in planning and policy decision processes.



**H.E. Dr. Amir Aman, Minister,  
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## Acronyms and Glossary

### Acronyms

|       |                                                        |
|-------|--------------------------------------------------------|
| CBHI  | Community-Based Health Insurance                       |
| CSA   | Central Statistical Agency                             |
| EHIA  | Ethiopian Health Insurance Agency                      |
| GDP   | Gross Domestic Product                                 |
| HA    | Health Accounts                                        |
| HAPT  | Health Accounts Production Tool                        |
| HDA   | Health Development Army                                |
| HEP   | Health Extension Program                               |
| HSDP  | Health Sector Development Program                      |
| HSTP  | Health Sector Transformation Plan                      |
| MoFEC | Ministry of Finance and Economic cooperation           |
| MoH   | Ministry of Health                                     |
| NBE   | National Bank of Ethiopia                              |
| NGO   | Non-Governmental Organization                          |
| NPISH | Non-Profit Institutions Serving Households             |
| OECD  | Organization for Economic Co-operation and Development |
| OOP   | Out-of-Pocket                                          |
| PPP   | Purchasing Power Parity                                |
| SHA   | System of Health Accounts                              |
| SHI   | Social Health Insurance                                |
| STD   | Sexually Transmitted Disease                           |
| THE   | Total Health Expenditure                               |
| USAID | United States Agency for International Development     |
| WB    | World Bank                                             |
| WHO   | World Health Organization                              |

## Glossary

**Ancillary services to medical care:** These are specialized services, such as laboratory tests, diagnosis imaging and patient transport, performed mainly by paramedical or medical technical personnel, with or without the direct supervision of a medical doctor.

**Beneficiaries:** The groups that consume, or benefit from, the health care goods and services. Beneficiaries can be grouped in several ways, such as disease, gender and age classifications.

**Curative care:** Curative care starts with the onset of disease and encompasses health care during which the “principal intent is to relieve symptoms of illness or injury, to reduce the severity of an illness or injury, or to protect against exacerbation and/or complication of an illness and/or injury that could threaten life or normal function” (OECD, Eurostat and World Bank. 2011). It includes inpatient, outpatient, home-based, and day curative care.

**Double-counting:** Identification and management of instances when two data sources cover the same health spending. The rule of thumb is that entities/agents closer to the consumption of health care services are likely to have more precise information about health spending than those further from the consumption of services. This implies the need to take spending reported by financing agents rather than financing sources.

**Financing schemes:** The main funding mechanisms by which people obtain health services. Financing schemes categorize spending according to criteria such as: mode of participation in the scheme (compulsory vs voluntary), the basis for entitlements (contributory vs non-contributory), the method for fund-raising (taxes/compulsory pre-payments vs voluntary payments) and the extent of risk pooling.

**Financing agents:** Institutions or entities that manage (channel) the funds from financing sources and use those funds to pay for, or purchase, the activities and commodities that are delivered by health service providers within the HA boundaries. These may include Ministry of Health, insurance companies, NGOs and international organizations.

**Factors of provision:** The inputs to the production of health care goods and services by health care providers, such as compensation of employees, health care goods and services, and non-health care goods and services.

**Financing sources:** Institutions or entities that are original sources of resources (funds) used in the health system and managed by (channeled through) financing agents.

**General health administration and insurance:** Activities of private insurers, central and local authorities, and social security, including the planning, management, policy, regulation, collection of funds and handling of claims of the health care delivery system.

**Gross capital formation:** Gross capital formation on health is measured as the total value of assets that providers have acquired during the estimation year and that are used for longer than one year in the provision of health services. Those goods and services differ significantly from other inputs that are used repeatedly or continuously for more than one year in the production of health services, for example, hospital infrastructure, road ambulances or MRI machines, which are classified as capital formation.

**Health Accounts Production Tool:** Software developed by the WHO and USAID that facilitates the planning and production of HA. It automates several previously time-consuming procedures such as repeat mapping, and incorporates automatic quality checks. Its advantage also lies in providing a repository for HA data and HA tables for future use.

**Health care functions:** Health care functions are the goods and services produced and used in the specific period (fiscal year), with the primary purpose of restoring, improving, and/or maintaining the health status of individual citizens and the public at large.

**Health care providers:** Entities and actors who provide medical goods and services as their main activity, such as hospitals, health centers, clinics and pharmacies.

**Health care-related/memorandum items:** In SHA 2011, expenditure on “Research and development in health” and “Education and training of health personnel” are considered as investments and, as such, are recorded as additional memorandum items to the capital account.

**Health expenditures:** Expenditures made in the health sector within a defined period (usually one fiscal year) for the production of goods and services consumed/used within the period.

**Inpatient care:** A formal admission to a health care facility that involves an overnight stay after admission.

**Medical diagnostic labs:** Establishments that are primarily engaged in providing analytic or diagnostic services directly to outpatients. These institutions may include the Ethiopian Public Health Institute (EPHI) and regional laboratories. These laboratories also provide higher-level diagnostic services for individual patients referred by health facilities when such diagnoses are beyond the capacity of the facility laboratory.

**Not specified in kind:** Activities or transactions that fall within the boundaries of the health accounts but which cannot be definitely allocated to a specific category because of insufficient documentation.

**Other institutions providing health-related services:** Other entities that provide health care services, such as traditional healers, medicine sellers and religious institutions/leaders.

**Outpatient care:** Care that is delivered from the health care providers’ premises but does not involve a formal admission to a health care facility.

**Parastatal enterprise:** State-owned organization, as defined by the HA exercise, that is at least 50% owned by the government. The major parastatal enterprises include Ethiopian Airlines, Ethio-telecom, Ethiopian Electric Power Corporation and Commercial Bank of Ethiopia.

**Per capita expenditure:** Expenditure per person. Computed by dividing the total expenditure by the total population or the population group for which the spending is intended.

**Pharmaceuticals:** Mainly focused on drugs and medical supplies that are obtained from independent (stand alone) drug retail outlets (private and public pharmacies or drug stores). In the case of inpatient and outpatient care services, pharmaceuticals/medical goods are not usually identified separately due to aggregation problems, and are considered as part of inpatient and outpatient curative care expenditures.

**Pharmacies:** Establishments that are primarily engaged in the retail sale of medicinal preparations that are compounded or prepared and dispensed or sold to the public.

**Prevention:** Prevention interventions start with an individual in a healthy condition. Their aim is to enhance health status and to maintain a condition of low risk of diseases, disorders or injuries. Preventive interventions also cover individuals at specific risk and those who have either no symptoms of a disease or early signs or symptoms, where early case detection will assist in reducing the potential damage by enabling a more successful intervention (OECD *et al.* 2011).

**Public health programs:** Services designed to enhance the health status of the population, in contrast to curative services. These services are provided outside of health facilities that offer outpatient and inpatient health care services. Typically, this includes preventive health programs implemented by government agencies and NGOs, health promotion and sensitization programs, and campaigns to promote the use of specific health care services.

**Providers of occupational health:** According to SHA 2011, occupational health comprises a wide variety of health services, such as surveillance of employee health (routine medical check-ups) and therapeutic care (including emergency health care services) on or off business premises (including government and non-profit institutions serving households (NPISH)).

**Providers of health care system administration and financing:** Establishments that are primarily engaged in the regulation of the activities of agencies that provide health care and in the overall administration of the health care sector, including the administration of health financing.

**Rest of the economy:** According to the SHA 2011 providers' classifications, these entities include households as providers of home health care and all other industries as secondary providers of health care. In addition, this category also includes those establishments that are outside the health care provider universe but specialized in health-related activities, such as: i) long-term care (social); and ii) health promotion with a multi-sectoral approach.

**Rest of the world (RoW):** All international/foreign-based institutions that play a role in the financing and/or transactions of resources in the country's health system. The RoW includes bilateral and multilateral donors and international NGOs.

**Revenues of financing schemes (FSs):** Types of revenues received or collected by financing schemes. Examples include: transfers from the Ministry of Finance to governmental agencies; direct foreign financial transfers (e.g. external donors providing funds to NGOs); and voluntary prepayment from employers.

**Total health expenditure (THE):** The sum of current health spending, gross capital formation and health-related expenditures (such as educational training and R&D).

## Executive Summary

Health Accounts (HA) provide vital information for policy-makers regarding who pays for health, who manages health resources and on which interventions health resources are spent. The HA estimate informs how total health expenditure (THE) flows from financing sources to end users of spending. HAs are primarily designed to examine issues related to the flow of resources, management and priority alignment related to health care financing.

The seventh HA breaks down spending by the standard disease classifications, financing sources, financing schemes, financing agent, level and type of provider, and health function. This HA exercise follows the WHO-recommended Systems of Health Accounts SHA, 2011 framework.

This HA preparation was led by the Ministry of Health (MoH), Partnership and Cooperation Directorate, with substantial partners' support. The report covers the results of the 2016/17 (July 8, 2016 to July 7, 2017) fiscal year in Ethiopia and includes important findings from earlier HAs.

### Methods

The SHA model classifies health expenditure according to the tri-axial accounting structure for health care consumption, service delivery and health financing. Such a tri-axial presentation of health financial information ensures a stronger understanding among policy-makers and other stakeholders about the health care financing scheme and flow of health resources.

Health expenditure data were collected from the Ministry of Finance and Economic Cooperation (MoFEC), 32 universities, 38 bilateral and multilateral donors, a sample of 270 non-governmental organizations (NGOs) (119 international and 151 local), 274 employers (24 parastatals and 250 private), 17 insurance companies, five line ministries and 15 private health facilities. In view of the high cost involved in conducting large-scale household surveys, it was decided to utilize the 2015/16 household health utilization and expenditure survey with inflation and population growth adjustment. Unlike the earlier HAs, for this round, data collection was done using tablets and CSPRO interface for remote data entry. Stata 14 was intensively utilized for data structuring before migrating the final data to the Health Accounts Production Tool (HAPT) for mapping and data analysis. The changes made to the data collection and analysis contributed to early completion of the study, in less than a year.

### Findings

**Between 2013/14 and 2016/17, the total nominal health expenditure value increased by 45%, driven by substantial increases in government spending on health.** Total health spending during 2016/17 was ETB72.1 billion (US\$3.1 billion), a 45% increase in nominal terms from ETB49.6 billion (US\$2.5 billion) in 2013/14. Government expenditure accounted for 32% of total health spending in 2016/17. The nominal value of the government health spending increased remarkably, from ETB14.7 billion to ETB23.7 billion between 2013/14 and 2016/17. External funding accounted for 35%. Out-of-pocket (OOP) spending on health amounted to 31% of total health expenditure (THE) in 2016/17, considerably higher than the global recommended

target of 20%. Over 87% of THE was recurrent, while the remaining 12% went to capital and capital-related health expenditure.

**Since 2010/11, domestic government spending on health per capita tripled growth to reach US\$10.6 in 2016/17.** While the government per capita health expenditure reached US\$10.6 in 2016/17, THE per capita on health increased by 5.3% per year on average, from US\$28.7 in 2013/14 to US\$33.2 in 2016/17. This figure is still far below the US\$86 per capita spending estimated to be required to make essential health care services available in low-income countries.

**Compared with other countries in the region, total health spending as a share of GDP and government spending on health as a share of total government spending remain low.** THE as a percentage of GDP remained stable over the reporting period, with a slight decrease in 2016/17 to 4.2%. This is still a considerable improvement compared to the late 2000s share, when it stood at 3.8% of GDP. Expenditure on health as a share of total government expenditure increased from 7.6% in 2013/14 to 8.1% in 2016/17. The low-income country average government health expenditure as proportion of total government expenditure is 8.7%, which is a little over Ethiopia's figure.

**More than half of the total spending on health was managed by government.** Government manages more than half of the total health resources (52%), while it contributed (32%), the difference being mostly donor funding in the form of budget support and SDG pool fund. Of the total government-managed resources, regional health bureaus managed 48% and MoH managed 44%. The remainder was managed by other ministries and parastatals. About 15% of THE was managed by donors/NGOs, a decrease from 19% in 2013/14. The priority for government-managed resources was curative care: 51% of government-managed health resources. The priority for donor/NGO-managed resource spending was on preventive care (29%). On the other hand, the capital spending out of government-managed resources was approximately 17%, while NGOs spent only 5%.

**The largest share of total health expenditure was on infectious and parasitic disease prevention, control and treatment.** Of THE on infections and parasitic diseases, the share spent on curative care (42%) was greater than on preventive care (37%). On the other hand, the share of spending on NCDs, nutritional deficiencies and reproductive health was 12%, 11% and 8%, respectively. Of THE, health spending on NCDs, at 12%, has remained the same since 2013/14. As the share of morbidities and mortalities attributable to NCDs is growing fast in Ethiopia, MoH needs to strengthen NCDs initiatives, not only in its health spending but also in building capacity of the health system to deal with NCDs and other emerging health conditions.

## Major policy implications and recommendations

**Increase government allocation to health:** Though health spending is steadily growing in terms of both overall volume and per capita, it is still far below HSTP's resource requirements, the globally recommended amount, and the Abuja commitment. The MoH should present a comprehensive case as to why the government should allocate higher budgets to health. The assessment should use extensive fiscal space assessment for health to take into consideration the macroeconomic situation and the implications for the non-health sectors. Policy dialog forums with senior officials at all levels should be arranged to foster more government budget for health, although fiscal space assessment with return on investment is still essential.

**Implement innovative financing initiatives:** This report shows that the share of donor funding is declining, although only marginally. This trend is expected to continue as Ethiopia moves towards the status of a lower middle-income country. This is an alarm that forces MoH to strengthen its innovative financing initiatives on sin taxes, and airline and airtime levies. MoH should strategize both business and philanthropic approaches to encourage sustainable domestic resource mobilization.

This study shows that, although marginally, the share of donor funding is decreasing. As Ethiopia is progressing towards the status of low-middle-income countries, this trend is anticipated to continue. This is an alarm that drives MoH to reinforce its innovative financing initiatives on sin-tax, airline and airtime levies and other type of innovative finance. To promote sustainable innovative domestic financing, MoH needs to start both commercial and philanthropic innovative financing options.

**Intensify actions to reduce OOP spending:** Effort to expand financial protection through the various programs (including CBHI and SHI) needs to be tripled in order to increase health utilization and reduce OOP spending at the point of use. While it might not be possible to replace OOP spending altogether, it should be reduced sufficiently, particularly among the poor. Further, to protect the poor, in woredas where CBHI schemes are functional, it is equally important to expand the indigent subsidy program to all people below the poverty line.

**Reprioritize non-communicable diseases:** The share of morbidities and mortalities attributable to non-communicable diseases (NCDs) is growing fast in Ethiopia, while the share of health spending on NCDs has steadily grown. The health spending on NCDs, as a proportion of THE, has remained the same, at 12%, since 2013/14. As part of the reprioritization, the expenditure share between curative (79%) and preventive care of NCDs (0.3%) needs to be reconsidered. The nil NCD preventive care expenditure in 2016/17 is an indication for preventive care initiatives for NCDs were not adequately conducted.

**Integrate the resource mapping and tracking with HA:** Data for HA could be generated from the routinely collected resource mapping and tracking survey, which would do away with the costly data collection techniques of donors and NGOs. Similarly, health financial data from government institutions such as universities could be integrated into the resource mapping and tracking exercise. However, the household health expenditure and utilization survey can no longer be replaced or built-in with other routine data collection and reporting systems. Considering the cost and effort it requires, it could be conducted periodically, in three to five years.

# 1. Introduction

Health Accounts (HA) collect, map and summarize data on expenditure on health. HA provide vital information for policy-makers regarding who pays for health, who manages health resources and on which interventions health or diseases resources are spent. HA use internationally standardized methods for tracking expenditures using key financing indicators, such as total and per capita health spending, that allow for comparison across countries.

## 1.1. Background

With an estimated population of 93.4 million in 2016/17 (projected to reach 100 million in 2020 (CSA, 2013)), Ethiopia is the second most populous country in Africa. Over 55% of the population is young (aged below 20), and less than 20% of the population lives in urban settings (CSA, 2013). Ethiopia achieved significant economic and social progress over the past five years, with gross domestic product (GDP) growing at an average annual rate of 9.9% (NBE, 2016/17). The country is currently finalizing its second Growth and Transformation Plan (GTP II), implemented over 2015/16–2019/20, which aims to transform key socioeconomic systems, including health.

Having achieved nearly all the Millennium Development Goals (MDGs) by 2012, Ethiopia has continued to achieve remarkable gains in health. For example, Ethiopia was able to increase births attended by skilled health workers from 5% in 2005 to 50% in 2019, and reduce under-5 mortality from 123 to 55 (per 100,000) during the same period (Mini DHS, 2019). Ethiopia is now striving to achieve the Sustainable Development Goals (SDGs) for health, through universal health coverage.

With the vision of ensuring healthy and productive citizens of all ages, as established in Goal 3 of the SDGs and achieving other SDG components by 2030, Ethiopia has begun implementing different strategies for the health sector. Building on the achievements of the 20-year National Health Sector Development Program (HSDP) (1997–2015), Ethiopia is currently implementing the Health Sector Transformation Plan (HSTP) (2015/16–2019/20). The HSTP seeks to achieve ambitious goals, including improving equity and coverage of care, and utilization of essential health services, to sustain achievements of the MDGs and make further progresses. It also aims to improve quality of health care and enhance the implementation capacity of the health sector at all levels of the system (MoH, Health Sector Transformation Plan 2015/16-2019/20, 2015).

Ethiopia has implemented the 1998 Health Care Financing Strategy over the past two decades, which was instrumental in building strong resource mobilization and allocation systems that supported the implementation of HSDP and now HSTP. The strategy made a significant contribution to health by mobilizing financial resources for improving access to health services and health outcomes. The revised health care financing strategy builds upon the successes of its predecessor and aims to accelerate progresses toward attaining universal health coverage through primary health care. The new strategy focuses on implementing innovative financing mechanisms to increase domestic resource mobilization and sustainable health financing of essential health services to make them accessible and affordable to all people who need them.

## 1.2. Health Accounts in Ethiopia

Ethiopia has undertaken six rounds of HA and this report presents the findings of the seventh HA estimation, using data for Ethiopian fiscal year 2009 (July 8, 2016 to July 7, 2017). The data collection and analysis were conducted between January and August 2019. The sixth and the seventh Ethiopian HA use the Systems of Health Accounts (SHA 2011) framework (OECD Eurostat and WHO, 2011). The seventh round HA data allows disaggregation of health expenditures by region, and could be used as a tool for tracking HSTP progress for setting or reforming financing policies.

As highlighted above, the HA document how total health expenditure (THE) flows from financing sources to end users of spending. The seventh HA breaks down spending into the standard disease classifications, by financing sources, financing schemes, financing agent, level and type of provider, and health function (inpatient and outpatient care).

## 1.3. Objectives and policy questions

HA inform policy-makers to determine whether sufficient resources are being spent on health, whether resources are being used in the most equitable, effective, and sustainable way, and whether resources are allocated in a way that will enable the health system to achieve more value-for-money and improve the coverage and quality of health services. Some of the more specific objectives of the HA survey includes:

- ❖ Quantifying total resources spent on health and the contribution of each stakeholder in financing health care.
- ❖ Generating evidence on the relation between health sector priorities and health spending by level and types of health services.
- ❖ Understanding disaggregated health resources by financing agent and disease category as well as health programs.
- ❖ Producing health expenditure data that will be internationally comparable.
- ❖ Documenting the magnitude and share of health expenditures in a broader macroeconomic context, including the share of health expenditure out of gross national product (GDP) and Government spending.
- ❖ Synthesizing health expenditure data and documenting lessons learned policy implications for further development of health financing in Ethiopia.

The Ethiopia seventh HA data will be able to answer some of the following policy questions:

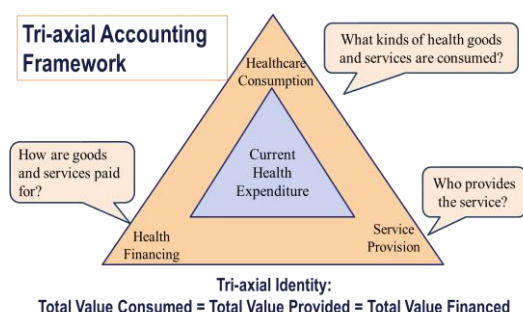
- ❖ What is the magnitude of total and per capita health spending in Ethiopia?
- ❖ What are the sources of finances for health?
- ❖ What is the trend in health spending and share of health financing?
- ❖ What share of resources is managed at each level of the health system?
- ❖ How are health resources managed and distributed?
- ❖ How much is spent on each level and group of providers?
- ❖ For what services and functions are health resources used?
- ❖ For which diseases and health conditions are health resources used?
- ❖ How heavy is the burden of out-of-pocket expenses on households?
- ❖ How significant is the role of the private sector in health financing?

## 1.4. Methodology

### 1.4.1. System of Health Accounts (SHA)

The SHA 2011 framework, recently adopted in many countries, including Ethiopia, is an internationally comparable standard for reporting expenditure on health. It classifies health expenditures according to the tri-axial accounting framework of consumption, service provision and financing for the purposes of providing policy-makers with timely and accurate information (Figure 1).

**Figure 1: SHA Framework**



More specifically, the SHA model provides the structure for estimating the health expenditure that is amenable to international, sub-national and sub-accounts comparisons. The framework defines the boundaries of health care activities to include “all spending activities whose primary purpose is to improve, maintain and prevent the deterioration of the health status of individuals, groups of a population or the entire population of the nation or state” (OECD Eurostat and WHO, 2011).

### 1.4.2. Data sources

The seventh HA use the primary and secondary data described below. Primary data was collected from a wide range of sources, including:

- ❖ MoFEC, which provided audited data for EFY 2009 (2016/17) on government spending on the health sector at all levels of government (federal, regional and woreda), and by various types of providers.
- ❖ All line ministries/agencies with health-related activities and expenditure, and 32 universities whose data were not captured in the disaggregated MoFEC data.
- ❖ All bilateral and multilateral donors working in Ethiopia’s health sector, to estimate the magnitude, flow and purpose of donor spending in the health sector.
- ❖ A randomly selected 270 NGOs (119 international and 151 local), to understand flows of health resources through these entities.
- ❖ A stratified sample of 274 employers (24 parastatals and 250 private employers), to understand the extent to which employers provide medical insurance or reimbursement to their employees.
- ❖ All 17 insurance companies (one public and 16 private) operating in the country during the study period, to estimate the amount of health resources managed by these entities.
- ❖ A sample of 15 large private health facilities, to estimate net gross capita formation.

In addition to the primary data described above, data were also generated from the following sources:

- ❖ The sixth round Household Health Utilization and Expenditure Survey data were extracted and used to estimate and track household health expenditure after accounting for health inflation and population adjustment.
- ❖ MoH's Health and Health-related Indicators Annual Reports. The health services utilization data, generated from the health management information system (HMIS) database, were used to develop/estimate distribution keys for this HA exercise.
- ❖ MoH unit cost study (2015/16 and 2017/18): Unit cost figures also were used to produce/estimate distribution keys, which in turn were used to disaggregate government spending to the different disease categories/programs at various levels of care.
- ❖ National Bank of Ethiopia annual reports for the GDP estimates.
- ❖ Central Statistical Agency's Population and Housing Census 2007, to estimate per capita health spending of the country.
- ❖ [Annual reports of the National Bank of Ethiopia \(2017/18\)](#) were used to convert the different foreign currencies into Ethiopian birr (ETB) and US dollars (US\$).

### 1.4.3. Data analysis

Ethiopia adopted the Health Accounts Production Tool (HAPT) software that was developed by the USAID-funded Health Systems 20/20 Project, with additional input from the World Health Organization and the World Bank (OECD Eurostat and WHO, 2011). APT's development was informed by the need to reduce complexity in the documentation and methodology of measuring financial resource flows in the health sector and to enhance the comparability of outcomes across countries. We used all six modules of the HAPT for entering general information and data, customizing codes, mapping expenditures, checking for double-counting, creating/applying rules, and validating the data up to the generation of HA tables, graphs and reports.

### 1.4.4. Limitations and challenges

Data were not collected from households for the seventh HA because of budget and time constraints. It would be ideal to collect data from households to understand changes in utilization, OOP spending, and expenditure by disease categories. However, we were able to resolve this challenge by adjusting (for inflation) data during the 2015/16 household health utilization and expenditure survey, which was undertaken one year before the 2016/17 budget year.

## 2. Health expenditure findings and analysis

### 2.1. Health spending: who finances health care, and how much do they contribute?

In the seventh round HA (2016/17), Ethiopia's total health expenditure (recurrent and capital) was estimated at ETB72 billion (US\$3.10 billion). In 2016/17, total health expenditure accounted for 4.2% of the country's GDP, which is lower than the expected average of 5% for low-income countries, and well below the global average of 9.2% (WHO, Global Health Expenditure Data Base, 2016). However, it represented a considerable improvement over the situation in the late 2000s, when it stood at around 3.8%.

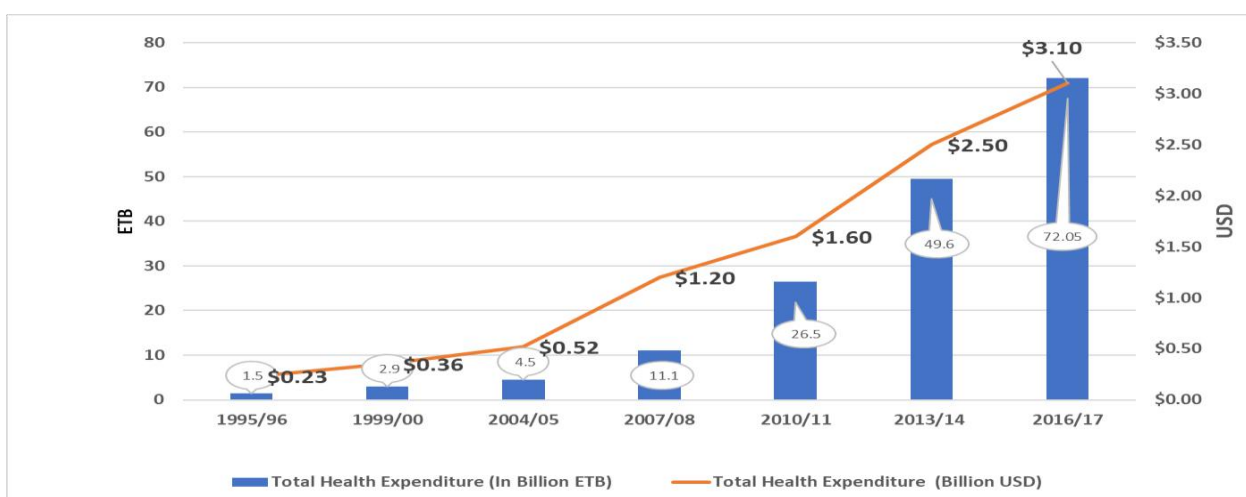
The share of recurrent health spending<sup>1</sup> in 2016/17 increased to 87.95% from 86.3% in 2013/14, while the share of spending on training and research remained about the same. On the other hand, the share of capital spending has decreased to 8.6% in 2016/17 from 10.4% in 2013/14.

**Table 1: Total Health Expenditure by Source of Financing and Spending Categories, 2013/14 and 2016/17 (ETB Billion)**

| Health Spending Categories, 2016/17 |               |              |                       |              |
|-------------------------------------|---------------|--------------|-----------------------|--------------|
| Source of Financing                 | Recurrent     | Capital      | Training and Research | Total        |
| Donors                              | 22.55         | 2.80         |                       | 25.35        |
| Government, including parastatals   | 17.19         | 3.37         | 2.62                  | 23.07        |
| Households                          | 22.08         |              |                       | 22.08        |
| Private employers, NGOs, and others | 1.54          | 0            |                       | 1.54         |
| <b>Total</b>                        | <b>63.37</b>  | <b>6.18</b>  | <b>2.62</b>           | <b>72.05</b> |
| <b>Share</b>                        | <b>87.95%</b> | <b>8.6%</b>  | <b>3.5%</b>           |              |
| Health Spending Categories, 2013/14 |               |              |                       |              |
| Source of Financing                 | Recurrent     | Capital      | Training and Research | Total        |
| Donors                              | 15.68         | 1.95         |                       | 17.63        |
| Government including parastatals    | 9.93          | 3.16         | 1.62                  | 14.71        |
| Households                          | 16.49         |              |                       | 16.49        |
| Private employers, NGOs, and others | 0.68          | 0.05         |                       | 0.73         |
| <b>Total</b>                        | <b>42.78</b>  | <b>5.16</b>  | <b>1.62</b>           | <b>49.56</b> |
| <b>Share</b>                        | <b>86.3%</b>  | <b>10.4%</b> | <b>3.3%</b>           |              |

The total health expenditure has grown steadily since 1995/96. It grew by 45% from ETB49.6 billion in 2013/14 to ETB72.1 billion in 2016/17. In real terms, however, this growth was 15%, i.e., from ETB49.6 billion to ETB57.16 billion<sup>2</sup> after adjusting for inflation.

**Figure 2: Total Health Expenditure (ETB and USD Billion), 1995/96–2016/17**



<sup>1</sup> Spending on delivery of health care services, provision of health commodities and supplies, and general health system operation.

<sup>2</sup> The real spending is calculated by deflating the total spending of the current health account year (2016/17) to the previous HA year (2013/14).

The growth in total health expenditure (THE) came from different financing sources. In nominal terms, government spending has increased from ETB14.7 billion in 2013/14 to ETB23.1 billion in 2016/17; in real terms, it grew by 24.7%. Moreover, health has been prioritized through a pro-poor policy that sees 70% of government expenditure going to the five pro-poor sectors of agriculture, education, health, roads and water. However, public allocations to fund the health sector were around 8.04% of total government expenditure in 2016/17. While this is higher than the 7.6% share in 2013/14, it is slightly lower than the average of 8.7% for other low-income countries (WHO, Global Health Expenditure Data Base, 2016) and well below the 15% target set by the Organization for African Union's 2001 Abuja Declaration.

The share of the government contribution has increased from 30% to 32% during 2016/17. The share of government health expenditure was 1.4% of GDP in 2016/17. This amount was lower than the low-income country average of 1.9% for the same year. This is low for what is essentially the mandatory pre-paid component of a health financing system. The global average, for example, was 5.3%. The challenge faced by the GoE in ensuring adequate coverage is encapsulated by per capita government expenditure on health, which was around US\$34.2 (in terms of purchasing power parity<sup>3</sup>) in 2016/17, higher than the low-income country average of US\$25 but nineteen times less than the global average of US\$652 (WHO, Global Health Expenditure Data Base, 2016).

Donor financing accounted for 35% of total health sector expenditure in 2016/17. This was considerably higher than the low-income country average of 28%. However, donor assistance contributed more than one third of the total health expenditure, making it an important source of financing for health services.

As would be expected from the relatively low levels of government expenditure, OOP payments played a significant role in Ethiopia in 2016/17 (31% of total financing, which is 1.3% of GDP). This was higher than the global average (21%), and about the same as the low-income country average (30%). It was far above the 20% threshold suggested by WHO to minimize financial catastrophe and impoverishment as a result of accessing health care services (WHO, Health System Financing, 2010).

Increasing OOP payments over the years 1995/96 to 2016/17 accounted for growth in both total health expenditure and total per capita health expenditure at a pace faster than the growth in both GDP and GDP per capita. Furthermore, other private health expenditure in Ethiopia has played an insignificant role at only 2% of total health sector financing 2016/17.

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<sup>3</sup> Using purchasing power parities (PPPs) 1 ppt=7.202 ETB

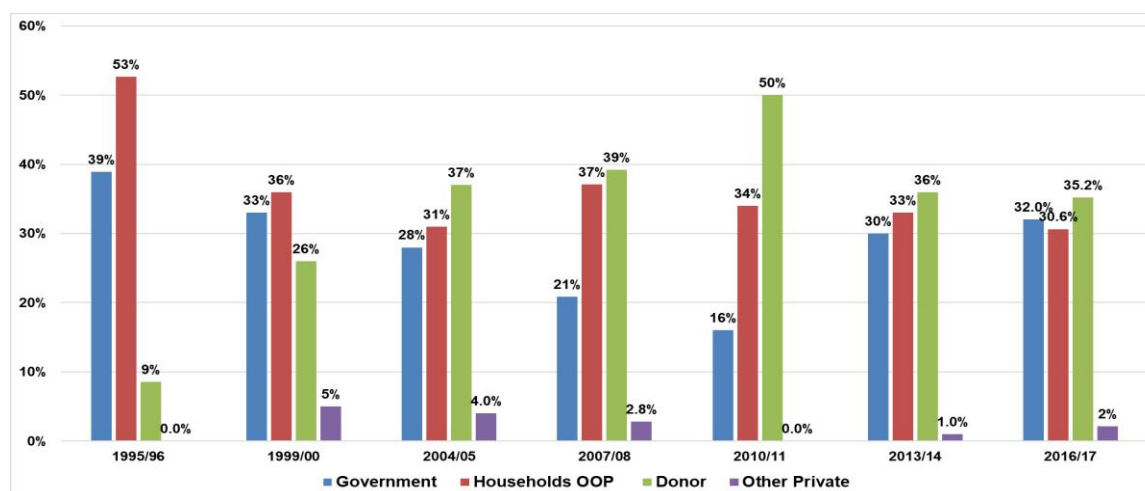
**Table 2: National Health Accounts Indicators of Health Care**

|                                                                                 | 1995/96 | 1999/00 | 2004/05 | 2007/08 | 2010/11 | 2013/14 | 2016/17  |
|---------------------------------------------------------------------------------|---------|---------|---------|---------|---------|---------|----------|
| <b>Indicators of the level of health care expenditure</b>                       |         |         |         |         |         |         |          |
| 1 Total expenditure on health (In million USD)                                  | 230     | 356     | 522     | 1,200   | 1,600   | 2,500   | 3,102.34 |
| 2 Total expenditure on health as % of GDP                                       | 3.8%    | 5.0%    | 5.0%    | 4.5%    | 5.2%    | 4.7%    | 4.23%    |
| 3 General government expenditure on health as % of GDP                          | 1.5%    | 1.7%    | 1.4%    | 0.9%    | 0.8%    | 1.4%    | 1.4%     |
| 4 General government expenditure on health as % of total government expenditure | 5.2%    | 5.6%    | 4.8%    | 4.8%    | 3.5%    | 7.6%    | 8.07%    |
| 5 Out-of-pocket expenditure on health as % of GDP                               | 2.0%    | 1.8%    | 1.6%    | 1.7%    | 1.8%    | 1.6%    | 1.30%    |
| 6a Per capita total health expenditure at average exchange rate (US\$)          | 4.1     | 5.6     | 7.1     | 16.1    | 20.8    | 28.7    | 33       |
| 6b Per capita total health expenditure (PPP \$)                                 | 13.6    | 23.2    | 29.7    | 47.7    | 75.6    | 81.3    | 107      |
| 6c Per capita government expenditure on health at average exchange rate (US\$)  | 1.6     | 1.8     | 2.0     | 3.4     | 3.3     | 8.6     | 10.6     |
| 6d Per capita government expenditure on health (PPP \$)                         | 5.3     | 7.7     | 8.3     | 10.0    | 12.1    | 24.4    | 34.2     |

Source: authors compilation based on HA I to VII reports.

## 2.2. Making Ethiopia's health system financially sustainable: what is the trend toward domestic resource mobilization?

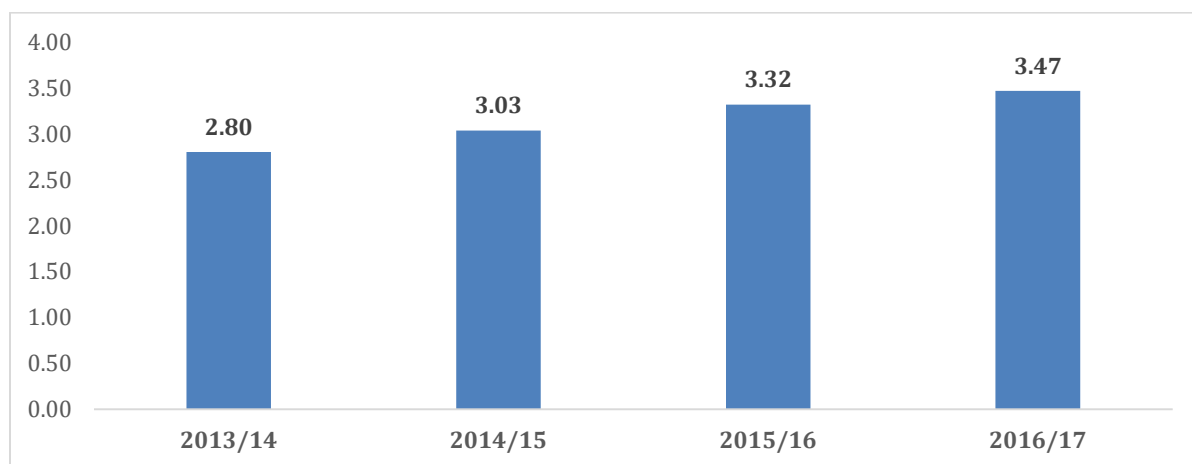
The share of THE coming from domestic sources has slightly increased from 64% in 2013/14 to 65% in 2016/17. The proportion of the government contribution has increased from 30% to 32% during the same period. Household OOP spending remains a major domestic source of financing for the health sector and its share of THE has slightly decreased from 33% in 2013/14 to 31% in 2016/17. The contributions by other sources, including private employers and others, remained insignificant, with a slight increase from 1% to 2% of THE. In contrast, the contribution of the rest-of-the-world has marginally decreased from 36% to 35% of THE. The increase in the share of the government's contribution to health is encouraging, as it pushes the Ethiopian health sector towards more financial sustainability.

**Figure 3: Total Health Expenditure by Source of Financing (%), 1995/96–2016/17**

### 2.3. Community ownership and engagement: an important pillar for sustainability

One of the successes of the Ethiopian health system is working at community and household levels to engage and empower the community to safeguard their health. This is being realized through the Health Extension Program (HEP), the health sector's flagship program, and the Health Development Army (HDA). These complementary programs enabled the health sector to reach communities and households with health promotion and prevention programs. The health sector was also able to mobilize resources from households and communities, both in kind and in cash, for the construction of health posts, for environmental health campaigns such as the drainage of water ponds, for indoor residual spraying operations and distribution of insecticide-treated nets to combat malaria, and for other public works that promote health and prevent diseases. The HA team estimated community contribution based on the previous household survey data, which collected data and estimated that the community contribution to health through the HDA and malaria control programs was about ETB3.4 billion in 2016/17. Though community contribution and engagement is difficult to account for in the HA framework, one can understand that such an intervention is significant in the Ethiopian health system, and that it contributes to enhancing community ownership of health care and health system sustainability.

**Figure 4: The Estimated Monetary Value for Community Contribution to Health (non-HA expenditure)**

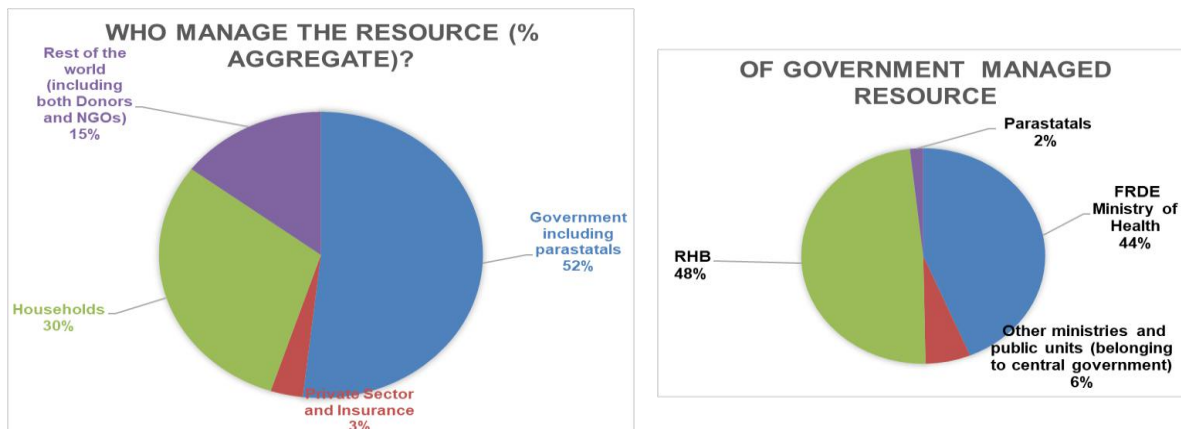


### 2.4. Who manages health resources?

In health financing, managerial responsibility of health resources is critical because it determines where, for what purposes, and how expenditures are made. Government has played an increasingly role in managing health resources, as its share increased from 44% to 52% between 2013/14 and 2016/17. Households account for the next largest share managing 30% of health spending – households manage their OOP spending at the time of seeking health care. Rest of the world (donors and NGOs) manages 15% of THE in 2016/17, which dropped from 19% in 2013/14, while insurance companies and private employers manage 3% of THE (Figure 5).

Within the government system, regional health bureaus and the MoH managed 48% and 44% of THE, respectively. Other ministries and public units (belonging to central government) managed 6% of THE, while parastatals managed 2% of the resources managed by the government (Figure 5).

**Figure 5: Total Health Expenditure by Financing Agent**

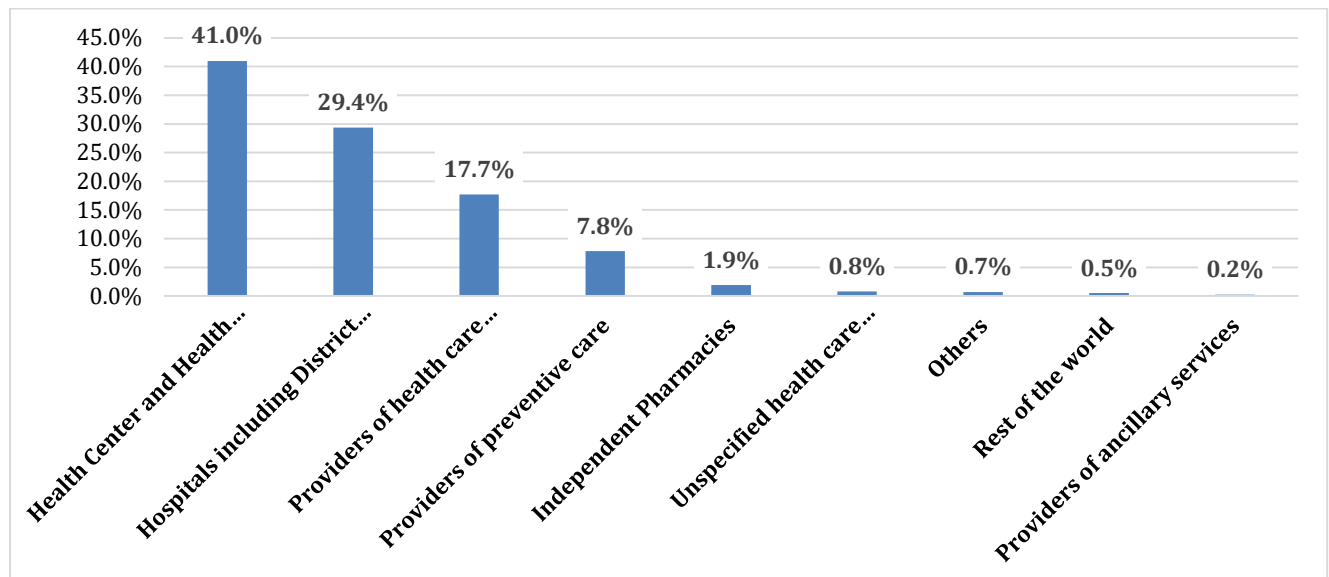


## 2.5. Pooling of health resources

Health insurance was initiated in Ethiopia with the objective of mitigating the financial barrier to health care. Accordingly, pooling of health resources is one component of health financing functions. Of the 31% of THE contributed in the form of OOP spending in the 2016/17 national HA, 30% was spent at the time of sickness, while 1% was pooled into the government system through CBHI, which was scaled-up to 378 woredas by 2016/17 (EHIA, 2018). The relatively large OOP spending can be a burden for households, potentially preventing them from seeking health care or to be financially catastrophic for some who choose to seek care. Private employers and insurance companies contributed 3% of THE, but these funds were not pooled into one system.

## 2.6. Who provides health services to Ethiopians, and how much is spent at each level and type of health service?

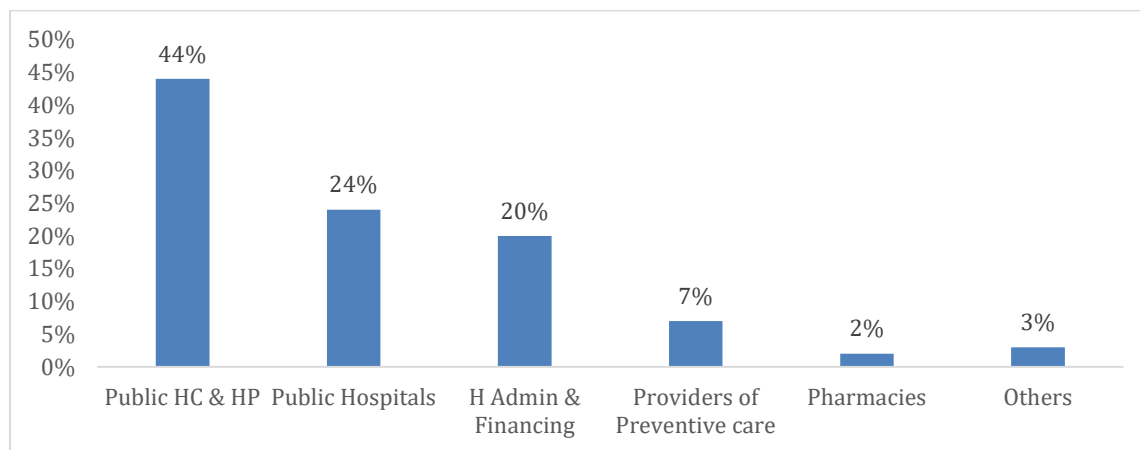
In the 2016/17 national HA study, 41% of THE was spent at the health center, health post and clinics, which was higher than similar expenditure during the 2013/14 study (36%). Hospitals took the next largest share (29.4%) of THE, which is slightly higher than the figure reported in the national HA study of 2013/14 (28%). Expenditure on providers of health care system administration and financing significantly increased from 4% of THE in 2013/14 to 17.7% in 2016/17. Providers of preventive care took 7.8% of THE in 2016/17, which is a significant drop from the figure reported in 2013/14 (11%). All other providers together received about 4% of THE in 2016/17.

**Figure 6: Share of Spending by Health Providers and Types of Health Service**

## 2.7. Government spending: where in the health system are government resources going?

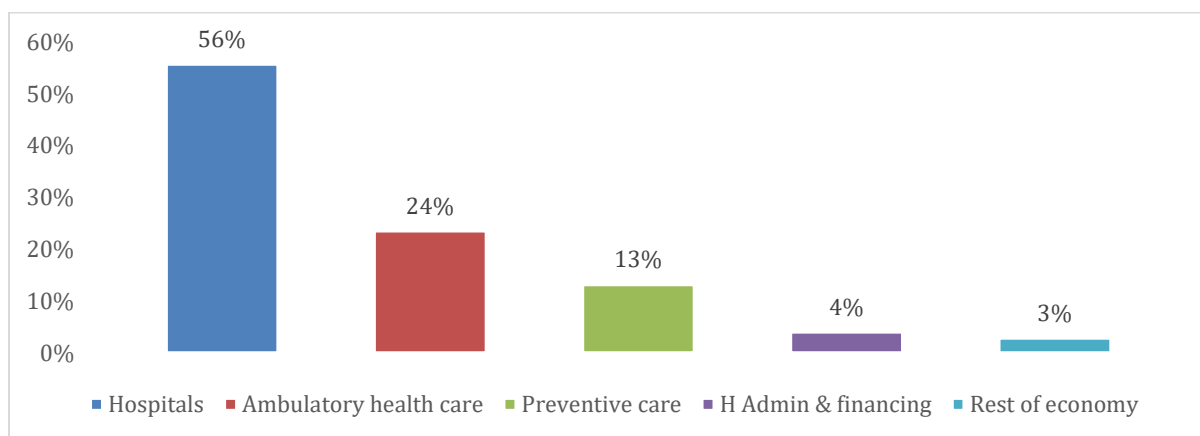
In EFY 2016/17, 44% of the total recurrent government health spending went to public health centers and health posts, while 24% went to public hospitals. About one-fifth of the recurrent government resources went to health administration and financing. Providers of preventive care, independent pharmacies, and other providers took 7%, 2%, and 3% of the government recurrent health spending, respectively (Figure 7).

Splitting further the 24% of the recurrent expenditure that went to public hospitals, district hospitals accounted for 72%, tertiary hospitals 22%, general hospitals 1%, and other public hospitals for the remaining 5%. Primary health care providers, including district hospitals, health centers and health posts together received more than 61% of total government recurrent expenditure. This is in line with government's health policy, which is focused on preventive and promotive services provided at the primary health care level.

**Figure 7: Recurrent Government Health Spending by Type of Provider**

The total government capital investment during the study period is presented in Figure 8. Accordingly, the largest share of government's capital spending was on hospitals (56%), and ambulatory health care providers took the second largest share (24%). The remaining balance went to preventive care (13%), health administration and financing (4%), and rest of the economy (3%).

Capital investment, and training and research, accounted for 15% and 11% of the overall total government health spending,<sup>4</sup> respectively, during the study period.

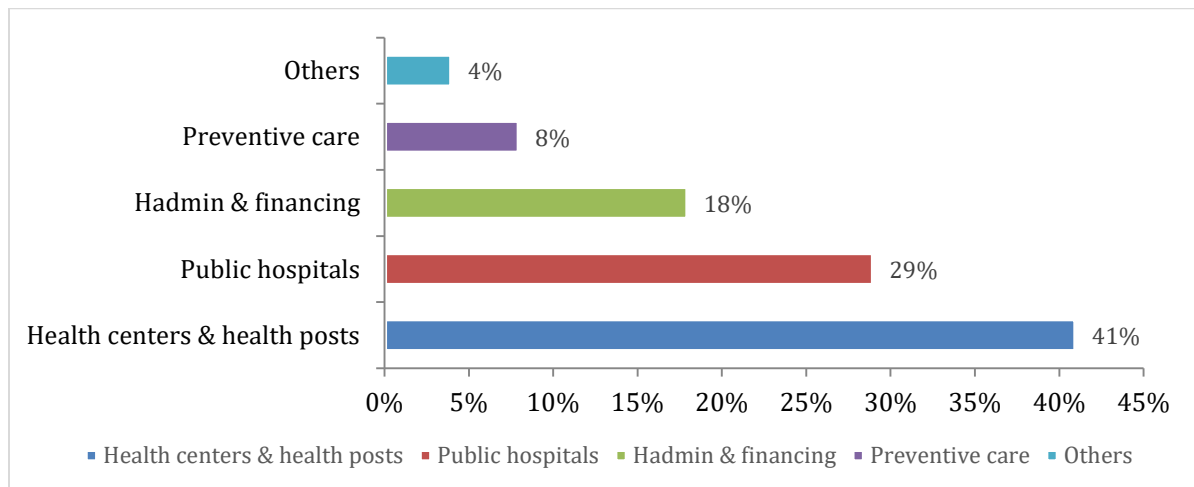
**Figure 8: Total Government Health Spending by Health Provider (Capital Formation)**

The breakdown of government recurrent and capital spending by health providers shows that the biggest share went to public health centers and health posts<sup>5</sup> (41%), followed by public hospitals (29%), providers of health care system administration (18%), providers of preventive care (8%), and other unspecified providers (4%) (Figure 9).

<sup>4</sup> Overall total government spending includes recurrent health expenditure, capital formation and health-related expenditure.

<sup>5</sup> The main entities under providers of ambulatory health care.

**Figure 9: Total Government Health Spending by Health Provider (Recurrent Expenditure and Capital Formation)**

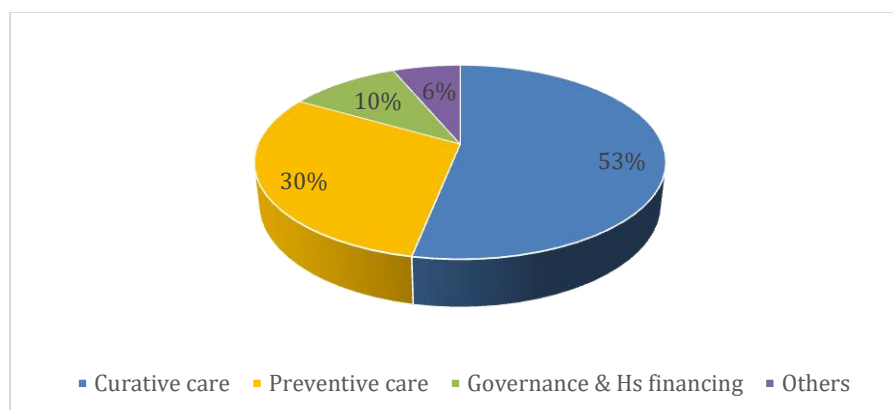


## 2.8. For what purposes are health resources used?

More than half of the country's recurrent health spending (53%) is on curative health care services. This is followed by preventive care services, which accounted for 30% of recurrent health spending in 2016/17. Governance and health system administration accounted for a little over 10% of the country's recurrent health spending. The remaining 6% went to other health functions, including long-term care, medical goods not specified by function, and other health care provisions (Figure 10).

Of the 53% of spending on curative care, about 89% was spent on outpatient services and about 11% on inpatient care. The share of total spending on curative care included hospitals (46%), public health centers and health posts (25%), private clinics (25%), and the remainder to other providers (4%). About 34% of the curative care spending was made at the primary health care level (i.e., district hospitals, health centers and health posts). The largest share of the curative spending on hospitals went to public hospitals (79%). Private hospitals accounted for 20.8% of hospital spending. The remaining balance (0.2%) was allocated to specialized (other than mental) and unspecified hospitals.

**Figure 10: Total Recurrent Health Expenditure by Function**

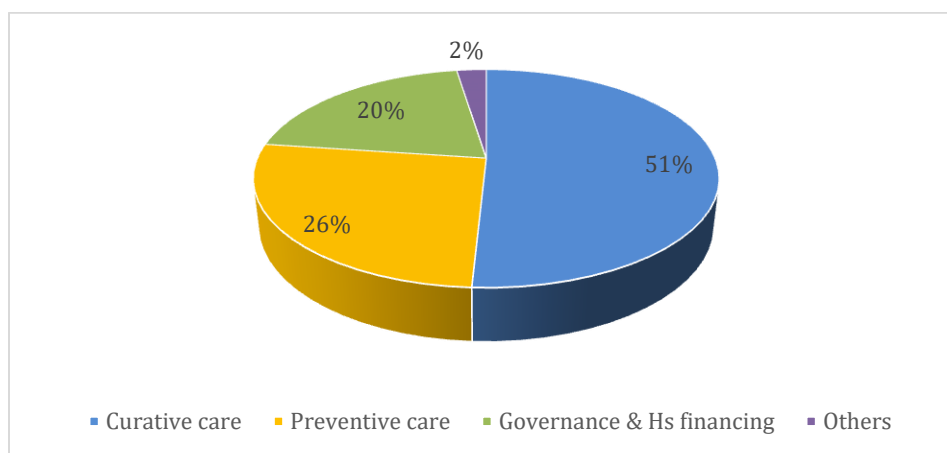


Moreover, capital formation/investment, together with training and research, accounted for 12%<sup>6</sup> of the country's overall total health expenditure (all of the three main health spending categories combined i.e., recurrent, capital, training and research).

## 2.9. How are government resources spent and does the spending align with government priorities?

The 2016/17 HA findings show that the largest share of government recurrent spending (51%) is on curative health care services.<sup>7</sup> The second largest share goes to preventive care (26%), followed by governance, health system financing and administration (20%). Other health functions/services accounted for the remaining 2% of the government's recurrent spending (Figure 11). However, government spending on governance and health system financing administration increased from 12% in 2013/14 to 20% in 2016/17.

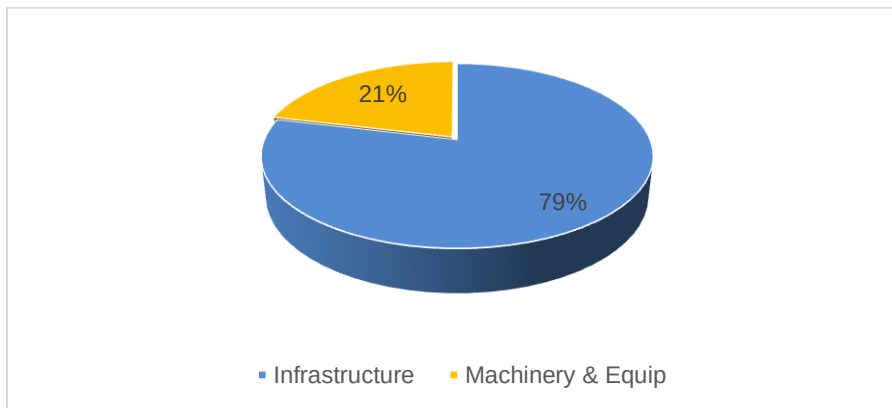
**Figure 11: Total Government Recurrent Health Expenditure by Function**



Looking at capital expenditure, total government spending was ETB3.4 billion, which accounted for 55% of the total capital investment in the health sector during the study period. Capital investment items include infrastructure in the form of residential and non-residential buildings (79%), and machinery and equipment, comprising medical as well as transport equipment (21%) (Figure 12). Moreover, in 2016/17, training and research (health-related spending) accounted for about 11% of government spending in the health sector, which is the same with the figure in 2013/14.

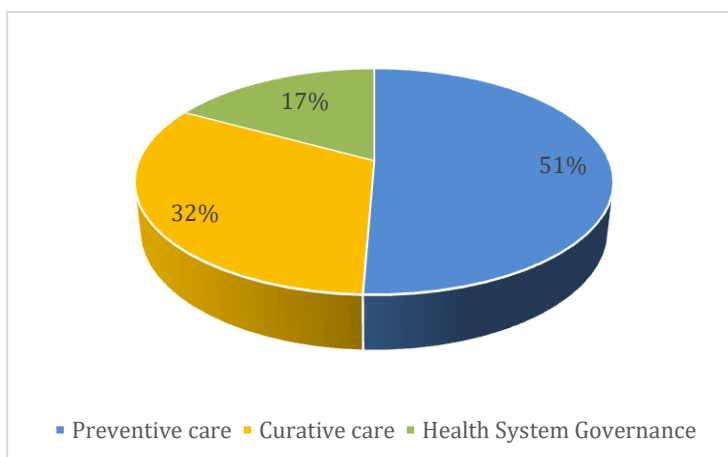
<sup>6</sup> Capital formation 8%, and training and research 4%.

<sup>7</sup> In terms of curative care, outpatient and inpatient services accounted for 66% and 31%, respectively.

**Figure 12: Programmatic Use of Government Resources (Capital Formation only)**

Examining the spending of treasury resources on health gives detailed evidence about government spending on priority services and provides a better understanding of where curative services are provided by government facilities. In 2016/17, the GoE spent over ETB23.1 billion of treasury resources on health care; around 74% of this was on recurrent expenditure, 15% on capital investment, and the remaining 11% was on training and research (health-related expenditure).

Looking at spending of all recurrent resources managed by government (including resources from other sources that flow through the government), the greatest proportion of the funding went to preventive care (51%). Following this were curative care (32%), and governance and health system financing administration (17%). The fact that the substantial share of government-managed resources goes to preventive care (while overall spending that went to curative care was 53%) could be due to the fact that more of the resources coming through the Global Fund and other sources are earmarked more for preventive services.

**Figure 13: Programmatic Use of Resources Managed by Government**

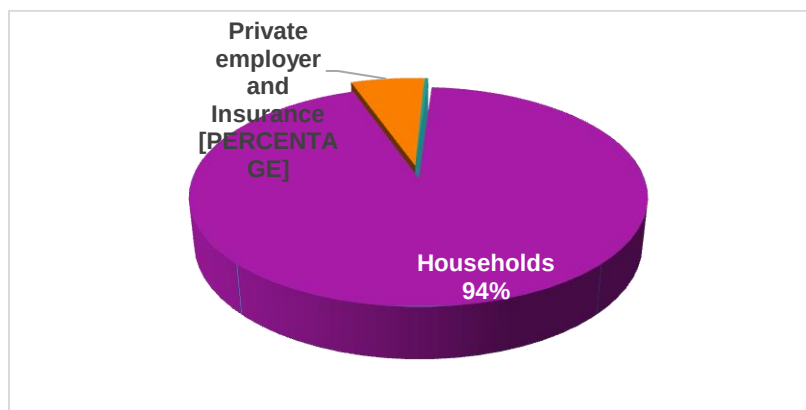
## 2.10. Role of the private sector in health financing: what are the sources of private spending?

Private health financing includes private insurance expenditure, OOP spending by private households, and expenditure by non-profit organizations, private companies and employers.

In Ethiopia, total private health expenditure was ETB23.6 billion, which was 33% of THE in 2016/17. The lion's share was contributed by households in the form of OOP spending (94%), and by private employers (6%). Only 0.3% was contributed by NGOs and other private sector sources. Despite the fact that there was a slight decrease in the contribution of the private sector to THE, the private employers' contribution increased from 4% to 6.2%; similarly, a slight increment was reported for NGOs. Health spending in the private sector increased from ETB17.2 billion in 2013/14 to ETB23.6 billion in 2016/17.<sup>8</sup>

As a percentage of total private health expenditure, out-of-pocket (OOP) spending exceeds 93%. Although OOP expenditure as a share of total private spending decreased slightly in 2016/17, the nominal value of OOP spending increased considerably from ETB16.5 to ETB22.1 billion. In 2016/17, the CBHI contribution from households was about ETB250 million, approximately 1.2% of total household expenditure. Remarkable efforts were made to advance CBHI, and thereby encouraging outcomes were achieved in the establishment of CBHI schemes in different woredas. OOP expenditure is expected to fall as CBHI matures in the coming years. Moreover, the health system needs to advocate for the implementation of a social health insurance system and reinforce the CBHI system.

*Figure 14: Distribution of Private Sector Health Financing*



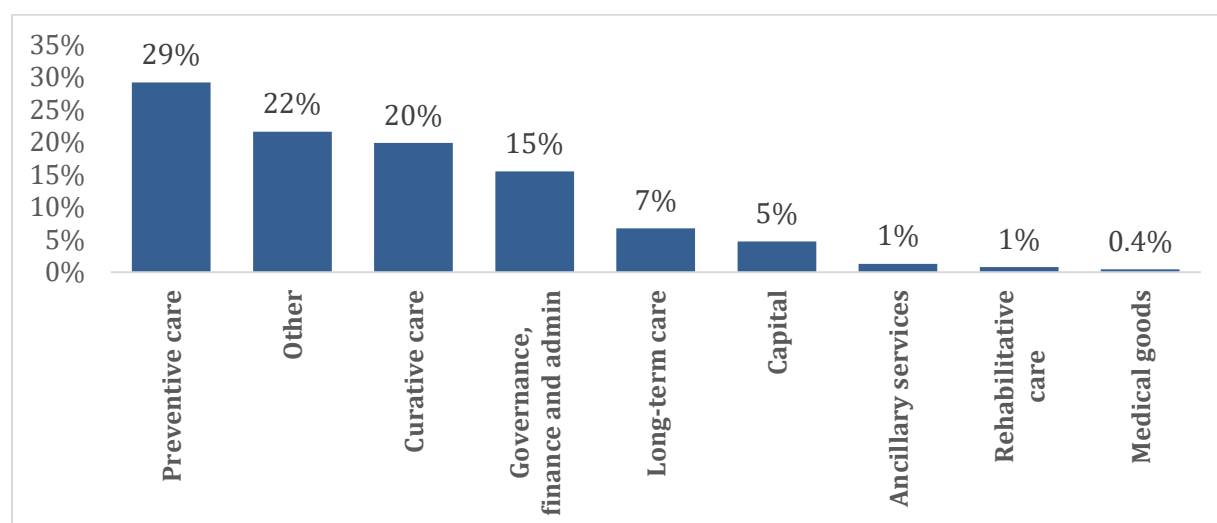
## 2.11. How were NGO-managed health resources spent?

Philanthropic financing can be acquired directly from people or through philanthropic fundraising organizations. Philanthropic revenue can be invested straight to patient care or in the form of endowment fund to generate revenue to cover current expenses.

<sup>8</sup> OOP spending for 2016/17 was projected based on the 2015/16 household health utilization and expenditure survey using the inflation rate for medical goods.

NGOs<sup>9</sup> managed around ETB10.63 billion, which is 15% of THE in 2016/17. Of this amount, 29% was spent on preventive health care, followed by 22% on other health care services, 20% on curative care, and 15% on health governance, finance and administration. NGOs spent 5% on capital expenditure from their total expenditure. The share of NGO spending on medical goods decreased considerably from 13% in 2013/14 to 0.4% in 2016/17. On the other hand, the share of curative care increased considerably from 12% to 20%; similarly, long-term care spending increased from 4% to 7%.

**Figure 15: Programmatic Use of Resources Managed by NGOs**

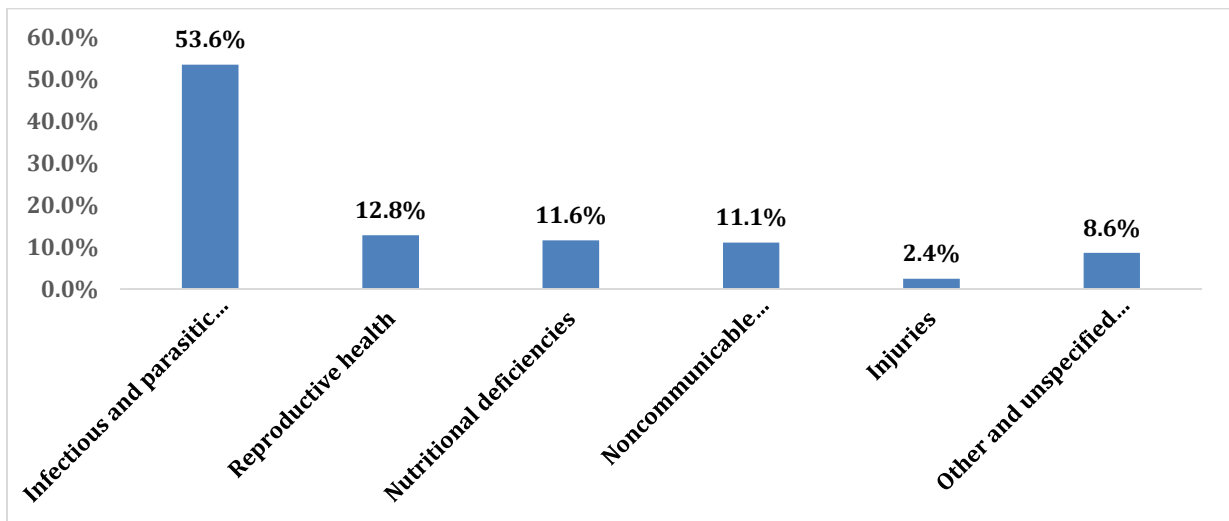


The priority for government-managed resources was on curative care (51%), whereas the priority for NGO-managed resource spending was on preventive care (29%). On the other hand, capital spending out of government-managed resources was approximately 17%; for NGOs, this was only 5%.

## 2.12. Which diseases and health conditions does Ethiopia spend money on?

Ethiopia spent over half of its health resources (53.6%) on the prevention and treatment of infectious and parasitic diseases (Figure 16). HIV/AIDS and other sexually transmitted diseases (STDs) took 11% health spending on infectious and parasitic diseases (17%). This was followed by spending on malaria, and neglected tropical diseases, each taking 16% of the total health spending on infectious and parasitic diseases, while vaccine-preventable diseases took 12% (Table 3). Reproductive health accounted for 8% of total health spending, nutritional deficiencies 11% and NCDs shared about 12%. Injuries and other unspecified diseases took 3% and 7% of the total health spending, respectively (see Table 3).

<sup>9</sup> Includes donors, and international and local NGOs.

**Figure 16: Which Diseases and Health Conditions Consume Health Spending?**

### 2.13. On what types of services was spending by diseases made?

Of the total spending on the prevention and management of infectious and parasitic diseases, 41% was spent on curative and rehabilitative care services (Table 3). About 37% of health spending on infectious and parasitic disease was spent on preventive care, while 8% was spent on governance and administration of health system. Spending on outpatient care comprises 78% of health spending on infectious and parasitic diseases. Likewise, 78% of health spending on NCDs goes to outpatient care, while the share of expenditure on outpatient care was 66% for injuries.

Table 3: Spending on Major Diseases and Health Conditions

| Classification of diseases/conditions                        | Types of health care services and medical goods |                         |                                                |                                           |                 |                                                            |                                                     |                                | Total by diseases/conditions | Share by diseases/conditions |
|--------------------------------------------------------------|-------------------------------------------------|-------------------------|------------------------------------------------|-------------------------------------------|-----------------|------------------------------------------------------------|-----------------------------------------------------|--------------------------------|------------------------------|------------------------------|
|                                                              | Curative care and rehabilitative care           | Long-term care (health) | Ancillary services (non-specified by function) | Medical goods (non-specified by function) | Preventive care | Governance, and health system and financing administration | Other health care services not elsewhere classified | Capital, training and research |                              |                              |
| <b>Infectious and parasitic diseases</b>                     | 41%                                             | 2%                      | 0%                                             | 0%                                        | 37%             | 8%                                                         | 0%                                                  | 11%                            | 100%                         | 51%                          |
| HIV/AIDS and other sexually transmitted diseases (STDs)      | 33%                                             | 1%                      | 0%                                             | 0%                                        | 40%             | 16%                                                        | 0%                                                  | 10%                            | 100%                         | 17%                          |
| Tuberculosis (TB)                                            | 49%                                             | 0%                      | 0%                                             | 0%                                        | 18%             | 2%                                                         | 0%                                                  | 30%                            | 100%                         | 4%                           |
| Malaria                                                      | 58%                                             | 0%                      | 0%                                             | 1%                                        | 12%             | 7%                                                         | 0%                                                  | 22%                            | 100%                         | 16%                          |
| Respiratory infections                                       | 72%                                             | 0%                      | 0%                                             | 1%                                        | 0%              | 12%                                                        | 0%                                                  | 16%                            | 100%                         | 10%                          |
| Diarrheal diseases                                           | 79%                                             | 0%                      | 0%                                             | 0%                                        | 0%              | 9%                                                         | 0%                                                  | 12%                            | 100%                         | 5%                           |
| Neglected tropical diseases                                  | 11%                                             | 0%                      | 0%                                             | 0%                                        | 81%             | 3%                                                         | 2%                                                  | 3%                             | 100%                         | 16%                          |
| Vaccine-preventable diseases                                 | 2%                                              | 0%                      | 0%                                             | 0%                                        | 97%             | 1%                                                         | 0%                                                  | 1%                             | 100%                         | 12%                          |
| Leprosy                                                      | 59%                                             | 0%                      | 0%                                             | 8%                                        | 11%             | 12%                                                        | 0%                                                  | 10%                            | 100%                         | 0.04%                        |
| Other and unspecified infectious and parasitic diseases      | 58%                                             | 9%                      | 1%                                             | 0%                                        | 13%             | 9%                                                         | 0%                                                  | 10%                            | 100%                         | 20%                          |
| <b>Reproductive health</b>                                   | 12%                                             | 0%                      | 0%                                             | 0%                                        | 60%             | 20%                                                        | 2%                                                  | 6%                             | 100%                         | 8%                           |
| Maternal conditions                                          | 28%                                             | 0%                      | 0%                                             | 0%                                        | 51%             | 12%                                                        | 2%                                                  | 8%                             | 100%                         | 24%                          |
| Perinatal conditions                                         | 27%                                             | 0%                      | 0%                                             | 0%                                        | 31%             | 5%                                                         | 0%                                                  | 36%                            | 100%                         | 4%                           |
| Contraceptive management (family planning)                   | 7%                                              | 0%                      | 0%                                             | 0%                                        | 80%             | 8%                                                         | 1%                                                  | 4%                             | 100%                         | 40%                          |
| Unspecified reproductive health conditions                   | 3%                                              | 0%                      | 0%                                             | 1%                                        | 44%             | 45%                                                        | 5%                                                  | 2%                             | 100%                         | 32%                          |
| <b>Nutritional deficiencies</b>                              | 85%                                             | 0%                      | 0%                                             | 0%                                        | 13%             | 0%                                                         | 0%                                                  | 0%                             | 100%                         | 11%                          |
| <b>Non-communicable diseases</b>                             | 78%                                             | 0%                      | 1%                                             | 0%                                        | 0%              | 9%                                                         | 0%                                                  | 12%                            | 100%                         | 12%                          |
| Neoplasms                                                    | 98%                                             | 0%                      | 0%                                             | 0%                                        | 0%              | 1%                                                         | 0%                                                  | 1%                             | 100%                         | 15%                          |
| Endocrine and metabolic disorders                            | 89%                                             | 1%                      | 0%                                             | 0%                                        | 0%              | 4%                                                         | 0%                                                  | 6%                             | 100%                         | 6%                           |
| Cardiovascular diseases                                      | 72%                                             | 0%                      | 1%                                             | 0%                                        | 0%              | 12%                                                        | 0%                                                  | 15%                            | 100%                         | 13%                          |
| Mental and behavioral disorders, and neurological conditions | 46%                                             | 0%                      | 7%                                             | 0%                                        | 0%              | 20%                                                        | 0%                                                  | 27%                            | 100%                         | 2%                           |
| Respiratory diseases                                         | 64%                                             | 0%                      | 0%                                             | 0%                                        | 0%              | 15%                                                        | 0%                                                  | 20%                            | 100%                         | 1%                           |
| Diseases of the digestive                                    | 57%                                             | 0%                      | 0%                                             | 0%                                        | 2%              | 17%                                                        | 0%                                                  | 23%                            | 100%                         | 10%                          |
| Diseases of the genito-urinary system                        | 91%                                             | 0%                      | 0%                                             | 0%                                        | 0%              | 4%                                                         | 0%                                                  | 5%                             | 100%                         | 32%                          |
| Sense organ disorders                                        | 55%                                             | 0%                      | 0%                                             | 0%                                        | 0%              | 19%                                                        | 0%                                                  | 25%                            | 100%                         | 8%                           |
| Oral diseases                                                | 68%                                             | 0%                      | 0%                                             | 3%                                        | 0%              | 12%                                                        | 0%                                                  | 16%                            | 100%                         | 4%                           |
| Other and unspecified non-communicable diseases              | 59%                                             | 1%                      | 3%                                             | 1%                                        | 1%              | 16%                                                        | 0%                                                  | 20%                            | 100%                         | 7%                           |
| <b>Injuries</b>                                              | 73%                                             | 0%                      | 0%                                             | 1%                                        | 0%              | 11%                                                        | 0%                                                  | 14%                            | 100%                         | 3%                           |
| <b>Non-disease specific</b>                                  | 26%                                             | 0%                      | 0%                                             | 0%                                        | 21%             | 27%                                                        | 19%                                                 | 8%                             | 100%                         | 9%                           |
| <b>Other and unspecified diseases/conditions</b>             | 51%                                             | 0%                      | 0%                                             | 11%                                       | 9%              | 4%                                                         | 17%                                                 | 7%                             | 100%                         | 7%                           |
| <b>All diseases</b>                                          | <b>48%</b>                                      | <b>1%</b>               | <b>0%</b>                                      | <b>1%</b>                                 | <b>27%</b>      | <b>10%</b>                                                 | <b>3%</b>                                           | <b>9%</b>                      | <b>100%</b>                  | <b>100%</b>                  |

### 3. Summary and Policy Recommendations

HA provide vital information on total health spending, contributions by different stakeholders and the distribution of health spending by various levels of providers, health functions, as well as by disease conditions. HA also measure whether health spending follows priorities outlined in health policies and strategies, and highlight what modifications are required to ensure health financing schemes are targeted at improving service provision and health outcomes. Collecting health expenditure data for the second implementation year of the HSTP (2016/17), the seventh Ethiopia HA provide critical evidence for measuring progress in health expenditures.

#### 2.14. Summary of key findings

**Total health spending:** Total health spending during 2016/17 was ETB72.1 billion (US\$3.1 billion), a 45% increase in nominal terms from ETB49.6 billion (US\$2.5 billion) that was reported by the sixth HA (2013/14). The 2016/17 health spending accounted for 4.2% of Ethiopia's GDP, which slightly decreased compared with the figure reported in 2013/14 (4.7%), and is lower than the globally recommended share of 5% of GDP.

**Per capita health spending:** Ethiopia's per capita spending on health increased by 5.3% per year on average, from US\$28.5 in 2013/14 to US\$33.2 in 2016/17. This figure is still far below the US\$86 per capita spending estimated to be required to make essential health care services available in low-income countries (Jowett & Cylus, 2016).

**Sources of financing for health:** The contributions of donors (35%) and OOP spending (31%) have slightly decreased from the 2013/14 HA, when they were 36% and 33%, respectively. On the other hand, the shares of government and the private sector, including insurance, have slightly increased from 30% and about 1%, to 32% and 2%, respectively. While the direction of these changes is encouraging, the magnitude of the changes is too small to ensure the sustainable financing of health. In particular, OOP spending needs to decrease and insurance needs to expand faster in order to reduce financial risk associated with paying for health care at the point of use. Furthermore, the share of government spending on health out of total government expenditure is far below the 15% specified in the Abuja commitment.

**Management of health resources:** Government manages more health resources (52%) than it contributes (32%), the difference being mostly donor funding in the form of budget support and SDG pool fund. Households manage almost all OOP expenditure, as they make spending decisions when they seek care, although an increasing, but still small, part of their CBHI contributions (1%) are managed by government.

**Spending by type and level of care providers:** Over half of health spending was made at primary health care provider level, including health centers, health posts and clinics. About one third of total health spending was on hospitals, while health administration and governance accounted for about 10% of total health spending. Of government health spending, 33% was spent on hospitals, including district hospitals, while 28% was spent on health administration and governance. About 24% of government health resources were spent on health centers and health posts. There were no significant changes in the share of spending by type and level of care providers between the sixth and seventh HA.

**Health spending by health functions:** A little less than half (49%) of health spending was made on curative care, which is similar to the figure reported in 2013/14. Similarly, spending on preventive care accounted for 28% both in 2016/17 and 2013/14. On the other hand, health system governance and financing administration accounted for 9% of the total spending in 2016/17, a significant increase compared to the figure reported in 2013/14 (5%).

**Health spending by diseases and health conditions:** Over half (51%) of total health spending was on the prevention, control and treatment of infectious and parasitic diseases. Within this category, HIV/AIDS took a significant share, accounting for 17% of total health spending on infectious and parasitic diseases. This was followed by neglected tropical diseases and malaria, each taking 16%, and vaccine-preventable diseases (12%). Spending on nutritional deficiencies accounted for 11% of total health expenditure. Reproductive health took 8% of the total health spending, while NCDs accounted for 12% of the total spending. This shows that health spending on infectious diseases is much higher than that of NCDs, although mortalities arising from the latter are about the same or even higher (IHME, 2017).

## 2.15. Policy implications and recommendations

**Increase government allocation to health:** Though health spending is steadily growing both in overall volume and per capita terms, it is still far below HSTP's resource requirements (MoH, Health Sector Transformation Plan 2015/16-2019/20, 2015/16), the globally recommended amount and the Abuja commitment. Thus, GoE needs to continue increasing spending on health significantly to be able to adequately provide essential health services to all citizens and meet the vision to achieve universal health coverage. Regional and woreda administrations need to allocate sufficient budget to cover people below the poverty line in their constituencies. This will include allocating sufficient budget by all levels of government (federal, regional and woreda) to fund CBHI premiums and fee-waiver schemes on behalf of indigent households in their communities. More importantly, the country needs to continue increasing its domestic health financing to make health care provision more sustainable.

MoH needs to organize discussions with relevant stakeholders – including MoFEC Ministry of Social and Labor Affairs, Regional Health and Finance Bureaus, Regional Administrators, Peoples' Representatives, as well as the Office of the Prime Minister – to advocate for more public resources to be allocated to health. It is crucial that MoH uses as inputs evidence on needs for subsidies to provide essential health services in a sustainable financing mechanism.

**Implement innovative financing initiatives:** This report shows that the share of donor funding is once again declining, albeit marginally. This trend is expected to continue as Ethiopia progresses towards lower middle-income status. On the other hand, the rate at which domestic resource mobilization increases needs to be higher in order not only to offset the decline in donor support but also to significantly increase the total resource envelope. This will require adopting innovative financing strategies in addition to a significant increase in government budget allocation to health. MoH needs to strengthen its initiatives on sin taxes and other innovative ways of (domestic) resource mobilization to be able to finance priority health services from domestic sources, which are currently largely dependent on donor funding.

### Intensify actions to reduce OOP:

**Expand CBHI and initiate SHI:** This report finds that the share of OOP spending in health financing has continued to decline but not sufficiently enough to protect

households from catastrophic and impoverishing spending. Efforts to expand financial protection through the various programs (including CBHI and SHI) need to be tripled in order to increase health utilization and reduce OOP spending at the point of use. While it might not be possible to abolish OOP spending altogether, it should be reduced sufficiently, particularly among the poor, so that it does not keep them from seeking health care or put them in a financially catastrophic condition when they do seek it. Furthermore, CBHI schemes need to be pooled at regional or higher level to ensure sustainability of the currently fragmented schemes at woreda level.

**Interim strategies to protect the poor:** A short- to medium-term strategy needs to be initiated or strengthened to protect the poor while CBHI is expanding and SHI is being initiated. It is also important to better target the fee-waiver system and to expand this scheme to cover all of the people under poverty (estimated to be 23% of the population) in woredas where the CBHI scheme is not functional. In woredas where the CBHI scheme is functional, it is equally important to expand the indigent subsidy program to all people below the poverty line.

**Reprioritize non-communicable diseases:** The share of morbidities and mortalities attributable to non-communicable diseases (NCDs) is growing fast in Ethiopia, while the share of health spending on NCDs is not growing as fast. Thus, to deal with NCDs and other emerging health conditions, Ethiopia needs to reprioritize NCDs, not only in its health spending but also in building the capacity of its health system.

**Revitalize preventive care:** The share of spending on curative care for some disease conditions, such as nutritional deficiencies and NCDs, is over 80%, which goes against the focus of the preventive care strategy of the government. Therefore, there needs to be additional allocation (reallocation, where feasible) of resources to preventive care.

**Integrate the resource mapping and tracking with HA:** Data for HA could be generated from the routinely collected resource mapping and tracking survey, which will avoid the need for expensive data collection from donors and NGOs. Additional data collection from government institutions, such as universities, can be integrated into the resource mapping and tracking exercise. Data from households can be generated from facility-based routine information systems.

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