Federal Democratic
Republic of Ethiopia
Ministry of Health

ETHIOPIA'S FIFTH NATIONAL HEALTH ACCOUNTS, 2010/2011

April 2014, Addis Ababa

Recommended Citation: Ethiopia Federal Ministry of Health. April 2014. *Ethiopia's Fifth National Health Accounts 2010/2011*. Addis Ababa, Ethiopia.

Program Management and support, funding for the NHA activities, and printing of this NHA report was provided by the United States Agency for International Development (USAID) through Health Sector Financing Reform/Health Finance & Governance (HSFR/HFG) Project which is part of the USAID's global Health Finance & Governance Project (HFG) Implemented by Abt Associates Inc. under cooperative agreement -AID-OAA-A-12-00080.

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FOREWORD

Based on robust evidence, it is globally accepted that investing in health is important for improving the wellbeing of a country's citizens and for accelerating its economic growth and development. Equally important, however, is appreciating how investment decisions are made, how investment areas are prioritized, and who is benefiting from these investments. There is also growing evidence that effective mechanisms for regularly monitoring investments are vital for maximizing the return by ensuring that resources are allocated and used responsibly, effectively, equitably, and efficiently.

In Ethiopia, the central role of health care in improving the wellbeing of citizens and spurring economic development is widely recognized, for example, in the government's multisectoral "Growth and Transformation Plan." Over the past two decades, this has led to substantially increased investments in the health sector, with a view to achieving the ambitious targets set out in the Health Sector Development Program (HSDP), a core component of broader national development plans. Introduced by the Ministry of Health (MOH) in 1997, the HSDPs focus on Ethiopia's most pressing public health problems, which are largely attributed to preventable communicable diseases and causes of maternal and child mortality. Ethiopia has successfully implemented three HSDPs. The major objectives of the soon-to-end HSDP IV (2010/11–2014/15) are primary health care expansion, health system strengthening, and maintaining/achieving health-related Millennium Development Goals (MDG) targets. Additional objectives are to build on achievements in the areas of HIV, TB, malaria, maternal health, and child health and to introduce initiatives to reduce the burden of non-communicable diseases. Reaching these objectives takes funding, and the National Health Accounts (NHA) study reported on here charts Ethiopia's steady progress in increasing investments in health and expands understanding of where these investments are made.

Significant investments are directed at improving the quality and equitable delivery of health services in the aforementioned key areas, with a strategic emphasis on crucial and interrelated elements – accessibility, affordability, and sustainability. These priorities underpin the government's community-centered effort to expand primary health care delivery at the local level through its flagship Health Extension Program (HEP). The Health Development Army (HDA) is another major policy initiative; using a social mobilization and an innovative 'model family' approach, the HDA is creating an enabling environment for engaging households through peer learning at the community level.

HEP, which is at the heart of our ongoing efforts to build a strong national health system, has in only three years almost doubled Ethiopia's health workforce by rapidly training and deploying more than 38,000 health extension workers (HEWs) – two for each kebele of the country. Using the HDA, HEWs are propagating healthy behaviors and improving access and utilization of basic health services by the community. HEWs' engagement as full-time government-salaried civil servants is key to HEP's early success and long-term sustainability. Regional and district governments are spearheading the HEP and HDA programs. The ownership and active participation of citizens also has been remarkable during construction of health posts as well as in supporting and evaluating performance of HEWs. The effective referral system that HEWs are developing at the grassroots level is also laying down a foundation for a strong and comprehensive health information system and broadening access to a continuum of care at secondary and tertiary levels.

Significant additional resources are also being committed and used to expand training, deployment, and retention of other key health professionals such as medical doctors, midwives, and nurses, in accordance with the MOH's human resource development strategy.

In addition to strengthening the health workforce, our government has continued investing heavily in an accelerated expansion of health infrastructure that has built and fully equipped 15,000 health posts and over 3,200 health centers around the country. The number of government-owned health

centers increased from 644 at the beginning of HSDP III (EFY2005/06) to 3,245 in 2013/14. During the same period, the number of public hospitals also increased, from 79 to 126, and another 185 are under construction.

As a result of government's ongoing efforts to create an enabling policy and regulatory environment for private provision of health care, private providers are increasing in number around the country and broadening access to care, particularly for the growing urban population.

Increased investments in the health sector have enabled us to continue improving access to and use of health care. By exempting from payment priority public health services including immunization; counseling, testing, and treatment for HIV/AIDS and TB; prevention of mother-to-child transmission of HIV; treatment of fistula; and control of epidemics, the government has increased use of these services, and the services are improving the health status of mothers and children and other vulnerable segments of our society. Those who cannot afford to pay for health care continue to be protected through the fee waiver system, through which local administrations absorb the costs of providing curative services.

With a view to creating a more comprehensive and sustainable protection system, the government has also been investing in the development of health financing mechanisms adapted to our country needs. The legal framework for the formal sector social health insurance scheme has been put in place and final preparations are being done to fully implement the initiative. Community-based health insurance piloted in 13 districts showed promising results and the regional governments of Amhara, Oromia, SNNPRS, and Tigray decided to scale up to an additional 161 districts. These schemes are expected to eventually remove the financial barriers to accessing health services, by enhancing risk pooling between the poor and the better-off as well as between the sick and the healthy.

Timely evidence generation and a regular and systematic review of the returns on these wide-ranging and substantial investments is vital to better direct and refine policies and to improve decision making for more effective mobilization and management of resources. NHA is an effective and internationally recognized instrument for monitoring trends in health spending. Recognizing the value of the evidence generated by NHA for improving our health policies and planning processes, we are striving to institutionalize use of the methodology in Ethiopia. To do so, we are engaging MOH technical staff and other key sectors and partners in the data collection and analysis, and report writing, and building NHA into our pre-service trainings. Thus far, we have conducted five rounds of NHA, including the one for which results are presented in this report.

The findings of this NHA provide critical information that the MOH and our diverse partners can use to jointly assess our financial performance. This fifth round examined health expenditures in the first year of HSDP IV, and findings will provide the baseline to gauge HSDP performance as well as input to accelerate investment in health and to redirect resources to priority areas. The findings will also enable us to clearly see how, where, and for what purposes the money available to us was spent during the study year. In addition to the general NHA, the findings on the five NHA subaccounts (HIV/AIDS, reproductive health, child health, malaria, and TB) provide more specific and in-depth information on how well we have resourced each of these priority areas. This report also enables us to better understand the burden of out-of-pocket spending on the public – evidence critical to substantiate the need for and the viability of the health insurance schemes.

The successful completion of this exercise would not have been possible without the committed efforts and vital contributions of a wide range of stakeholders. Special thanks go to all partners who were actively engaged in the process and particularly to the United States Agency for International Development (USAID). We look forward to USAID's continued support and partnership as we work toward firmly institutionalizing the NHA methodology as an integral part of our work processes.

While our government's steadfast commitment and ownership has been the centerpiece, the substantial gains registered through the implementation of the HSDPs and the progress we are making in advancing our various policy and institutional reforms would not have been possible without the dedicated support of our diverse partners, for which we are profoundly grateful. We should all be proud of the important progress we have made together and derive from these concrete results renewed optimism for the achievement of health MDGs over the coming years.

Kesetebirhan Admassu (MD, MPH)
Minister
Ministry of Health of the Federal Democratic Republic of Ethiopia

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ACRONYMS AND GLOSSARY

Acronyms

ART	Antiretroviral Treatment
BPR	Business Process Reengineering
CBHI	Community-Based Health Insurance
CH	Child Health
CSA	Central Statistical Agency
EDHS	Ethiopian Demographic and Health Survey
EEA	Ethiopia Economics Association
EFY	Ethiopian Fiscal Year
EHNRI	Ethiopian Health and Nutrition Research Institute
EPI	Expanded Program on Immunization
ERCA	Ethiopian Revenues and Customs Authority
FMOH	Federal Ministry of Health
FS	Financing Source
GDP	Gross Domestic Product
HAPCO	HIV/AIDS Prevention and Control Office
HC	Health Center
HC	Health Care Function
HCF	Health Care Financing
HCSS	Health Commodity Supply System
HDA	Health Development Army
HEP	Health Extension Program
HF	Financing Agent
HH	Household
HHM	HSDP Harmonization Manual
HP	Health Provider
HSDP	Health Sector Development Program
IHP	International Health Partnership
IRS	Indoor Residual Spraying
ITN	Insecticide-Treated Net
MDG	Millennium Development Goal
MOFED	Ministry of Finance and Economic Development
NCD	Non-communicable Disease
NGO	Nongovernmental Organization
NHA	National Health Accounts
NHAPT	National Health Accounts Production Tool
NHE	National Health Expenditure
OECD	Organization for Economic Cooperation and Development
OOP	Out-of-Pocket

PBS	Protection of Basic Services
PFSA	Pharmaceuticals Fund and Supply Agency
PHCU	Primary Health Care Unit
PLHIV	People Living With HIV
PPESA	Privatization and Public Enterprises Supervising Agency
PPP	Purchasing Power Parity
RH	Reproductive Health
RHB	Regional Health Bureau
ROW	Rest of the World
SHA	System of Health Accounts
SHI	Social Health Insurance
STI	Sexually Transmitted Infection
TB	Tuberculosis
THE	Total Health Expenditure
USAID	United States Agency for International Development
WHO	World Health Organization
WorHO	Woreda Health Office

Glossary

Addendum items: All non-health expenditures included in the HIV/AIDS subaccount, that is, expenditures on activities and commodities the primary purpose of which is not to improve or maintain the health status of individuals or to protect the general public from HIV/AIDS. These include income-generating activities (e.g., microenterprises), general income support to those affected (e.g., orphans, widows), and in-kind contributions to persons living with HIV. These items normally are outside the boundary of the NHA framework. They are included in the HIV/AIDS subaccount because they are relevant to programmatic and policy decision making about HIV/AIDS.

Ancillary services to medical care: 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.

Curative care: Expenditure on outpatient and inpatient health services whose 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. It includes all pharmaceutical expenditures provided within health facilities, i.e., it excludes expenditures made at drug retailers. It also includes all staff salaries and administrative costs within health facilities.

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

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 services providers within the health accounts boundaries.

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

Health care-related functions: Functions related to the health infrastructure, sanitation and water supply programs, research and surveys. These functions include capital formation by health care provider institutions, medical doctors, nurses and other health professionals' pre-service training, health-related research, and nutritional and environmental programs. Often these functions overlap with sectors such as education, overall "social" expenditure, research and development, and infrastructure.

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

Health functions: Health 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 providers: Entities that receive money in exchange for or in anticipation of producing the goods and services for improving and maintaining health status of individuals and/or the general public.

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.

Parastatal enterprise: A fully or partially government/public-owned company or enterprise. Common parastatal enterprises include water, electricity, and telephone services.

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: Drugs and medical supplies that are obtained from independent (standalone) drug retail outlets (private and public pharmacies or drug stores). (NHA treats expenditures on pharmaceuticals that are administered in health facilities as part of inpatient and outpatient care as part of inpatient and outpatient curative care expenditure.)

Pharmacies/Shops: Any stores, shops, or other place in which medicinal preparations are compounded or prepared and dispensed or sold to the public.

Public medical diagnostic labs: Public medical diagnostic institutions that provide high-quality, accurate, and timely laboratory-based information that can be used for public health decisions directed at effective control and prevention of priority diseases in country and potential public health emergencies of international concern. These institutions include the central Ethiopian Health and Nutrition Research Institute 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 facility laboratory.

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

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

Providers of occupational health: Providers that react to and prevent work-related illness and injury, and maintain and improve employees' health. Occupational health may involve some or all of these elements: health screening, including pre-employment screening; monitoring compliance with health and safety legislation; health promotion activities; and initiating and maintaining health-related policies. There may be overlap with employee assistance programs. An occupational health service strives to reduce absenteeism and improve employee morale and performance.

Providers of public health programs/ Provision and administration of public health programs: Government, donors, and NGOs that administer, manage, and provide prevention and public health programs such as health promotion and protection programs. The services are provided outside of health facility-based outpatient and inpatient services.

Reproductive health: "Reproductive health is a state of complete physical, mental and social well-being in all matters relating to the reproductive system and to its functions and processes" (UNFPA, 1994). It covers both family planning and maternal health services.

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

ACKNOWLEDGMENTS

The Ministry of Health of Ethiopia would like to extend its gratitude to all involved in the data collection and analysis, and writing of this report on the fifth Ethiopian National Health Accounts (NHA) estimation. This round of NHA involved a wide range of institutions and individuals whose efforts the Ministry of Health appreciates profoundly; the Ministry of Finance and Economic Development, donors, NGOs, private and public enterprises, insurance companies, households, and HIV-positive citizens all responded to the surveys and shared information. The Ministry also is grateful to the Central Statistics Agency (CSA) for its technical support and sharing of the sampling frame, cartographic map, and enumeration areas, which were critical to successful completion of the household survey. The Ministry thanks the Ethiopian Revenues and Customs Authority, Privatization and Public Enterprises Supervising Agency, and the Charities and Societies Agency for their providing, respectively, lists of private sector enterprises, of public (parastatal) enterprises, and of NGOs that helped the NHA team to determine the institutions covered in the study.

The Ministry of Health acknowledges in particular the financial and technical support of the United States Agency for International Development (USAID). Together with the Ministry team, the USAID Health Sector Financing Reform/Health Finance and Governance (HSFR/HFG) Project, led by Abt Associates, did the institutional data collection from government, donors, NGOs, employers, and insurance companies. The Ministry is extremely thankful for the professional work done by the Ethiopia Economic Association and Berhan Research and Development Consultancy, which conducted the general household and targeted HIV/AIDS surveys, respectively. The technical leadership, management support, and quality assurance provided by Abt Associates has been superb, as usual.

The Ministry congratulates the multi-disciplinary team of HSFR/HFG as well as its own experts who carried out the data collection and analysis and produced this report. The team members include Leulseged Ageze, Hailu Nega Zelelew, Tesfaye Dereje, Habtamu Tadesse, and Yenehun Tawye of Abt Associates; Awel Ababulgu of the Federal Ministry of Health; Degu Lakew of the Ministry of Finance and Economic Development; Martha Kibur of UNICEF; and Dr. Gebrekidan Mesfin of the World Health Organization. The general household and the targeted HIV/AIDS surveys benefited greatly from the wealth of experience and expertise of Abt's Kenneth Carlson.

Finally, the Ministry appreciates the contributions of reviewers Dr. NejmudinKedir Bilal of the African Development Bank, Ato Eshete Yilma of USAID Ethiopia, and Ato Abebe Alebachew, a private consultant, who thoroughly and critically reviewed and commented on the report. Professional review and editing by Linda Moll was critical in giving the document its final shape, and contributed greatly to its readability.

EXECUTIVE SUMMARY

Background, Objectives, Scope, and Methodology

In Ethiopia, access to and utilization of health services and overall health status has improved over time. The most recent Ethiopia Demographic and Health Survey (EDHS) demonstrated improvement in health status. For instance, between the 2000 EDHS and the 2011 EDHS, infant mortality declined by 39 percent, from 97 deaths per 1,000 live births to 59 deaths per 1,000 live births and under-five child mortality declined by 47 percent, from 166 deaths per 1,000 live births to 88 deaths per 1,000 live births from 2000 to 2011 (CSA and ICF International 2012). In 2013, Ethiopia achieved its Millennium Development Goal (MDG) for child health.

Though steadily growing, Ethiopia's health spending is far from adequate for financing of essential health care services. Financing continues to come from multiple sources including household out-of-pocket spending, the government treasury (federal, regional, district, and municipal levels), bilateral and multilateral donors and nongovernmental organizations (NGOs), private enterprises, and parastatal organizations. Per capita spending on health in 2007/08 was only $16.1, far less than the World Health Organization (WHO)'s recommended $34 in 2001, revised to US$60 by 2015 (WHO 2010b). Pursuant to this, the Ethiopian government has introduced a wide range of health financing reforms aimed at increasing financing for delivery of essential health care services, and thereby improving quality and equity in provision of health care. These reforms, which include retention and use of internally generated revenue in government-owned health facilities, are indeed generating additional resources, which have been used to improve quality.

Regularly tracking the amount of resources spent on health is critical for informed health financing policy making. Cognizant of the need for institutionalization of such a framework, the Ethiopian government, with technical support from projects funded by the United States Agency for International Development (USAID), has done regular health resource tracking estimations using the National Health Accounts (NHA) methodology. Final preparations are being made to provide health economics/financing program courses covering NHA in postgraduate program of selected universities. However, NHA is not "institutionalized" in that there is no public institution mandated, staffed, and budgeted to regularly do the estimations.

NHA is a globally recognized and accepted resource tracking methodology for the health sector. It organizes health expenditure data into tables that show the amount spent as well as the flow of resources – from financing sources to financing agents, then to providers of services and to the actual services – through the health system. By doing so, it provides answers to key health sector policy questions such as the following:

- Who finances health in the country?
- How and by whom are health resources managed?
- What goods and services are covered in this year's health expenditure?

The NHA methodology can be used to estimate the flow of health resource in the overall health sector (the "general NHA"); it also offers "subaccounts" that track spending on health sector priority areas such as HIV/AIDS, reproductive health, malaria, and child health. Findings are evidence for overall policy design, execution, and monitoring.

The current round of NHA (for 2010/11) is Ethiopia's fifth. The previous four were done for 1995/96, 1999/00, 2004/05, and 2007/08. The most recent two rounds also did subaccounts: reproductive and child health for 2004/05; and HIV/AIDS, reproductive and child health, malaria, tuberculosis (TB), and health information systems in 2007/08. The current round tracks spending on

general health and does five subaccounts, namely, HIV/AIDS, reproductive and child health, malaria, and TB.

The overall objective of this round of NHA is to update empirical evidence on the overall Ethiopian health care financing system and in the priority areas enumerated in the preceding paragraph. Specific objectives are to identify financing trends, know sources of health financing, fund management responsibilities, and understand which providers of health care are getting how much funding for which services. The findings will help measure progress in financing the Health Sector Development Program (HSDP), as well as inform the health insurance initiative and other health sector reforms.

Institutional expenditure data were collected through institutional survey from government, donors, NGOs, employers (parastatals and private enterprises), and insurance companies. Like the fourth-round NHA, this one collected primary data through two surveys: health service utilization and expenditure data were collected from over 10,000 randomly selected representative households to track their out-of-pocket spending on general health and selected subaccounts (reproductive and child health, malaria, TB). Data also were collected from 4,000 people living with HIV/AIDS (PLHIV) to estimate out-of-pocket spending of this segment of the population. In addition, information related to health service coverage, utilization, and health status was collected from a wide range of secondary sources.

Limitations of the Study

With full ownership and leadership of the Federal Ministry of Health (FMOH), active participation and involvement of health sector development partners, and financial and technical support from USAID, this round of NHA was far reaching in its scope and use of the standard methodology. It also used refined and improved survey instruments and the NHA Production Tool, which simplified the the manipulation of Excel spreadsheets and reduced inaccuracy in calculation, mapping, validation, and checking for double counting. Nevertheless, it is not without limitations.

Public expenditure classifications: Government budget and expenditure reports do not directly match NHA data classifications. Therefore, health service utilization reports and expert opinion were used to disaggregate government expenditures on inpatient and outpatient services as well as to estimate government spending on the subaccounts.

Data not collected from a small number of NGOs: Of the 237 NGOs (102 international and 135 local) included in the institutional survey, 217 (92 percent) responded. A small number of local NGOs (20) were not covered in the survey because they were not reachable in their official addresses and contact numbers. That said, some of the spending of even these NGOs might be captured in information from the donors and international NGOs that finance them, and so their spending could be only marginally underestimated. Still, this does not compensate for all the missed data.

General household survey: Because this survey was exclusively on health, there could be recall bias and over reporting of expenditures. Although it is the second survey of its kind, it was impossible to triangulate the findings with those of other surveys. The survey was conducted between December 2012 and January 2013 and we recognize that there could be seasonality bias for both disease incidence and availability of disposable income. Nevertheless, efforts were made to adjust for seasonality, particularly in respect to malaria.

Targeted HIV/AIDS survey: Although the population targeted for the HIV/AIDS survey was all HIV-positive adults, there was no way to obtain a list in an ethically acceptable way. Thus, PLHIV associations were used as the entry point. The sample frame has some bias: All the randomly selected members were either under antiretroviral treatment (ART) or in need of ART. There is possible urban bias: these associations are established and operate mostly in big cities and their members are mostly urban dwellers. In addition, it was also reported that the relatively poorer and unemployed PLHIV who are in need of psychosocial and economic support predominantly joined

these associations as well. The sample size distributed to regions may not reflect the regional situation, particularly where regional sample sizes are small. Therefore, the findings for some regions should be interpreted with caution.

Community contributions: It is common for communities in Ethiopia to make in-kind (labor and material) contributions to health facility construction and other health undertakings. The NHA study does not capture these contributions, in particular the resources spent to strengthen as well as the contributions of the recently developed Health Development Army (HDA) initiative.

Non-health development initiatives: Non-health investments – in infrastructure (roads, housing, water supply, food security, etc.), education, gender and child development issues, and other interventions – help determine health care availability and use and therefore health status. The government of Ethiopia is making huge non-health investment. Because NHA tracks spending with the primary focus of restoring, improving and maintaining health; it does not include spending on these non-health investments.

Findings, Conclusion, and Policy Recommendations

Summary of Findings, and Conclusion on General NHA

National health expenditure (NHE)[1] increased substantially between 2007/08 and 2010/11 in both absolute and per capita terms, but it still is not adequate to buy better health for all Ethiopians. This fifth round of NHA revealed that there has been a tremendous increment in health spending both in nominal and per capita terms. Nominally, NHE increased from Birr 11.1 billion (US$1.2 billion) in 2007/08 to over Birr 26.5 billion (US$1.6 billion) in 2010/11.[2] Per capita NHE increased modestly, from US$16.09 per capita in 2007/08 to US$20.77 in 2010/11.[3] This figure is far below the HSDP-IV per capita spending target of US$32. The amount is also low compared with Ethiopia's peer countries; for instance, 49 low-income countries on average spent $22 per capita in 2006 (WHO 2010a). As noted above, it also is by far much less than the US$34 per capita recommended by WHO in 2001 and more recently updated by WHO for the high-level Taskforce on Innovative International Financing for Health Systems; the update suggested that the 49 low-income countries including Ethiopia need to spend just less than US$44 per capita in 2009, rising to a little more than US$60 per capita by 2015. Thus, health is still underfinanced and there is strong need for making more resources available to the sector to improve health service delivery and ultimately the health status of the population.

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[1] NHE and Total Health Expenditure (THE) are distinct in NHA (see the NHA "Producers' Guide" (WHO et al. 2003)) and they are important for international comparison. THE covers all spending on core activities (personal and collective health care activities) (HC.1–HC.7) plus HCR.1 Capital Formation, while NHE covers all spending pn both core and non-core health (other health-related) activities such as training, education, research and development, food, hygiene and drinking water, environmental health as well as administration in provision of non-core health related activities/services. This distinction was not found useful for Ethiopian policy decisions. The body of this report does not make such distinction, and, unless specified otherwise, THE includes spending on both core and health-related activities. However, the annex tables show the detailed functions on which expenditures are made, and could be used to generate THE and NHE summaries for international comparison.

[2] In 2010/11, the annual average exchange rate was US$1 = Birr 16.1178 (National Bank of Ethiopia 2010). This rate was applied to convert Birr into U.S. dollars, and vice versa.

[3] The total population used for per capita estimation is 79,045,498, the Central Statistical Agency population projection for 2010/11. (CSA 2008)

The contributions of all major financers (government, households, and the rest of the world[4]) substantially increased. NHE, at the current market price, increased by 138 percent between 2007/08 and 2010/11. Government contributions grew by 67 percent in the same period. However, most of the increment came from households and the rest of the world; their respective contributions grew by 116 percent and 202 percent. In fact, the Ethiopian health sector is highly donor financed (nearly half in 2010/11), and households (34 percent), the latter of which are burdened by high out-of-pocket costs for health that usually are incurred at time of sickness. It is critical to work on sustainability of health sector financing as well as on reducing the financing burden on households, particularly at time of sickness. In relation to the latter, the ongoing health insurance initiative is timely and commendable. Because of the substantial increment in health spending by donors[5] and households, the government contribution accounted for only 15.6 percent of the total spending in 2010/11.

The government is the major manager of health resources, but households also play a significant role. All government (federal, regional, and parastatal) together managed nearly half (48.9 percent) of NHE in 2010/11. This is a change in the lead managerial responsibility from the private sector in 2007/08. This is because major donor programs such as the Global Fund to Fight AIDS, Tuberculosis and Malaria, the Protection of Basic Services (PBS), and the GAVI Alliance are using the government system and management. Government and partners also created the MDG Performance Pool Fund, which is managed within the government system. In 2010/11, households together with other private sector financing sources managed only 34.4 percent of THE. Donors and international NGOs managed 14 percent of NHE.

Government health facilities are the major recipients of health spending in 2010/11. Government health facilities are major recipients of the 2010/11 spending, accounting for nearly 34 percent (primary health care units (PHCUs) account for nearly 15 percent and hospitals for nearly 19 percent). Public health programs are also major recipients of health resources, accounting for 27 percent of the overall spending. Private providers (both for-profit and nonprofit) received 16 percent of NHE.

Curative care services were still the major functions on which health resources were spent. Curative care services remained the major target of health expenditures, accounting for 51.6 percent of NHE; 43.8 percent went to outpatient services and 7.8 percent to inpatient. Prevention of communicable diseases including prevention efforts related to maternal and child health accounted for 27 percent. Expenditures on general health administration was estimated at nearly 8 percent. Capital formation in the health sector – investments in health facility construction, equipment and vehicle purchase, and so forth – and education, in-service training, and research accounted for 7 percent and 5 percent of NHE, respectively. Spending on pharmaceuticals and other medical nondurables through independent pharmacies was found to be negligible; and it is believed that households might have reported their spending for medicines as part of outpatient and inpatient spending. Future rounds of NHA should pay particular attention to health spending for pharmaceuticals in independent pharmacies, for policy use.

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[4] "Rest of the world" is an NHA classification that comprises multilateral and bilateral donors and international NGOs. Throughout the report international NGOs are considered as part of rest of the world at source level, and thereafter at financing agent and provider levels, they are considered as part of NGOs/international NGOs.

[5] Donor contributions in this round of NHA were higher than in the previous NHA estimations partly because some donors that were not able to provide spending data in previous NHA provided the data in this round. In addition, new programs such as the MDG Performance Pool Fund and the GAVI Health System Strengthening Program reported in this round.

HIV/AIDS Subaccount

The total national HIV/AIDS expenditure more than doubled in nominal terms from Birr 2.3 billion (US$248 million) in 2007/08 to Birr 4.94 billion (US$306.7 million) in 2010/11. This amount is the largest amount spent on a specific disease. It accounted for more than 19 percent of THE. The per capita HIV/AIDS NHE over the total population of the country was Birr 62.53 (US$3.88), while the per capita HIV/AIDS NHE over total population of PLHIV was Birr 4,062 ($252), an increase from Birr 1,684 (US$180) in 2007/08.

HIV/AIDS is highly donor financed. In 2010/11, the bulk of expenditures (over 83 percent) on HIV/AIDS, Birr 4.1 billion (US$255.6 million), originated from the rest of the world. This is more or less the same as it was in the previous NHA, 84 percent. This was followed by contributions from government (federal, regional, and parastatals): Birr 698 million (US$43.3 million) (about 14 percent).

PLHIV shouldered a higher financial burden for their health care. PLHIV contributed Birr 96.7 million (US$6 million) (2 percent) of the total spending on HIV/AIDS. The 400,251[6] people represented in the survey who are HIV positive and need ART (both not in ART and under ART) on average spent Birr 240.59 or $14.93 (a reduction from Birr 301 or US$32 per capita in 2007/08). This is more than double the per capita amount spent by the general population on overall health (about Birr 112.93 or US$7.01 per person) albeit a reduction of fivefold from the previous NHA. All other private sources, including local NGOs and private for-profit organizations, covered only 1 percent.

Government is the major manager of HIV/AIDS resources. Government (the FMOH and regional health bureaus (RHBs) together with the federal and regional HIV/AIDS Prevention and Control Offices) managed nearly 68 percent of HIV/AIDS health expenditures. The rest of the world also managed a significant amount, about 16 percent. PLHIV managed 2 percent, through out-of-pocket expenditures; though this percentage is small, it represents a burden on this segment of the population.

The bulk of HIV/AIDS resources went to providers of public health programs. Overall, more than 51 percent (much less than the 72 percent in the previous NHA) of HIV/AIDS spending goes to providers of HIV/AIDS public health programs that render HIV/AIDS prevention services. Health administration by government and other HIV/AIDS program managers accounts for 15 percent of the NHE. Public PHCUs (mainly health centers) received 10 percent of the spending. Government hospitals received 9 percent.

The bulk of HIV/AIDS resources were spent on HIV/AIDS prevention and public health care services. Out of the total HIV/AIDS health expenditure (nearly Birr 5 billion or $307 million), Birr 2.5 billion (US$153.5 million) or half of the total was spent on HIV/AIDS prevention and public health programs. HIV/AIDS curative care services absorbed 23.1 percent (20.8 percent outpatient and 2.3 percent inpatient). Capital formation together with research, training and education accounted for 11.8 percent of the total HIV/AIDS health spending.

[6] The total number of people in need of ART in 2010/2011 was 400,251 as estimated by the PLHIV survey done for this NHA. (FMOH, 2014b). The PLHIV survey covered members of PLHIV associations and networks almost all of whom are either under ART or in need of ART, and the survey represents this segment of the PLHIV population.

Reproductive Health Subaccount

Total reproductive health expenditure in 2010/11 was Birr 3.6 billion (US$224 million), more than double the amount spent in 2007/08 (an increase from Birr 1.4 billion or US$151 million in the previous NHA). Reproductive health accounted for 13 percent of the THE in 2010/11. This gives a per capita spending per woman of reproductive age (15–49 years) of Birr 195 or US$12.

Share of government financing of reproductive health reduced. The Ethiopian government (federal and regional) covered about one-fourth (24.8 percent) of the total reproductive health spending. However, the rest of the world still contributed the highest proportion, 47 percent in 2010/11. Households covered about 28 percent of the total reproductive health spending.

Government managed the bulk of reproductive health resources. Government (FMOH, RHBs, woreda health offices (WorHOs), and parastatals) managed over 52 percent of the total reproductive health spending. Household out-of-pocket spending represented 27.6 percent. International and local NGOs managed 17.4 percent, and private enterprises and insurance accounted for only about 0.5 percent.

Government health facilities (PHCUs and hospitals) were the major recipients of reproductive health resources. Government-owned health facilities received 37 percent of total reproductive health spending (23 percent hospitals and 14 percent PHCUs), and private (for-profit and nonprofit) health facilities received 11 percent. Public health programs and health administration accounted for 16 percent and 15 percent, respectively.

Outpatient care was the major reproductive health service. Funds for reproductive health were spent mostly on outpatient care (42 percent), family planning and counseling programs (16 percent), capital formation (15 percent), and maternal health inpatient care (11 percent).

Child Health Subaccount

Child health expenditures accounted for about 11 percent of THE in 2010/11. This was a slight increase from 10 percent in 2007/08. The overall amount of spending on child health in current prices almost tripled (increased by 179 percent), from Birr 1.1 billion (US$114.1 million) in 2007/08 to nearly Birr 3 billion (US$184.5 million). The per capita spending on individual children of under five years old increased to Birr 256 (US$16) from Birr 82 (US$9) in the previous NHA.

Child health is predominantly financed by household out-of-pocket spending. In 2010/11, households were the major source (48 percent) of the total child health spending. The rest of the world contributed 27 percent, and government covered one-fourth.

Households managed the bulk of the child health resources in 2010/11. Close to half (48 percent) of the overall child health spending was managed by households, an increase from about 25 percent in 2007/08. Government is the second largest manager of child health resources accounting 39 percent of the total spending (federal government 27 percent and regional and local governments 12 percent). Donors and NGOs (local and international) managed 8 percent and 6 percent, respectively.

Government health facilities were the major recipients of child health resources. In 2010/11, government health facilities received almost half (48.1 percent) of the total spending on child health (25 percent public hospitals and 23 percent PHCUs). Private for-profit and nonprofit health facilities (hospitals, NGO PHCUs, and private clinics) together received over 14 percent of the total child health spending. Providers of public health programs received about 15 percent.

Inpatient and outpatient services consumed about three-fourths of the total child health spending.[7] Inpatient and outpatient services together accounted for 73 percent of the total child health spending (63 percent outpatient and 10 percent inpatient). Prevention and public health programs accounted for about 15 percent.

Malaria Subaccount

In 2010/11, Birr 3.89 billion (US$241 million) was spent on malaria. This is a substantial increase (more than sevenfold) from the mere Birr 519.5 million (US$55.5 million) spent on malaria in 2007/08. The share of NHE spent on malaria reached 15 percent in 2010/11, from only 5 percent in 2007/08. This increase is mainly because of substantial donor funding for malaria programs including for procurement of insecticide-treated nets (ITNs). It is a positive development to see the substantial increase in the absolute amount and share of malaria spending as malaria is still among the major causes of mortality and morbidity in Ethiopia. Its focus on prevention and control of malaria is commendable.

In 2010/11, malaria was predominantly donor financed. Donor funding accounted for 79 percent of the total spending on malaria, followed by households and government, which contributed 14 and 7 percent, respectively. The spending by government almost doubled in absolute terms (and increased by about 82 percent) and household spending more than doubled (134 percent) from 2007/08.

The managerial role of government was substantially increased in 2010/11. Government (FMOH, RHBs, WorHOs, and parastatals) managed 82 percent of the overall resources spent on malaria. This is understandable as major malaria spending financed by PBS and the Global Fund are managed by the FMOH. Households managed all of their spending on malaria (14 percent). The rest of the world managed only 2 percent of the total spending, while local and international NGOs managed 1 percent of the total spending.

The bulk of malaria spending went to public health program administrators. In 2010/11, close to 69 percent of total malaria spending went to administrators and implementers of public health programs. Public PHCUs received about 11 percent of total malaria spending. Government hospitals received 4.3 percent. Private clinics and hospitals (both for-profit and nonprofit) received 5.5 and 1.2 percent of the total malaria spending, respectively. The share of health administration was estimated at only 2.9 percent.

Malaria-related prevention and public health programs absorbed the lion's share of total malaria spending. In 2010/11, 69 percent of the total malaria spending was made on malaria prevention and public health program. In fact, more than half of the total malaria spending (52 percent) was on ITN procurement and distribution programs. The second largest consumer of spending on malaria was curative care services (21 percent outpatient care and 2 percent inpatient care).

[7] Though this shows a significant shift from public health programs to health facility-based outpatient and inpatient care, this could be mainly a shift in provision of immunization and other campaign-based public health programs on child health to more health facility-based provision of these services, or it may be attributable to the way most donors reporting linked such preventive services.

Tuberculosis Subaccount

The overall spending on TB almost doubled from a total of Birr 447.5 million (US$47.8 million) in 2007/08 to Birr 824.6 million (US$51.2 million) in 2010/11. This amount accounted for 3 percent of overall NHE.

The rest of the world was the major sources of financing spent on TB. In 2010/11, the major source of TB funding (51 percent) was the rest of the world, followed by households, which accounted for 36 percent. Government and all other sources accounted for 12 percent and 1 percent, respectively.

Government was the major manager of TB resources. In 2010/11, government had managerial responsibility for about half of the total spending. Understandably, households managed all the resources originating from them (36 percent), making them the second major financing agent. The rest of the world managed about 12 percent and the remaining 3 percent was managed by other agents.

Public PHCU received about one-third of TB resources. The major recipients of TB resources were public PHCUs, which received about 30 percent of the total TB spending. Public hospitals received about 14 percent. Private for-profit and not-for-profit hospitals received 15 percent of the total TB expenditure, followed by providers and mangers of public health programs (6 percent). All other non-specified providers received 25 percent of the spending.

The bulk of TB spending was used for outpatient curative care. About 61 percent of TB funds were used for TB outpatient care, followed by TB prevention and public health programs, which accounted for 20 percent, inpatient care for 8 percent, general health administration for 7 percent, and health-related services (capital formation and education, training, and research) for 4 percent.

Policy Recommendations

Increase health spending focusing on increasing domestic financing: As noted above, Ethiopia's overall per capita spending as well as spending on selected priority areas remains inadequate. There is a great need to mobilize more resources for health to continue improving the quality of health care, and equity and access to care. While it is critical that Ethiopia needs continued donor support in the short term, the country also needs in the long term to reduce its donor dependency by increasing domestic resource mobilization as the country's economy transitions to that of a middle-income country. The Ethiopian government needs to meet the Abuja target/commitment by African leaders of spending 15 percent of the total government budget on health. Additionally, Ethiopia needs to explore innovative financing mechanisms to increase domestic financing for health.

Continue generation and use of evidence for policy initiation and use: In addition to the need for further exploration and use of the data gathered for this round of NHA (household, PLHIV, and institutional surveys/data), the FMOH in collaboration with other stakeholders may need to do studies to gain an even more in-depth understanding of spending on health care. Conducting Public Expenditure Tracking Surveys to examine health spending thoroughly at the woreda and facility level, to see if there are some leakages and wastages where the sector can have some efficiency gains, is of paramount importance.

Continue building a more efficient and responsive health system: In light of the still-inadequate level of per capita spending on health, the progress in bringing change and improving health status of Ethiopians is very impressive. However, WHO estimated a global 20 to 40 percent inefficiency-related loss of resources in the health sector, and it underlined that every country has room for improving efficiency in the health sector. Efficient use of resources is also an important case to make when arguing for increased investments in health from government, private sector, and development partners.

Continue integration of different health programs and vertical support mechanisms: In Ethiopia, the various vertical programs are well integrated with the overall health system, in line with the principle of three ones, i.e., "One Plan, One Budget and One Report." This is increasingly possible, as the government system is being used by more programs such as The Global Fund, GAVI, MDG Performance Pool Fund, Technical Assistance Pool Fund, and PBS. The FMOH and health sector partners need to continue building on this experience.

Reduce the financial burden and barriers to household use of health care: Household spending is very high both in absolute terms and on a per capita basis. Given the level of income and high poverty, household spending can be prohibitive to many households and catastrophic to others. In view of this, the health insurance initiative in Ethiopia is commendable. In addition, in the short-term effective implementation of the fee waiver system should be strengthened and ensure that it will be appropriately implemented in all regions and woredas.

Track and estimate voluntary contributions and other health expenditure: In the future, Ethiopia should try to estimate financial values of the wide range of community contributions including through the HDA initiative.

Increase understanding of noncommunicable diseases (NCDs) and other diseases: Half of the total spending in the reporting year is consumed by health services and programs outside the four subaccounts (HIV/AIDS, reproductive health, malaria, and TB), as child health overlaps with three of the subaccounts and other health services and programs. One of the major areas of spending might be NCDs. The household survey done for this NHA revealed that 5 and 7 percent of the causes for outpatient visits and inpatient admissions, respectively, are NCDs (more specifically, cancer, diabetes, and hypertension). The survey also found that 13 percent of deaths were related to these diseases. In view of this, there is strong need to better understand the magnitude and resource implications of financing NCD services.

Institutionalization of NHA

Health resource tracking, particularly health expenditure tracking, is critical for making policies and other decisions on health financing and health investments. Ethiopia's FMOH and health sector partners have been using evidence generated by earlier rounds of NHA including for introduction of a wide range of health financing reforms, initiation of health insurance, a baseline for HSDPs, tracking spending against major health sector priority areas, and at different levels of the health sector. However, doing an NHA study is a huge undertaking in terms of time, labor, technical capability, and financial resources, and there is strong need to generate data regularly and in less expensive ways. It is commendable that Ethiopia is incorporating health economics/ financing in the postgraduate programs of selected universities as one way to lay the foundation for such capacity. Other development steps that Ethiopia needs to continue include making use of the updated System of Health Accounts (SHA) 2011 framework and WHO's updated Resource Tracking Production Tool.

Following are suggestions for making the NHA more affordable:

- Piggyback selected general household and targeted group spending-related questions onto other national surveys such as the EDHS. It also might be useful to include some of the NHA household questionnaires in the household income, consumption and expenditure survey.
- Develop a national donor and NGO health expenditure database with clear reporting mechanisms and formats as needed for health policy making and in accordance with the NHA classification scheme.
- WHO and other major stakeholders on health financing and resource tracking revised the SHA in 2011, and all countries are expected to transition from NHA and use the SHA2011 framework. WHO and other partners are doing capacity building at global, regional, and country levels. In Ethiopia, transition to the SHA2011 framework by building capacity of FMOH and key partners' staff to use the framework and WHO's updated Resource Tracking Tool is underway.

- Engage in continuous dialogue with the Federal Ministry of Finance and Economic Development, the Central Statistical Agency, and other relevant partners about the institutionalization of NHA, and on collaboration on regular generation of NHA tables and reports.
- Incorporate financial expenditure data into the routine health management information systems.
- As part of the woreda evidence-based planning, the FMOH, RHBs, and WorHOs are annually doing resource mapping, and in the future, expenditure tracking can help to compare commitments captured during resource mapping with actual spending.
- The initiative to include health economics and financing in pre-service public health programs of major universities is commendable. The FMOH may need to continuously engage with these universities to assess progress in provision of the course as well as in additional course revision and updates as needed. In addition, the Ministry may need to engage in dialogue with other universities that teach economics and with other relevant departments to incorporate health financing courses with some sessions on resource tracking

1. INTRODUCTION

1.1 Background

Ethiopia is a Federal Democratic Republic composed of 11 regions: nine national regional states (Afar, Amhara, Benishangul-Gumuz, Gambella, Harari, Oromia, Somali, Southern Nations Nationalities and People Region (SNNPR) and Tigray) and two city administrations (Addis Ababa City Administration and Dire Dawa City Council). The land area of Ethiopia is estimated at about 1.1 million square kilometers. Its population is estimated at around 79 million, more than 84 percent of which is rural (CSA 2008). The proportions of male and female residents are almost equal. Around 23.4 percent of women are of reproductive age (15–49 years) and 45 percent of the population is younger than 15 years (FMOH 2012).

Ethiopia's gross domestic product (GDP) in 2010/11 (EFY 20038) is estimated at Birr 511.16 billion (US$31.7 billion) and per capita income at US$392. Economic growth (GDP at constant basic price) in 2010/11 was estimated to be 11.4 percent. Annual growth rates of the major sectors of the economy were agriculture 9.0 percent, industry 15.0 percent, and services 12.5 percent; their shares of total GDP were 41.0 percent, 13.4 percent, and 45.6 percent respectively. The economy has grown in real GDP terms at a rate of 11 percent per annum for the past five years (MOFED 2012 and National Bank of Ethiopia 2010) as a result of the government's intense commitment to poverty reduction.

In 2010/11, over 73 percent of the total population had access to safe drinking water. Access to primary health care services and coverage of the Expanded Program on Immunization (EPI) were 92.1 percent and 74.5 percent, respectively. Estimated life expectancy at birth is 54 for males and 57 for females. Though these achievements are encouraging, Ethiopia's health sector is far from delivering what is required and the health status of the population is still poor. The low level of health service delivery is due partly to the low level of health sector financing. The fourth round of National Health Accounts (NHA) showed that between 2004/05 and 2007/08, health expenditure from all sources increased at an annual rate of about 43 percent and per capita health expenditure increased from US$7.14 to US$16.1 (FMOH 2010a). Despite the steady increase, Ethiopia's health sector remains underfinanced when compared with the World Health Organization (WHO)-recommended minimum spending of US$34 per person per year to provide basic health care services in developing countries (WHO 2001), which later was updated to US$54 and more recently to US$60. Despite this shortcoming, the government's commitment to improve the health status of its citizens is demonstrated in the emphasis given to the health sector in national development programs such as the Sustainable Development for Poverty Reduction Program, the Plan for Accelerated and Sustained Development to End Poverty, and the Growth and Transformation Plan.

Aligned with these policy frameworks, the government developed the fourth Health Sector Development Program 2010/11-2014/15 (HSDP-IV) (FMOH 2010b). The major priorities of the HSDP-IV are improving maternal and child health, and reducing and reversing the impact of major communicable diseases such as HIV/AIDS, tuberculosis (TB), and malaria. The Health Extension Program (HEP), the Accelerated Expansion of Health Centers, and the accelerated training of health officers and doctors are considered as vehicles for improving service delivery to the community at large. In addition to health care financing, harmonization, and alignment "One Plan, One Budget and

[8] Ethiopia follows the Julian calendar. The Ethiopian calendar is 7–8 years behind the Gregorian calendar used by the rest of the world. In the Ethiopian calendar, the year starts on September 11 and ends on September 10. EFY 2003 started on July 8, 2010, and ended on July 7, 2011.

One Report"), the health commodity supply system and comprehensive human resource development are the system issues considered essential to delivering the services and achieving the goals and objectives of HSDP-IV. Furthermore, to address the critical financial problems of the health sector, the government is implementing health care financing reforms including health insurance.

1.2 Health Status

The well-coordinated and extensive efforts of the government, development partners, and the general public have resulted in relatively improved health status in Ethiopia. The substantial investment in health sector in terms of human resources, construction of health facilities, and equipping and providing pharmaceuticals in the past few years had a positive impact on the health status of the Ethiopian people.

According to the most recent (2011) Ethiopia Demographic and Health Survey (EDHS), the nutritional status of children under five indicates that 44 percent are stunted, 10 percent are wasted, and 29 percent are underweight (CSA and ICF International 2012, henceforth referred to as EDHS 2011). The EDHS report also showed that HIV/AIDS continues to be prevalent throughout Ethiopia, with devastating public health consequences. Overall HIV prevalence among the adult population remained a low 1.5 percent (1.0 percent among men and 1.9 percent among women) in 2011. The maternal mortality ratio remained the same from 2005 with 676 deaths per 100,000 live births[9] in the seven years preceding the survey.

This shows that maternal deaths are still very high, with about 15 percent of pregnancies leading to life-threatening complications. Maternal mortality could be further reduced if women could more easily access antenatal and postnatal services, and have access to skilled attendance of deliveries and to family planning services. In 2010/11, only 10 percent of deliveries were attended by skilled health personnel (EDHS 2011). During the same period, however, the percentage of pregnant women receiving antenatal and postnatal care services increased to 82.2 percent and 42.1 percent from 59.4 percent and 25.1 percent, respectively, in 2007/08. Use of modern contraceptive methods among currently married women has increased from 6 percent in 2000 to 27 percent in 2011 (EDHS 2011).

Improving child health is one of the government's priorities to meet the Millennium Development Goal (MDG) of reducing under-five mortality by two-thirds by 2015 (from the base year of 1990). In 2011, the child mortality rate was 88 per 1,000, while infant mortality was 37 per 1,000 live births (EDHS 2011).

Malaria is a major cause of morbidity and mortality in Ethiopia. In 2010/11, it accounted for 12 percent of outpatient consultations, 13 percent of hospital admissions (FMOH 2011). Almost 75 percent of the land is malarious and 68 percent of the population lives in areas at risk of malaria. Areas at altitudes less than 2,000 meters above sea level are generally considered as malarious. However, transmission has been detected at altitudes as high as 2,500 meters. Malaria has a serious impact on the country's economic productivity because it strikes during planting and harvesting seasons.

Studies reveal that the country has made tremendous progress in mobilization of resources for and implementation of a wide range of malaria prevention and control interventions that have reduced malaria-caused morbidity and mortality (EHNRI 2008). The government is implementing two important vector control activities, namely, indoor residual spraying (IRS) and insecticide-treated nets (ITNs). IRS is used in malaria epidemic-prone areas, while ITNs are used in areas with longer

[9] In other words, for every 1,000 live births in Ethiopia, about seven women (6.76) died during pregnancy, during childbirth, or within two months of childbirth.

periods of transmission. In 2010/11, the national IRS spray coverage was 49.7 percent10 in epidemic-prone areas and the number of ITNs distributed to regions was 3,420,000. Nevertheless, lack of effective utilization of vector control tools is observed at the individual and community levels, a serious problem that requires regular follow-up.

TB is another leading cause of mortality in the country. Ethiopia ranked seventh in the world and third in Africa for TB burden. The most recent WHO estimates for Ethiopia are: an annual TB incidence (including HIV-positive) of 210 per 100,000, prevalence (including HIV-positive) of 230 per 100,000, and mortality (excluding HIV) of 18 per 100,000 people (WHO 2014). According to the First Ethiopian National Population Based TB Prevalence Survey 2011, the national case detection rate is estimated to be 72 percent, which exceeds the international standard of 70 percent. Both the TB success rate and cure rate have also increased in the two years preceding the survey, from 82.5 percent to 90.6 percent and from 66.5 percent to 68.2 percent, respectively (EHNRI 2011).

1.3 Governance and Stewardship

The responsibility for health service delivery and regulation in Ethiopia comports with the decentralized federal arrangement of the country, per the 1995 Constitution. Responsibility of health policy, regulation, and service delivery is shared by the Federal Ministry of Health (FMOH), regional health bureaus (RHBs), and woreda health offices (WorHOs). Policy development, as well as development of standards and operational protocols, is the responsibility of the FMOH. The implementation of policies, standards, and protocols as well as the responsibility for service delivery at regional levels is mandated to RHBs. RHBs are also responsible for owning, financing, and supervising the service delivery of regional hospitals. WorHOs manage and coordinate the operation of the primary health care units (PHCUs). They are responsible for planning and budgeting of health programs and health care services, as well as negotiating budgets with finance offices and cabinets/councils at the woreda level.

In the decentralized context of Ethiopia, while both RHBs and WorHOs are parts of the health system, they are not directly accountable to the FMOH. RHBs are accountable to their regional government, WorHOs to the local government. However, the lower-level health entities are technically accountable to their higher counterparts and they are supposed to submit regular reports.

The FMOH is supporting regions in system development/revision, design of health sector programs, and setting of targets in line with the national plans and targets, resource mobilization, and allocation and harmonization of efforts with partners, as well as in creating platforms for reviewing progress against HSDP targets and for sharing of experiences. To strengthen information flow and effective resource mobilization and use, the FMOH and RHBs introduced a woreda-based national planning system in 2007/08. The main purpose of this planning system is to ensure that health plans at the grassroots level are evidence based, results oriented, and contributing toward country-level health sector targets while at the same time helping higher-level plans (of the FMOH and RHBs) to be more realistic, gap filling, and supportive of the lower-level plans. The FMOH and RHBs use the woreda-based plans to identify financial and nonfinancial resource requirements and gaps at local levels. According to this planning system, WorHOs prepare their plans based on an indicative budget provided by the woreda finance and economic development offices. WorHO plans are aggregated at the regional level and all are compiled at the FMOH level. This evidence-based planning process is improving value for money and health authorities at different levels are negotiating with their counterparts in finance.

To strengthen the governance of the health sector, and to ensure stakeholders participation and improve their contribution, different governance bodies were established at the federal level. They include the Central Joint Steering Committee, FMOH-Development Partners Joint Consultative Meeting, Joint Core Coordinating Committee, and FMOH-RHBs Joint Steering Committee. The governance bodies

[10] Percentage of households sprayed during the year out of the total number of households in the epidemic prone areas.

and committees are being used as platforms for policy dialogue and harmonization of effort in the health sector. Government and health sector partners are also developing joint operational frameworks including the HSDP Harmonization Manual (HHM), published in 2007, and a Code of Conduct signed by the government and its development partners in 2005. The International Health Partnership (IHP) Compact roadmap was signed in 2008; it is intended to be a leading framework for aid coordination in Ethiopia and a complement to more specific agreements relating to the aid policy of the government. One of the results of the planned harmonization and alignment activities was the preparation of a Joint Financing Arrangement, signed by development partners in 2009. In accordance with this agreement, the signatories have established the MDG Performance Pool Fund and have pooled their funds.

Similarly the National HIV/AIDS Council coordinates and leads HIV/AIDS prevention and control activities with broader stakeholder participation. The council takes into account the multi-sectoral nature of the HIV/AIDS epidemic. At the regional and woreda levels, there are HIV/AIDS coordination offices that are accountable for their respective councils. The Country Coordinating Mechanism and the National and Regional Review Boards are also important governance structures that allow decisions in a more transparent and participatory way.

To take the accountability and ownership of health facilities closer to users/the community, health facilities are accountable to the local authorities (e.g., PHCUs, the dominant health service providers, are accountable to WorHOs). Furthermore, health facilities in most regions are legally autonomous and allowed to retain and use the revenue they are generating. They are also allowed to establish their own governing bodies (health facilities boards) in which the community and local administrations are represented.

A. Health Service Delivery

The FMOH has been implementing various activities, including the Business Process Re-engineering (BPR), to improve health service delivery in the country. Service delivery is under reorganization into a three-tier structure of specialized hospitals, general hospitals, and PHCUs. The structure of PHCUs in rural and urban areas will be quite different.

With the aim of improving primary health care coverage of the rural population, the government has been implementing the HEP since the HSDP-II, delivering 16 packages of services[11] at community and household levels. Although the HEP initially focused on rural settings, because most of the country's health problems are attributed to preventable infectious and communicable diseases, a 24-package urban HEP has been established.

In 2010/11, the public health sector had 122 hospitals, 2,660 health centers, and 15,095 health posts.[12] In the three-tier system into which the government is reorganizing the health system, a PHCU will consist of five satellite health posts, one health center, and a primary hospital which are expected to serve 100,000 people. Each health post and health center is expected to serve 5,000 and 25,000 people, respectively. The secondary-level, general hospital, will serve 1 million people and the tertiary, specialized hospital, will serve 5 million. In addition, there were 63 hospitals (56 for profit and 7 for non-profit hospitals) and 4,088 clinics (lower, medium and higher level) owned by the private sector (FMOH 2012).

[11] It was ;ater increased to 17, with the adoption of emergency services.
[12] This excludes 56 private and 16 NGO hospitals, and 4,088 private clinics.

B. Human Resources for Health

Maternal, child, and infant mortality rates are expected to decline significantly with an increase of qualified health workers. The shortage of human resources for health in sub-Saharan Africa has been recognized since the 1980s (Chen et al. 2004), and it is an obstacle to countries achieving their health MDGs. Ethiopia's HSDP-IV aims to improve the health workforce ratio from 0.7 per 1,000 to 1.7 per 1,000 population by the program's end in 2015, and the physician to population ratio from 1:37,996 to 1:5,500; this latter ratio is very low compared with the WHO standard of 1:10,000. Though it is believed that there are enough nurses in the country, their deployment to the rural and hard to reach geographic areas is limited. Additionally, there is a need for an adequate number of nurse-midwives, and anesthesia professionals mainly to improve maternal and child health services.

The training and deployment of health extension workers has been a top priority on which the government has been working. The cumulative number of these workers has steadily increased during the previous years, from 2,737 in 2004/05 to 24,571 in 2007/08, and to 30,948 in 2010/11. Furthermore, the Accelerated Health Officers Training Program, a bachelor's degree program that includes training on Basic Emergency Obstetric and Newborn Care and Comprehensive Emergency Obstetric and Newborn Care, is on schedule, producing many graduates every year since 2009. A two-year master's program to train health officers in emergency obstetric care was also initiated in several universities.

C. Pharmaceutical Supplies

Timely procurement and distribution of adequate and safe pharmaceutical supplies is critical for health service delivery system. To supply safe and affordable pharmaceuticals on a sustainable basis, the government of Ethiopia recently reorganized the procurement of pharmaceuticals, medical equipment, and supplies as part of the ministry's BPR.

Before this reorganization, procurement was done in a fragmented manner by various FMOH units and independent agencies. Duplication of effort at every level of the supply chain, mismanagement and frequent stock-outs of pharmaceuticals, and lack of affordability and irrational use of drugs were some of the problems that existed in the system. As per the 2006 Health Commodity Supply System Master Plan recommended by the FMOH, the government established a Pharmaceuticals Fund and Supply Agency (PFSA), which is accountable to the FMOH and responsible for timely procurement and distribution of pharmaceuticals to health facilities.

The PFSA opened regional branch offices/hubs to facilitate distribution. The PFSA procurement system is needs-based; the regional offices check and transfer the requests of health centers and hospitals to the head office for procurement. The PFSA has many regional hubs, and these hubs are expected to distribute drugs to health facilities within a 160 km radius.

The PFSA uses a Revolving Drug Fund to strengthen its working capital and was able to mobilize US$21.5 million for the fund from the GAVI Alliance, the Global Fund to Fight AIDS, Tuberculosis and Malaria, and the Protection of Basic Services (PBS) (FMOH 2009). Procurement is processed through bids from both international and local sources. Local manufacturers, private importers, and wholesalers are also among procurement sources of pharmaceuticals and supplies. During the NHA study period, there were 12 manufacturers, 224 importers, and distributors in the country (FMOH 2011).

1.4 Health Information System

One of the priority areas that the FMOH and RHBs have been working on with development partners is to improve evidence generation, management, and use for policy making. Lessons have been drawn over time to improve the quality of information for planning, monitoring, and evaluation purposes. The health sector's monitoring and evaluation system is designed as part of the Policy, Planning and Monitoring and Evaluation System of health sector strategic and operational plans. The FMOH and its development partners also agreed on a single results-based framework with a small number of indicators to make the national-level monitoring and evaluation process effective and efficient.

Efforts are also being made to improve the routine health management information system including better patient record documentation/registration and reporting on sector-wide indicators that have been developed with stakeholders' engagement. Although more must be done, efforts being made to secure human resources, equipment, and other inputs are encouraging.

Performance monitoring and quality improvement measures are being institutionalized, and facility-level data are being analyzed and used to improve service delivery at facility level, even while the data are being compiled and analyzed at the national and subnational levels to guage performance and continue improving efficiency in resource allocation and use in the sector.

The health system is practicing Integrated Supportive Supervision, which is critical to provide on-the-spot policy, managerial, and technical support and guidance to health facilities and lower-level health authorities as well as to help the flow of the health information and feedback process. In addition, the health sector has improved research capacity by reorganizing and strengthening the Ethiopian Health and Nutrition Research Institute (EHNRI) and collaborating with academic and research institutions such as the Central Statistical Agency (CSA) and institutions of higher learning.

1.5 Health Care Financing

Ethiopia's health sector has multiple financing sources including the government treasury (federal, regional, and woreda/district levels), bilateral and multilateral donors, household out-of-pocket expenditures, international and local nongovernmental organizations (NGOs), private and parastatal employers, and insurance companies. Cognizant of the underfinancing of health care in Ethiopia – evidenced by per capita health spending of US$16.1 in 2007/08 (FMOH 2010a) and by problems with the quality, equity, and sustainability in health care delivery – the Ethiopian Council of Ministers approved a health care financing strategy in 1998. The strategy aimed at increasing availability of health care resources in a way that would improve equity and sustainability and lead to improved quality of care.

Reforms in the financing strategy include user fee revision, revenue retention and utilization to improve quality, rules for rationalizing and systematizing fee waivers, health facilities governance, establishment of private wings in public hospitals, and outsourcing of nonclinical health services. These reforms are being implemented in almost all regions of the country. The strategy also identifies health insurance as a mechanism to generate additional sources of revenue, and a way to increase the country's low level of health service utilization. In light of this, the government has embarked on implementing two types of health insurance schemes, social health insurance (SHI) for the formal sector and community-based health insurance (CBHI) for the informal sector. The proclamation and the regulation of SHI were endorsed by the Parliament and the Council of Ministers in July 2010 and October 2012, respectively. CBHI, which is envisaged to cover more than 83 percent of the population, is undergoing pilot implementation that began in 13 selected districts (with 1.45 million people) in the four biggest regions: Amhara, SNNPR, Tigray, and Oromia. Three pilot woredas were chosen from each of the first three regions, while four were chosen from Oromia. The pilot has been scaled up to a total of 161 woredas in the same four regions.

In addition, the government is working with health sector partners on securing more resources for the sector, and on harmonizing interventions with the broader HSDP framework and with annual

operational plans at different levels. To this effect, the FMOH, in consultation with partners, developed the HHM and signed a Code of Conduct and the IHP Compact with key health sector partners. It is believed that the IHP is helping the country to mobilize and channel more resources to the health sector as well as enhance effective utilization of these resources. In recent years, a significant amount of resources has been mobilized from the Global Fund, GAVI Alliance, World Bank, U.S. government, and other sources. The Ethiopian health sector partners established the MDG Performance Pool Fund, and different donors are putting funds in the basket. In 2012/13 (EFY 2005), partners committed a total of US$133.2 million to the pool fund mechanism and this amount was disbursed the same year (FMOH 2013).

The FMOH and health sector stakeholders in the country believe that the amount and flow of resources in the health sector need to be regularly tracked. To understand the flow of funds to the health sector and to ensure evidence-based policy decisions, all spending that comes from all sources should be tracked properly.

1.6 Objective of the Study

The overall objective of this NHA is to generate up-to-date empirical evidence on the Ethiopian health care financing system. The specific objectives of the study are to:

Gauge health financing trends, sources of financing, managerial responsibility, and at what level of the health system and on what type of health care services health expenditures are made;

Produce baseline data on health care financing for the new/upcoming HSDPs, including scale-up of ongoing health care financing reforms and implementation of health insurance; and

Provide input for gauging financing of HSDP-IV priority areas (HIV/AIDS, reproductive health, child health, malaria, and TB), and to generate evidence on the relationship between health sector priorities and spending on health care by level and type of health care service.

1.7 Organization of the Report

This chapter 1 has presented an overview of the Ethiopian health system and health care financing reform initiatives, the health status of Ethiopians, and the objectives of the NHA study.

Chapter 2 describes the approach used in this NHA study. It introduces the NHA methodology and covers the sources and methods used for collecting data on health expenditures, including survey methodology and samples. It also discusses computation of the national expenditure figures based on the samples. Limitations of the survey are also noted in this chapter.

Chapter 3 deals with the general NHA findings: it identifies the financing sources and the total amount of health expenditure they made, the managers of the funds, where the resources were spent, and for what purposes. It also provides an overview of health spending share by major health sector priority areas.

Chapters 4–8 cover the subaccounts: HIV/AIDS, reproductive health, child health, malaria, and TB. Each chapter discusses the financing program/activities, managers of the funds, where funds are spent, and on what services or commodities funds are consumed.

Chapter 9 presents conclusions and policy recommendations derived from the evidence generated through the study.

Finally, a glossary of NHA classifications and detailed output tables are annexed to the report to serve as additional references on the general NHA and the various subaccounts as well as for international comparison with similar other countries.

2. METHODOLOGY

2.1 Overview of NHA Methodology

In a rapidly changing health care environment, policymakers need reliable national information on the sources and use of funds for health to enhance health system performance. NHA estimations provide such information. NHA is a globally accepted framework of health accounting used to track and measure health expenditure and resource flow in health systems of low-and middle-income countries. The methodology is developed based on the System of Health Accounts (SHA) established by the Organization for Economic Cooperation and Development for regularly tracking health expenditure of its high-income member countries. Having first helped low- and middle-income countries to do NHA studies in the 1990s, in 2003 WHO, the World Bank, USAID, and other partners published the "Producers' Guide" to assist these countries to measure their national health expenditures and resource flows (WHO et al. 2003). In 2011, SHA was revised to help countries use similar standard methods regardless of their level of economic development and income. In order to streamline the NHA data management and analysis, the USAID Health System 2020 Project in collaboration with WHO developed an NHA Production Tool (NHAPT).

The NHA framework is powerful and useful for estimating health expenditure of a country and tracking the flow of these resources within the health system from financing sources down to actual health services and commodities. In the long term, a country can institutionalize the health accounts process and produce a time series of standardized tables, permitting a more thorough assessment of the progress being made toward health system goals.

In the NHA framework, health expenditures are defined as "all expenditures for activities whose primary purpose is to restore, improve and maintain health for the nation and for individuals during a defined period of time" (WHO et al. 2003). NHA also has its own well-defined boundaries of space and time. The space boundary of NHA is defined as all health expenditures made by a country's citizens and by residents who are temporarily abroad; it excludes health expenditures by foreign nationals in the country. Moreover, it includes all donor assistance except the spending on the planning and administration of health programs.

Ethiopia, similar to other low-income countries, has multiple sources and mechanisms of financing the health sector. The main financing sources are the government (treasury at all levels and parastatals), the private sector (households, private for-profit, and private not-for-profit organizations), and the rest of the world (bilateral and multilateral donors and international NGOs). The flow of funds from these financing sources to financing agents (managers of funds), to providers of services, and to actual health care services and commodities are tracked using the NHA framework. These flows of resources are organized and presented in standard set of tables. The NHA tables help to facilitate the estimation process by cross-tabulating the flow and answering the following critical questions:

- Who finances health in the country?
- How and by whom are resources managed?
- Who provides goods and services?
- What goods and services are provided?

Financing sources, financing agents, providers, and functions are referred to as "dimensions" of health expenditure. The definition of these four main dimensions is limited to the boundary of health accounts:

- Financing sources (FS) are entities that provide funds or resources (e.g. Ministry of Finance, international donors).
- Financing agents (HF) are entities that manage and channel funds provided by financing sources and use those funds to pay health care providers or purchase health care activities inside the health accounts boundary. They pool resources from different financing sources and pay through a variety of mechanisms such as budgets and contracts (e.g., Ministry of Health).
- Health providers (HP) are entities that receive money from the financing agents and provide health care services and goods in exchange for the money they receive from financing agents (e.g., hospitals).
- Health care functions (HC) are the end uses or the provided goods and services (e.g., preventive or curative care).

NHA tables can be produced to track spending on a country's general health activities or, using NHA subaccounts, on specific diseases or priority health areas, types of services or programmatic areas, and target groups depending on the country's needs. While NHA can produce up to nine tables showing the flows of health expenditures, Ethiopia, like other low-income countries, has limited itself to the four dimensions mentioned above. These are considered critical for national policy relevance and estimation of total health spending. From these dimensions, four data sets were constructed as follows:

- Health expenditure by financing source and type of financing agent (FS x HF),
- Health expenditure by type of financing agent and type of provider (HF x HP),
- Health expenditure by type of financing agent and type of function (HF x HC), and
- Health expenditure by type of provider and type of function (HP x HC).

2.2 Scope of the NHA Study

The purposes of conducting this fifth round of NHA are multiple and so the scope is broad. In addition to generating general health expenditure information, the study uses the NHA subaccount methodology to produce expenditure information on five selected health sector priorities: HIV/AIDS, reproductive health, child health, malaria, and TB.[13] These subaccounts/health service categories are policy priorities of the Ethiopian government (with specific performance targets in HSDP-IV), and they also have global targets and commitments that Ethiopia is committed to achieve.

Methodologically, the HIV/AIDS, reproductive health, child health, and malaria subaccounts have their own guidelines that were tested and have been used in several low-income countries in Africa and elsewhere. The TB subaccount is relatively new and not widely used. As shown above, Ethiopia has now produced the TB subaccount for the second time; its experience should be useful for refining the TB guidelines.

[13] These five subaccounts were also conducted during the fourth round of Ethiopia's NHA. This round excludes one additional subaccount, health information systems (HIS), done in the fourth round. This is because the methodology for the subaccount has not been well developed and the evidence it produced in the fourth round was insufficiently robust for policy use. In fact, Ethiopia is the only country that has carried out the HIS subaccount.

In this fifth round NHA, data were collected from government, donors, NGOs, employers (parastatal and private enterprises), and insurance companies using an institutional survey conducted in these organizations. In addition, as in the fourth round, data were collected from more than 10,000 randomly selected representative households to track their out-of-pocket spending on general health and four subaccounts (reproductive health, child health, TB, and malaria). Data on HIV/AIDS services were collected from 4,000 PLHIV to estimate out-of- pocket health expenditures of this segment of the population.

2.3 Study Boundaries

The Ethiopian NHA was done to generate evidence for the evaluation of the HSDP-IV and design of the next health sector plan. In view of this, it was agreed to do the estimation using the latest available data, from 2010/11 (EFY 2003), which started on July 8, 2010, and ended on July 7, 2011.

Regarding the space boundary, the study encompasses all spending made with the primary purpose of promoting, restoring, or maintaining the health status of Ethiopian citizens within the geographic boundary of the country and abroad.

2.4 Data Collection

All data used in this NHA study are limited to the 2010/11 period. Expenditures were calculated using the accrual method.[14] The household and PLHIV expenditure surveys were conducted in December 2012 and January 2013. Because of the practical issue of recall, both the household survey and PLHIV survey gathered information on expenditures on outpatient visits and inpatient admissions in the four weeks and 12 months prior to the survey, respectively. These survey data were annualized to estimate the survey year's spending and then deflated to estimate general household and PLHIV spending in 2010/11.[15]

Additional data were collected both from other primary and secondary sources. The sources were identified first by inventorying key actors that have a significant role in financing, managing, and spending health resources. It also took into account the historical trend in financing and managing of health resources as well as record keeping and reporting. These sources were identified from the records of previous NHA surveys and further brainstormed during the NHA training for the current round.

2.4.1 Primary Data Collection

2.4.1.1 Institutional Survey

As indicated earlier, the institutional survey covered all categories of financers and managers of health expenditure in Ethiopia: government, donors, NGOs, employers, and insurance companies. To collect information for the survey, 41enumerators and six supervisors (grouped into six teams) were deployed for about 45 days starting on October 1, 2012.

Government expenditures: Audited official government health expenditure data were obtained from the Federal Ministry of Finance and Economic Development (MOFED). The data cover government spending in the health sector from all government sources (federal, regional, and woreda) and also by providers. The data were reorganized into the NHA categories and classifications from sources to functions. They showed that resources for the health sector come

[14] Expenditures are attributed to the time period during which the economic value was created, not when actual cash disbursements took place.

[15] The annualized figure was deflated into 2010/11 price using the CPI indices, obtained from the CSA.

from the treasury as well as from foreign sources (bilateral and multilateral donors) as assistance and loans. Sources of funding for government spending from both the treasury and loans were considered as government. Health specific assistance through channel II and some channel III funding were considered as rest of the world.

Donors (bilateral and multilateral): All bilateral and multilateral donors that supported the Ethiopian health sector at all levels were covered in the survey. A total of 29 donors were included. Only the African Development Bank, which did not have projects in Ethiopia's health sector during the study period, did not complete the questionnaire.

NGOs (international and local): An exhaustive list of NGOs working in the health sector was compiled based on lists obtained from the Charities and Societies Agency. A list of NGOs that are members of CCRDA, an umbrella organization of most NGOs in Ethiopia, was obtained to support the data from the Charities and Societies Agency. A total of 250 NGOs (about 107 international and 137 local) were identified as active players in the Ethiopian health sector and an effort was made to survey all these NGOs. With the exception of 20 local NGOs, which were not reachable due to problems in their address, all other NGOs filled in and returned the questionnaires. While a few small local NGOs were not covered in the survey and their health expenditure figures are not incorporated, this small omission likely did not affect the overall spending amount calculated.

Employers (parastatals and privates): The universe of entities was obtained from two institutions: the Privatization and Public Enterprises Supervising Agency (PPESA) for parastatals and the Ethiopian Revenues and Customs Authority for private employers. After making use of different criteria in systematically categorizing the employer organizations list, the total sample frame considered was 2,125 employers (51 parastatals and 2,074 private institutions). In determining the final sample size, institutions were first grouped into the four major economic sectors, namely, agriculture, manufacturing, mining, and services. Using the World Trade Organization classification of the services sector was further disaggregated into nine subsectors.[16] Annual turnover of entities, which differs among the various economic sectors/subsectors, was assumed as the minimum threshold level in capturing entities into the sample frame.[17] Finally, a total sample size of about 290 (i.e., 239 randomly selected private employer institutions and 51 parastatals[18] taken as census) were covered in the survey.

Of the total of 290 employers in the sample, 258 (89 percent) filled in and returned the completed questionnaires. All the 51 public employer enterprises, including the five big entities, filled in and returned the questionnaires.

Insurance companies: All the 13 insurance companies (12 private and one public) that were operational during the study period were covered. All provided the requested information.

2.4.1.2 Household and PLHIV Surveys

General Household Survey: Similar to the fourth round of NHA, this round collected household out-of-pocket health expenditure data. A survey of 10,060 households was done to track household expenditure on general health, reproductive health, child health, malaria, and TB. This survey was conducted by the Ethiopian Economics Association (EEA), a think-tank actively engaged in economic research since its establishment in 1991. The CSA and Abt Associates provided technical support to EEA on sampling, sample selection, survey instruments, and data analysis. As in the fourth round, the scope of the survey went beyond NHA, as it covered household health services utilization as well as

[16] Business & Distribution, Communication, Construction and related engineering, Educational, Environmental, Financial, Health, Transport, and Tourism and related travel services.
[17] For the manufacturing sector, however, information from the CSA on employment levels of entities is used.
[18] Including the five big enterprises (EAL, EEPC, Ethio-Telecom, CBE, and EIC), which are outside of PPESA oversight.

health expenditures. A separate, comprehensive "Household Health Services Utilization and Health Expenditure Survey Report" will be published by the FMOH.

PLHIV Survey: In light of the sensitivity and ethical considerations associated with data collection on HIV/AIDS, a separate, targeted survey was conducted to track the health expenditures of PLHIV in Ethiopia. As in the fourth round NHA, the PLHIV survey was conducted by Birhan Research and Development Consultancy, a private consultancy firm experienced in the area.

It was impossible to get the list of HIV-positive people who knew their status in an ethically acceptable manner. In lieu of such a list, the NHA team, the FMOH, and other key stakeholders agreed to use the Network of Networks of HIV Positive (NEP+) in Ethiopia as an entry point and members of their networks as the sample frame. Subsequently, 4,000 representative HIV-positive persons were selected from 74 associations. The report "NHA Survey of Health Service Utilization and Expenditures among People Living with HIV and AIDS (PLHIV)" will be published by the FMOH.

2.4.2 Secondary Data Collection

The NHA team identified secondary sources of data on health status, health expenditure, disease prevalence, health service coverage and utilization, and so forth during the NHA training. On the list were health sector policy, strategic, and development plans; health sector evaluation and performance assessment reports; special studies and reports on specific diseases and health sector priorities; routine and special reports of health sector partners; and global documents. Most of these documents were collected and relevant data extracted. Important sources of the secondary data were the Federal Ministry of Finance and Economic Development (MOFED), FMOH, RHBs, CSA, EHNRI, Federal HIV/AIDS Prevention and Control Office (HAPCO), U.N. agencies, World Bank, and selected bilateral and multilateral donors and NGOs.

2.5 Data Processing and Analysis

Proper data processing is key to good data quality and reliability. To ensure this, qualified and experienced data entry clerks were hired to encode the completed questionnaires gathered from the different institutions. Data cleaning, editing, and consistency checking of activities were performed before data entry, integration, and analysis in the NHAPT. A two-day technical meeting for data analysis reviewed preliminary outputs from the different surveys. The meeting was conducted by the NHA team members with representatives of key stakeholders: FMOH, USAID, CSA, WHO, UNICEF, German Leprosy and TB Relief Association (GLRA), the USAID-funded Health System Finance Reform project, and others. The data mapping exercise, a critical aspect of NHA data processing done using the NHAPT, was performed by the NHA core team.

Finally, the health expenditure estimates for the general NHA and five subaccounts were organized into the four two-dimensional NHA tables described earlier in this chapter.

2.6 Limitations of the Study

With its full ownership and leadership of the FMOH, active participation and involvement of health sector development partners, financial and technical support from USAID, and use of the standard methodology and surveys, this round of NHA was far reaching. Nevertheless, it is not without limitations, as described below.

Institutional survey response and completeness of data:

- Government budget and expenditure reports do not directly match NHA data classifications.

Therefore, as in previous NHA rounds, distribution keys[19] were calculated and used to disaggregate government expenditure figures between outpatient and inpatient health services at various levels as well as to estimate government spending on the subaccounts.

- Some local NGOs (20) were not traced for the study and some employers did not fill and return the questionnaire. However, it is believed that the health spending from these organizations might be negligible, and will not substantially affect the total spending on health.
- Different institutions keep information in different formats. This made it difficult to obtain comparable information. For instance, the survey questionnaires required detailed information about expenditures on the different intervention areas/subaccounts. Most organizations do not keep information at that level of detail and if they do, the formats are different.

General household survey: Data collection for the household survey was done between mid-December 2012 and January 21, 2013. As explained above, data were collected on household out-of-pocket expenditures based on four-week and 12-month recall periods for outpatient health care and inpatient admissions, respectively. After annualization, these figures were deflated to estimate expenditures for 2010/11. Like all other household surveys, this one has a methodological limitation in that it may have overestimated the per capita health expenditures because of recall bias and also some unknown biases in annualized estimates.

Targeted HIV/AIDS survey: Although the universe for the HIV/AIDS survey was all PLHIV, there was no way to get such a list in an ethically acceptable way. Thus, associations and networks of HIV-positive persons were used as entry points and members taken as representative of the universe. Because most people get tested to know their status only after they experience health problems, members of these associations are usually the relatively sick and those with socioeconomic problems. Thus, the sample frame has some bias; all the randomly selected members were either under antiretroviral treatment (ART) or in need of ART. It would have been preferable when tracking expenditures to know spending by the different groups of HIV-positive people, i.e., HIV-positive pre-ART, HIV-positive need ART, and HIV-positive under ART. However, there was no other feasible option for identifying PLHIV.

PLHIV associations were used as a sample frame from which individual PLHIV were selected for interview. However, not all PLHIV are members of these associations. Moreover, the list of members are not only incomplete but also are not updated frequently. Thus, the obtained sample is unlikely to be representative of all PLHIV in Ethiopia. The sample size of 4,000 PLHIV was designed for national-level estimates. The sample size distributed to regions may not reflect the regional situation, particularly where regional sample sizes are small. Therefore, the findings for some regions should be interpreted with caution.

Community contributions: It is very common for communities in Ethiopia to make in-kind (labor and material) contributions to health facility construction and community health promotion/disease prevention programs. Moreover, activities mainly performed by the Health Development Army, capacity-building efforts by different ministries with high spillover effects on the health sector, and other unreported expenditures are worth mentioning. Unfortunately, the lack of rigor in adhering to formal accounting and financial reporting rules means reliable data on these items are unavailable. Hence, the NHA study does not capture these contributions.

[19] In constructing the distribution keys, the NHA team consulted health services utilization reports (such as Health and Health related Indicators, 2003; (FMOH 2011) and SHI Unit Cost Study 2007), as well as previous NHA survey findings, expert opinion, and so forth.

3. GENERAL HEALTH EXPENDITURES FINDINGS

Summary of Key Findings

- There has been a tremendous increase in Ethiopia's overall health expenditure, both in nominal and per capita terms.
- Overall health spending in current prices increased 138 percent since 2007/08, from Birr 11.1 billion (US$1.2 billion) in 2007/08 to Birr 26.5 billion (US$1.6 billion) in 2010/11.
- Per capita spending in 2010/11 is Birr 334.81 (US$20.77) compared with Birr 150.49 (US$16.09) in 2007/08.
- Financing sources: The rest of the world, households, and government, remain the major sources of financing for the health sector, accounting for 50 percent, 34 percent, and 16 percent of expenditures, respectively.
- Financing agents: Government managed the largest share of the health sector resources (49 percent), while households, international NGOs, and the rest of the world managed 34 percent, 9.9 percent, and 4.7 percent, respectively.
- Providers: Providers of public health programs are the major recipient of health resources, accounting for 27 percent of the total heath expenditure in 2010/11. Public PHCUs (health centers and health posts) receive about 15 percent.
- Functions: 44 percent of the country's health resources were spent on outpatient services, 27 percent on prevention and public health programs, and about 8 percent on inpatient health services. General health administration and capital formation accounted for 7.5 percent and 7.1 percent, respectively.

3.1 Overview of General Health Expenditure Findings

The most recent NHA studies in Ethiopia show that total health expenditure the country's health expenditure has been growing steadily (Table 3.1) [20]. In 2010/11, it reached Birr 26.5 billion (US$1.6billion) [21], up from Birr 11.1 billion (US$1.2 billion) in 2007/08. Nominal health spending grew by 138 percent over the same period. The major source of this increment in spending is the rest of the world that is, funding by donors and international NGOs. However, government spending on health increased substantially (67 percent) from Birr 2.5 to Birr 4.1 billion, and household spending more than doubled when measured in Birr.22 The share of GDP going to health reached 5.2 percent,23 up significantly from 4.5 percent in 2007/08. This is acceptable as it is above the WHO recommended minimum of 5 percent of GDP spending on health.

HSDP-IV Health Finance Targets:

1. Increase per capita expenditure on health from US$16.1 to US$32.2.
2. Increase government expenditure on health budget as a proportion of total budget from 5.6 percent to 15 percent.
3. Increase proportion of public health facilities retaining and using their revenue from 20 percent to 100 percent.
4. Increase proportion of people enrolled in health insurance from 1 percent to 50 percent.
5. Increase health budget utilization rate to 90%

Table 3.1: Trend in Health Spending by Major Financing Sources, 2004/05-2010/11

Source of Finance	Third NHA 2004/05 (Birr)	Fourth NHA 2007/08 (Birr)	Fifth NHA 2010/11 (Birr)	Change in Health Expenditure from NHA 4 to NHA 5 (%)
Government including parastatals	1,376,331,696	2,476,381,390	4,126,681,043	67%
Households	1,382,770,265	4,125,367,110	8,926,754,560	116%
Rest of the world[24]	1,661,413,034	4,364,465,742	13,193,919,360	202%
All other sources	87,228,590	156,807,872	217,511,290	39%
National Health Expenditure (NHE)	4,507,743,585	11,123,022,114	26,464,866,253	138%

Source: Source of data for the first two columns is FMOH (2010a); data for 2010/11 is from the current NHA.

[20] NHE and Total Health Expenditure (THE) are distinct in NHA (see the NHA "Producers' Guide" (WHO et al. 2003)) and they are important for international comparison. THE covers all spending on core activities (personal and collective health care activities) (HC.1–HC.7) plus HCR.1 Capital Formation, while NHE covers all spending pn both core and non-core health (other health-related) activities such as training, education, research and development, food, hygiene and drinking water, environmental health as well as administration in provision of non-core health related activities/services. This distinction was not found useful for Ethiopian policy decisions. The body of this report does not make such distinction, and, unless specified otherwise, THE includes spending on both core and health-related activities. However, the annex tables show the detailed functions on which expenditures are made, and could be used to generate THE and NHE summaries for international comparison.

[21] In 2010/11, the annual average exchange rate was US$1 = Birr 16.1178 (National Bank of Ethiopia 2010). This rate was applied to convert Birr into U.S. dollars, and vice versa.

[22] The spending in local currency (Birr) has more than doubled because of exchange rate gain; in U.S. dollar terms, the increase is less substantial, only 38 percent. Also, because the bulk of the increment is from donors, the Birr amount of the rest of the world and its share of THE has significantly increased. Nor is the increment significant when one takes inflation into account; when this is done, real health expenditure grew only by about 34 percent.

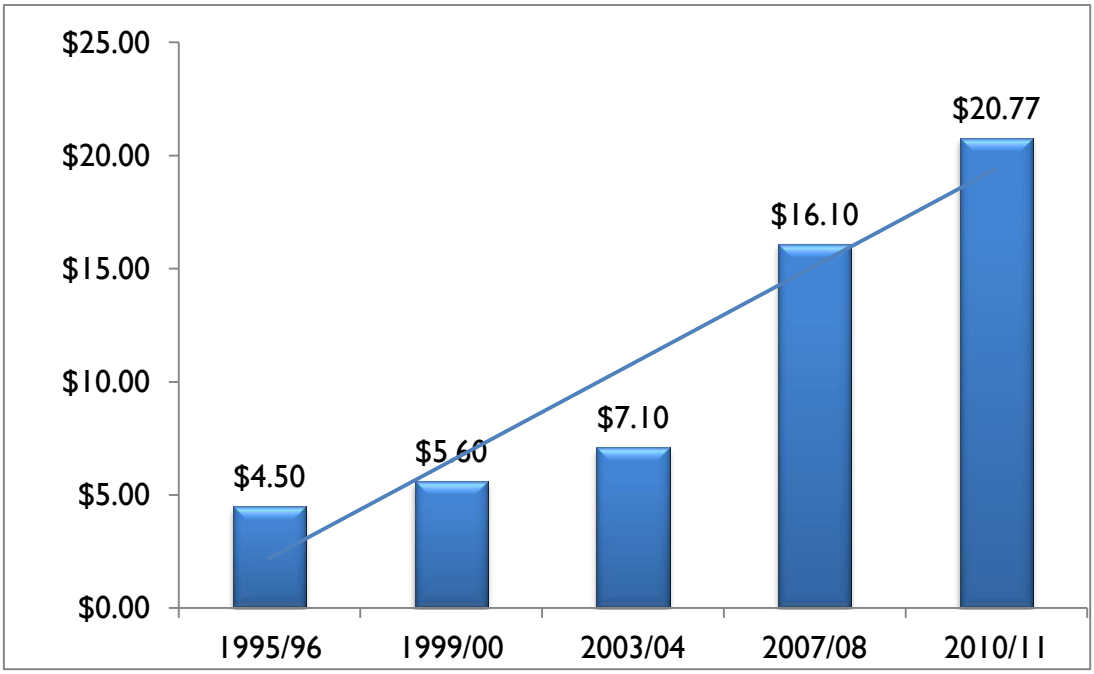
[23] MOFED (2011) indicates that total GDP in 2010/11 was Birr 511.156 billion.

[24] The total population used for per capita estimation is 79,045,498, the Central Statistical Agency population projection for 2010/11. (CSA 2008)

Total public sector health expenditure as a share of the country's total government expenditure reached 5.6 percent in 2010/11, a modest increment from its 5 percent share in 2007/08.[25] This is far less than the Abuja commitment to spend 15 percent of the government budget on health. This shows that although health spending as a share of GDP is acceptable, there is a high dependence on donors for financing of health, making sustainability of health financing a serious concern.

This round of NHA also determined that per capita health expenditure rose from Birr 150.48 (US$16.10) in 2007/08 to Birr 334.81 (US$20.77) in 2010/11.[26] In fact, the various rounds of NHA studies show that per capita health spending has risen steadily (Figure 3.1). Nevertheless, per capita health spending is far from the $34 recommended by WHO in 2001 (since revised to $60) to deliver essential health care in low-income countries like Ethiopia. It is also less than the average spent (US$22 in 2006) by 49 low-income countries with per capita income of $935 or less (WHO 2010a). It is unlikely that Ethiopia will reach its HSDP-IV target for per capita health spending of $32.2 by the end of the program in 2014/15.

Figure 3.1: Trend in Per Capita Health Spending, 1995/96-2010/11



Source: Source of data for 1995/96, 1999/00, 2003/04 and 2007/08 is FMOH (2010a); data for 2010/11 is from the current NHA.

[25] The Annual Report for 2010/11 of the National Bank of Ethiopia (2010) showed that total government expenditure in 2010/11 was Birr 93.8 billion, of which Birr 19.992 billion was from grants and the rest from internal revenue and loans. Since efforts are made to track all grants to health sector and show the source as the rest of the world (donors), the total government spending from domestic sources and loan is Birr 78.414 billion.

[26] If measured in terms of purchasing power parity (PPP), the per capita spending would be approximately US$58.36. PPP is estimated for a hypothetical international dollar that is used to translate and compare costs from one country to another using the U.S. dollar as a common reference point. For Ethiopia in 2005, US$1 would have be equivalent to 2.81 international dollar units in terms of purchasing power.

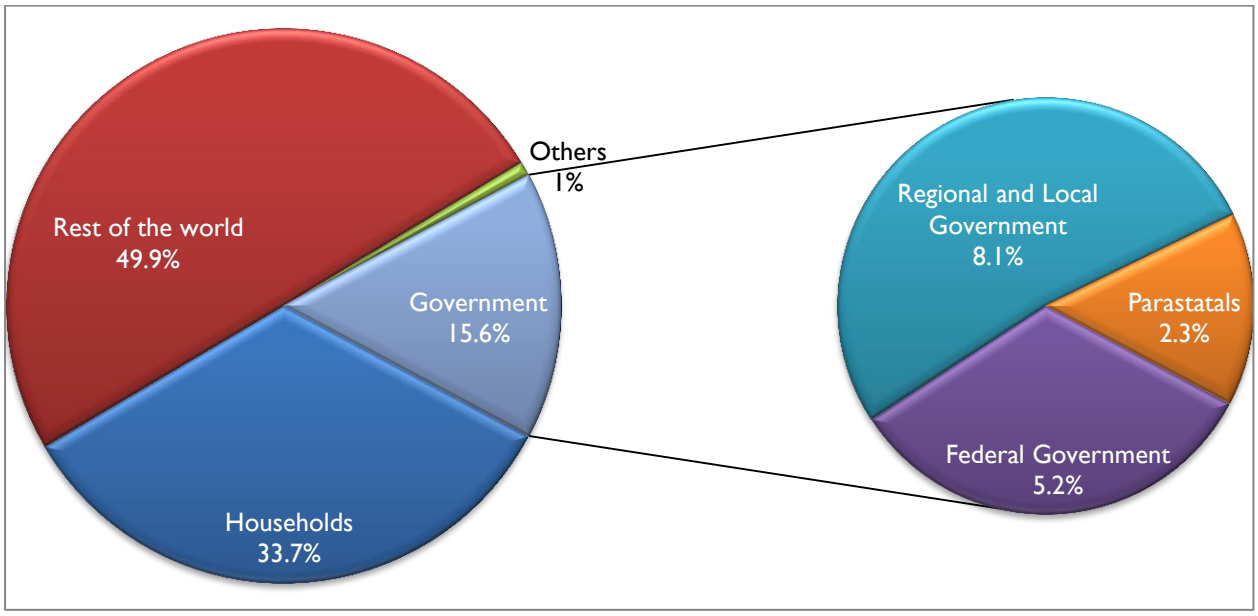
3.2 Financing Sources of General Health Care

The rest of the world (donors and international NGOs) contributed the lion's share – 50 percent – of spending on health in Ethiopia in 2010/11, up from 40 percent in 2007/08 (Figure 3.2). This increase in absolute and relative terms is attributable mostly to new initiatives like the GAVI Health System Strengthening and the MDG Performance Pool Fund. In addition, several donors that did not participate in previous NHA studies provided their spending data for this estimation.

Households represent the second largest financing source, accounting for about 34 percent of THE. Government (federal, regional, and parastatals) accounted for close to 16 percent. All other sources contributed less than 1 percent. As was shown in Table 3.1, though its share out of THE declined, overall government spending on health has increased by 67 percent. Of government spending on health from its own (domestic) sources, more than half (Birr 4.1 billion, or 52 percent) came from regional and local governments, 33 percent from the central government, and 15 percent from public enterprises (parastatals).

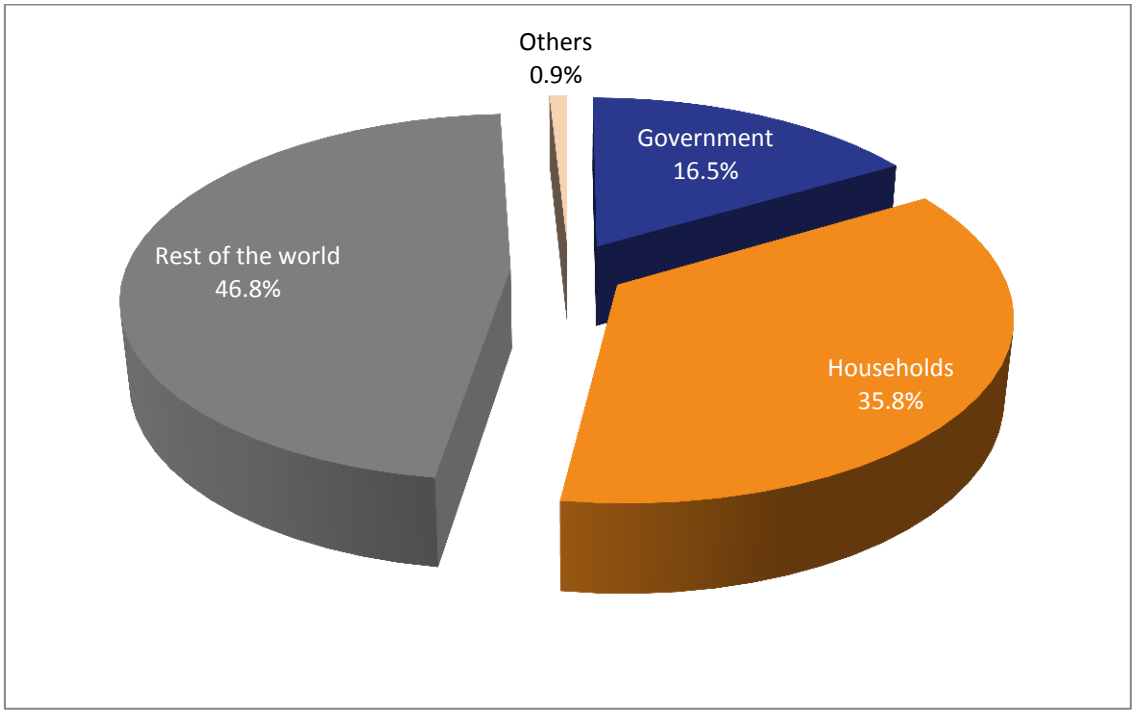
In-kind contributions, such as from new initiatives like the Health Development Army (HDA), and voluntary services provided by health workers, other government staff, and community members, are not captured in NHA.

Figure 3.2: Spending on General Health Care, by Financing Source



As noted above, in this round NHA all donors reported their spending in health sector in the reporting year. For instance, if we remove one of the major donors that reported its spending for NHA for the first time, the share of donors would reduce to 47%, see Figure 3.3.

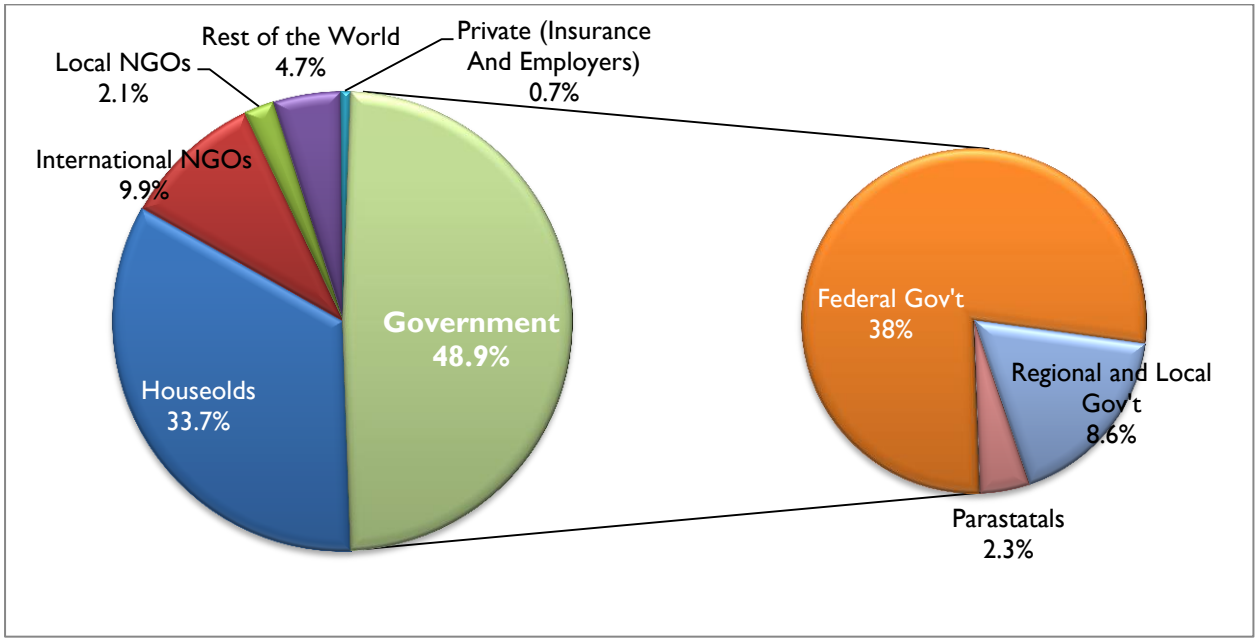
Figure 3.3: Spending on General Health Care, by Source (after deducting spending from one major donor that reported for the first time)



3.3 Financing Agents of Spending on General Health Care

Though the government's share of health spending declined from 21 percent in 2007/08 to 15.6 percent in 2010/11, the government's management of health resources has increased significantly, from 42 percent in 2007/08 to nearly half (49 percent) in 2010/11 (Figure 3.4). This is mainly because major donor programs including Global Fund grants, GAVI Health System Strengthening, PBS, and the MDG Performance Pool Fund are managed by the FMOH and other government agencies. This is a positive development as it enables the government to direct program resources to priority areas. Households manage 34 percent, all of their out-of-pocket health spending (and essentially all of their spending). All other financing agents together managed only 17 percent of THE. Insurance schemes managed less than 1 percent.

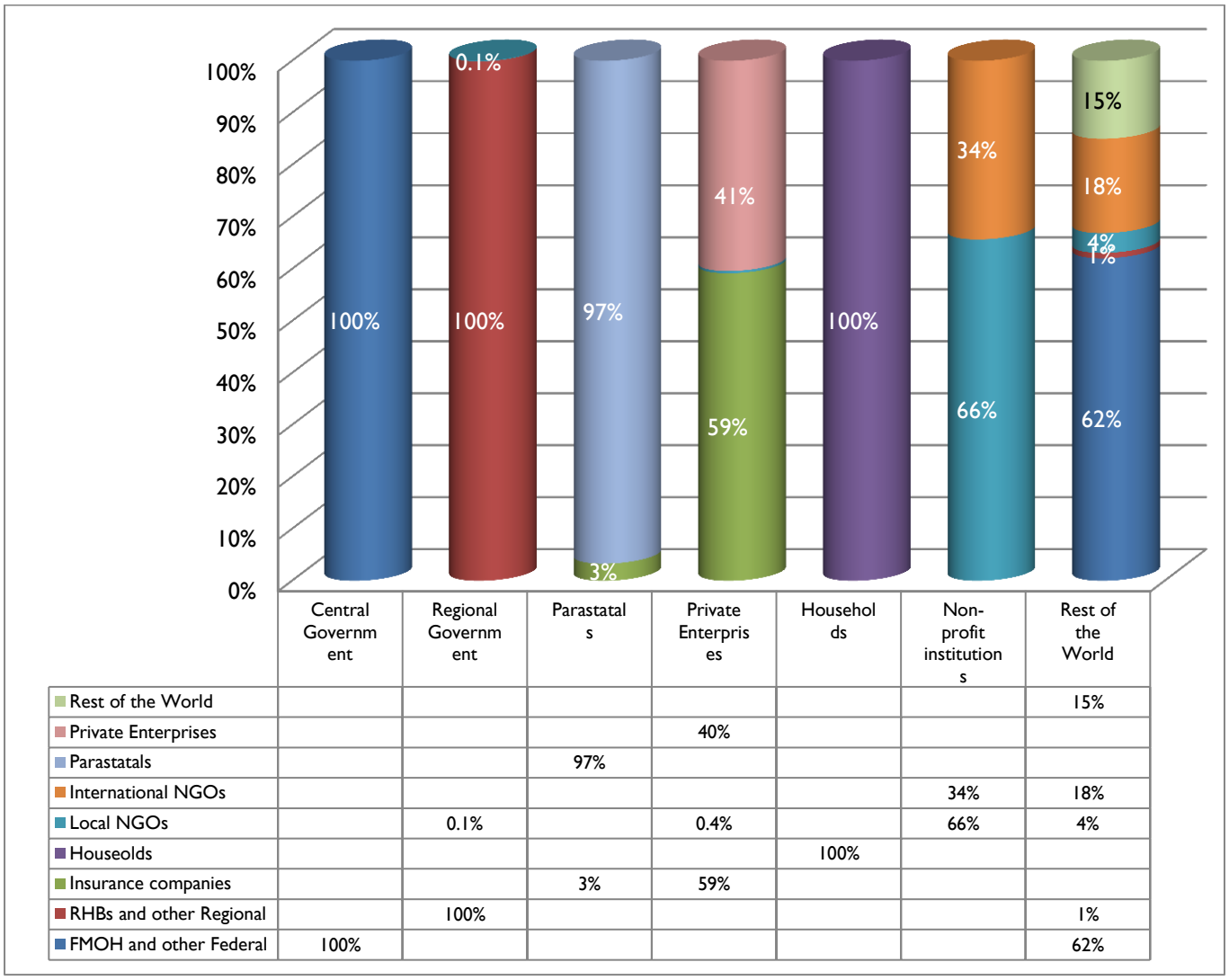
Figure 3.4: Spending on General Health Care, by Financing Agent



As Figure 3.5 shows, health expenditure by government sources at federal, regional, and subregional levels is channelled to government ministries and agencies at federal and regional levels. Most funding from parastatals is managed by the parastatals themselves; only 3 percent is channeled through insurance companies. As noted above, households manage nearly all their spending; a negligible amount goes to risk pooling and health insurance. In contrast, a large share of spending by private enterprises (59 percent) is managed by health insurance; the rest they self-manage.

Figure 3.5 also shows the significant proportion (62 percent) of spending by donors like the Global Fund and GAVI that is channelled through the government. Although the MDG Performance Pool Fund was established several years ago, 2010/11 is the first time that its spending has been captured by a NHA study.

Figure 3.5: Flow of Health Funding from Financing Source to Financing Agent

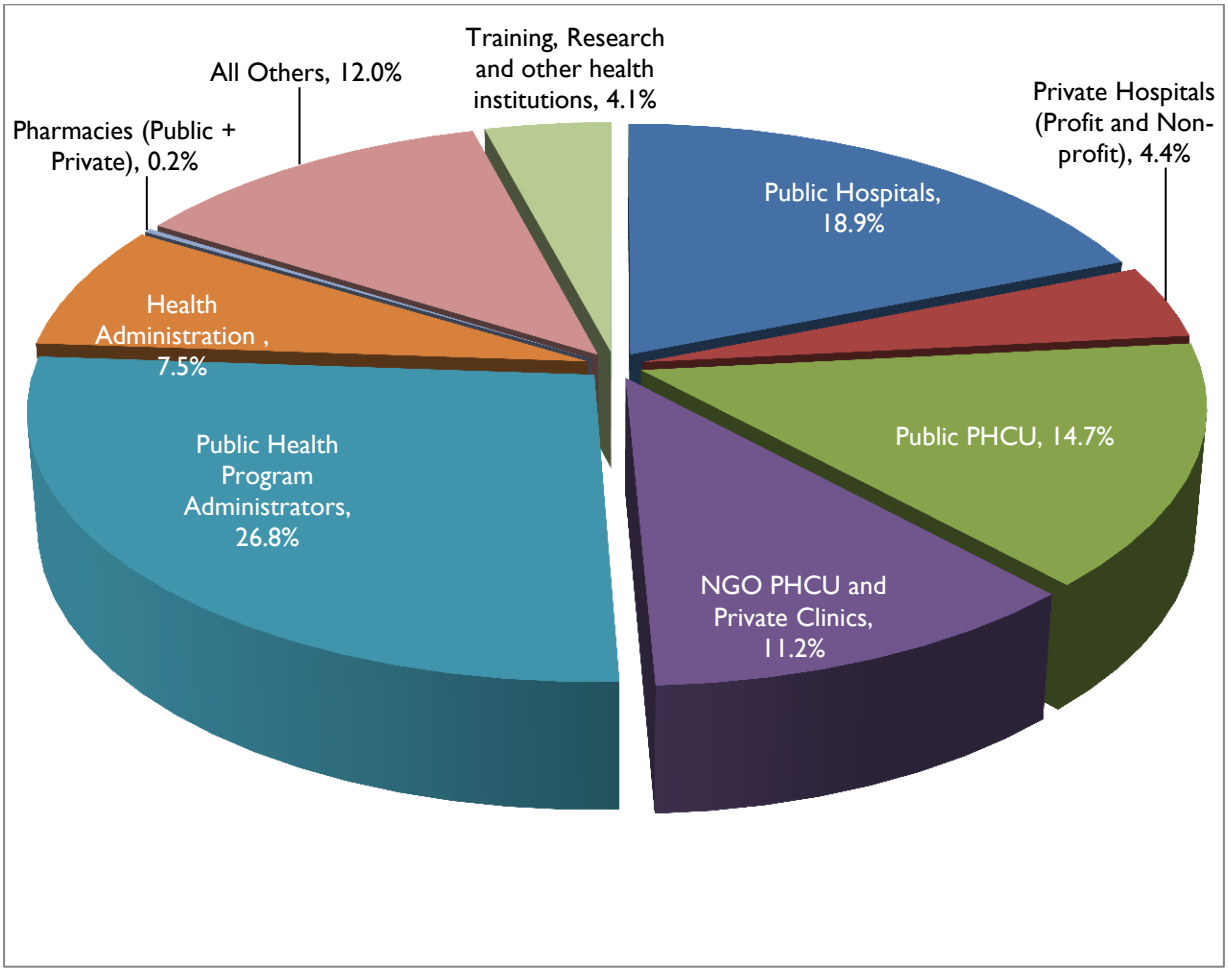


	Central Government	Regional Government	Parastatals	Private Enterprises	Households	Non-profit institutions	Rest of the World
Rest of the World							15%
Private Enterprises				40%			
Parastatals			97%				
International NGOs						34%	18%
Local NGOs		0.1%		0.4%		66%	4%
Houseolds					100%		
Insurance companies			3%	59%			
RHBs and other Regional		100%					1%
FMOH and other Federal	100%						62%

3.4 Flow of Funding to Providers of General Health Care

Spending on providers of public health programs accounts for more than one quarter (27 percent) of THE (Figure 3.6). These programs include non-health facility-based prevention and health service promotion programs such as HIV/AIDS prevention and community mobilization for immunization. Government-owned hospitals, health centers, and other facilities account for about 34 percent of THE. Privately owned health facilities (both for-profit and nonprofit) including hospitals, clinics and PHCUs receive nearly 16 percent. Over 7.5 percent of the total spending goes to administrators of health services.

Figure 3.6: Spending on General Health Care, by Provider

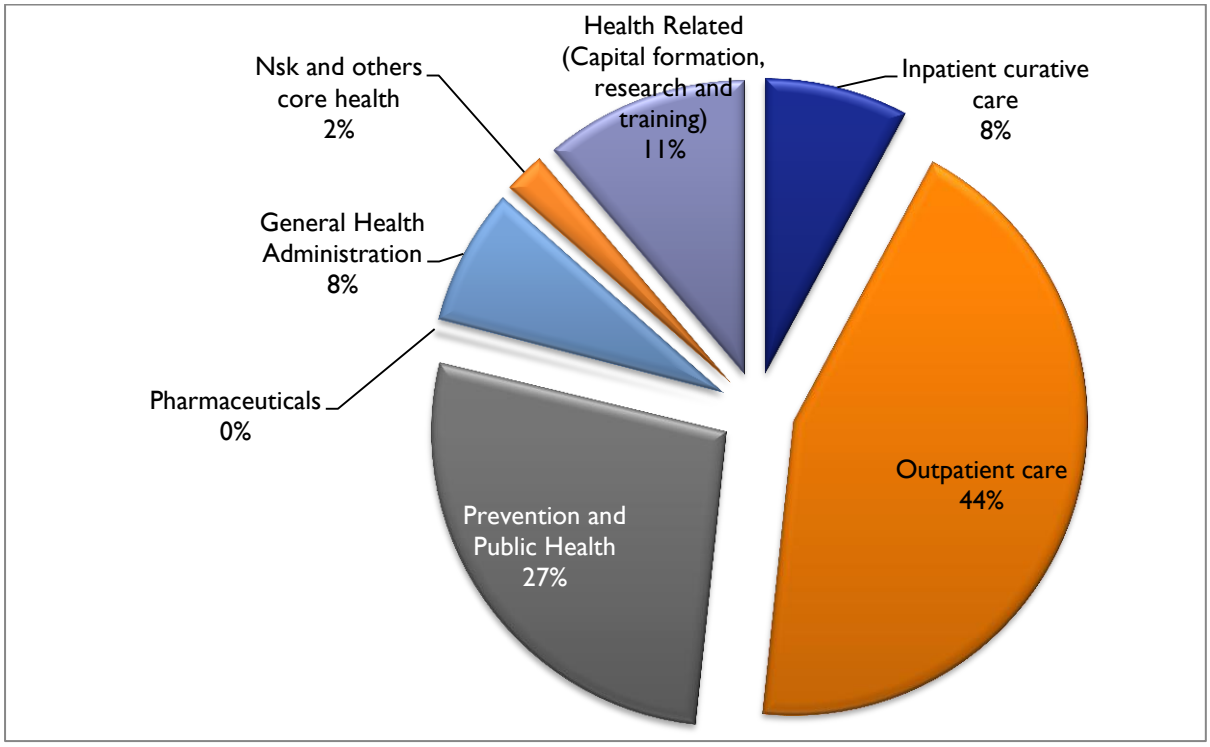


3.5 Spending on Functions of General Health Care

Inpatient and outpatient curative care services consume slightly more than half (52 percent) of THE (Figure 3.8). Prevention and public health services consume 27 percent of the total spending. Much smaller shares of spending, 7.1 percent and 4.2 percent, go to capital formation and to health education/trainings and other health-related services, respectively. General health services – services related to administration, management, and coordination of general health services provision – account for 8 percent. Household spending on pharmaceuticals[27] purchased from standalone pharmacies is negligible; households may include this spending in their spending on outpatient care.

Compared to the previous NHA (2007/08) spending on outpatient care increased from 35 percent in 2007/08 to nearly 44 percent in 2010/11. Spending on capital formation, prevention and other public health programs, and general health administration remained more or less the same.

Figure 3.8: Spending on General Health Care, by Function



[27] Spending on pharmaceuticals refers to purchase of drugs from standalone pharmacies outside the outpatient and inpatient treatment. All pharmaceutical supplies related to outpatient and inpatient services provided at the health facility level are covered as part of the respective functions.

3.6 Overview of Health Spending by Health Priority Area

In addition to knowing expenditure levels and flows of resources in the health sector overall, having similarly detailed information for priority health areas also is critical for making decisions about health financing policy, and answering questions like, is the funding level reasonable compared to the overall health sector envelope? the disease burden? NHA subaccounts were developed to provide this kind of information.

In Ethiopia, spending in priority areas was analyzed for the third time. The third round of NHA looked at two areas (reproductive and child health) and the fourth round covered six (HIV/AIDS, reproductive health, child health, malaria, TB, and health information systems). Based on the experience and policy use of findings of previous NHA, all but health information systems were included in this round. This section touches upon the remaining five subaccounts here; more detailed expenditure information about each is in subsequent chapters (4–8).

There was a significant increase in spending on each priority area between 2007/08 and 2010/11 (Table 3.2). The share of spending on malaria increased more than sevenfold, mainly due to a substantial ITN procurement by donors and Global Fund spending on malaria. The increment in spending on reproductive health (186 percent) and child health (179 percent) exceeded that of general health spending (138 percent). Spending on HIV/AIDS more than doubled (118 percent) and spending on TB nearly doubled (84 percent) from 2007/08.

Table 3.2: Health Spending by Priority Areas, 2007/08 and 2010/11

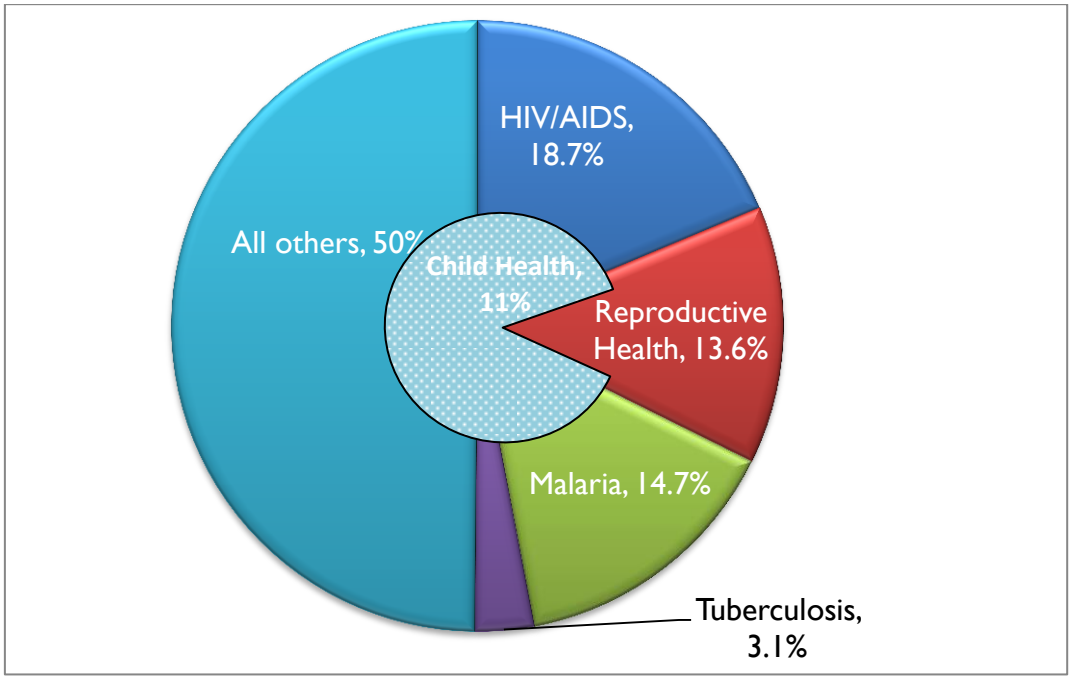
Spending Priority Areas	2007/08 (Birr)	%	2010/11 (Birr)	%	Increase in nominal spending (%)
HIV/AIDS	2,263,206,924	20%	4,943,098,817	19%	118%
Reproductive Health	1,411,728,484	13%	3,611,831,961	14%	156%
Malaria	519,538,250	5%	3,891,885,761	15%	649%
Tuberculosis	447,461,443	4%	824,619,769	3%	84%
Four sub-accounts total (Less of child health spending)	4,641,935,101	42%	13,271,436,308	50%	186%
Child health	1,066,917,786	10%	2,974,024,300	11%	179%
All others	6,481,087,012	58%	13,193,429,946	50%	104%
General health	11,123,022,113	100%	26,464,866,254	100%	138%

Source: Source of data for the first column is FMOH (2010a); data for 2010/11 is from the current NHA.

As explained above, the NHA methodology defines boundaries and tries to avoid double counting between subaccounts. Whenever there is spending on a co-infection (e.g., HIV and TB) or a service or commodity that serves more than purpose (e.g., use of condoms for HIV prevention and family planning), the NHA methodology attributes the expenditure to its primary purpose. The only exception is the child health subaccount, which overlaps with all priority areas except reproductive health. Thus, expenditures on HIV/AIDS, malaria, and TB for children under five years are double counted under child health and the other respective subaccounts. For this reason, the four subaccounts together accounted for half (50 percent) of THE in 2010/11, an increase from 42 percent in 2007/08.

In Ethiopia, noncommunicable diseases (NCDs) are increasingly important health issues. Though spending on NCDs were not analyzed as a separate subaccount, households were asked to report on their NCD burden. More specifically, they were asked about expenditures on cancer, diabetes, hypertension, and mental health. People attributed 5 percent of outpatient visits and more than 7 percent of inpatient admissions to these four diseases. They also attributed 13 percent of deaths to them.

Figure 3.9: Health Spending by Priority Area



The HIV/AIDS share of overall health spending decreased slightly between 2007/08 and 2010/11, from 20 percent to 19 percent; spending on reproductive health increased from 13 percent to 14 percent; spending on TB fell from 4 percent to 3 percent, though it almost doubled in total nominal spending. The share of child health increased from 10 percent to 11 percent. A significant change is recorded in the share of spending on malaria from 5 percent in 2007/08 to 15 percent in 2010/11, again, because of donor programs.

As Tables 3.3 and 3.4 show, with regard to sources of financing, donors are the major source overall: HIV/AIDS (83 percent), reproductive health (47 percent), malaria (79 percent), and TB (51percent). The only priority area where domestic source(s) (households, 48 percent) predominate is child health, and even there, donors cover 27 percent. Compared to donor spending on child health in 2007/08, it has increased by 20 percent.

Table 3.3: Amounts of Spending on Health Priority Areas by Sources of Financing (Birr)

Source of Finance	General Health	HIV/AIDS	Reproductive Health	Child Health	Malaria	Tuberculosis	Four sub-accounts total (Less of CH)	All others
Government	4,126,681,043	698,096,279	894,404,909	736,693,560	273,257,091	96,940,258	1,962,698,537	2,163,982,507
Households	8,926,754,560	96,684,908	996,845,339	1,425,414,427	549,973,912	296,778,993	1,940,283,152	6,986,471,407
Other Private Sources	217,511,290	28,627,324	21,905,016	5,547,099	8,637,083	7,250,880	66,420,303	151,090,987
Rest of the	13,193,919,360	4,119,690,305	1,698,676,697	806,369,214	3,060,017,675	423,649,638	9,302,034,315	3,891,885,045
Grand Total	**26,464,866,254**	**4,943,098,817**	**3,611,831,961**	**2,974,024,300**	**3,891,885,761**	**824,619,769**	**13,271,436,307**	**13,193,429,946**
Share of Priority Areas and Others in %	**100%**	**18.7%**	**13.6%**	**11.2%**	**14.7%**	**3.1%**	**50.1%**	**49.9%**

Table 3.4: Shares of Spending on Health Priority Areas by Sources of Financing

Source of finance	General Health	HIV/AIDS	Reproductive health	Child health	Malaria	TB	All 5 Sub-accounts total	All others
Government	16%	14%	25%	25%	7%	12%	15%	16%
Households	34%	2%	28%	48%	14%	36%	15%	53%
Other private	1%	1%	1%	0%	0%	1%	1%	1%
Rest of the world	50%	83%	47%	27%	79%	51%	70%	29%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%

4. HIV/AIDS SUBACCOUNT FINDINGS

Summary of Key Findings

- HIV/AIDS expenditure accounted for 19 percent of the country's NHE in 2010/11. This is a 1 percentage point decline from 2007/08.
- However, HIV/AIDS spending (in nominal terms) increased from Birr 2.3 billion (US$248 million) in 2007/08 to Birr 4.9 billion (US$307 million) in 2010/11 (118 percent increase).
- Per capita PLHIV spending is US$252 compared with US$180 in 2007/08.
- Financing sources: The major financing sources of HIV/AIDS expenditures are the rest of the world (83 percent), government (14 percent), and households (2 percent).
- Financing agents: Government manages the largest share of HIV/AIDS resources (68 percent); rest of the world and households manage 16 percent and 2 percent, respectively.
- Providers: Fifty one percent of HIV/AIDS expenditure is utilized by providers of public health programs, 15 percent by general health administration, 10 percent by public PHCUs (health centers and health posts), and 9 percent by public hospitals.
- Functions: Fifty percent of the HIV/AIDS resources are spent on prevention of HIV transmission, 21 percent on HIV outpatient care, and 15 percent on HIV general health administration; the remaining 14 percent goes to capital formation (9 percent), HIV education, training, and research (3 percent), and HIV inpatient care (2 percent).

4.1 Introduction

HIV/AIDS is one of the most serious public health and development challenges in Ethiopia. According to the 2011 EDHS, 1.5 percent of the population ages 15–49 are HIV positive. HIV prevalence is higher among women (1.9 percent) than among men (1.0 percent). Even though this rate seems low, HIV/AIDS now affects all sectors of Ethiopian society. The future course of the HIV/AIDS epidemic in the country depends on a number of factors including knowledge about HIV/AIDS, social stigmatization, risk behavior change, provision of HIV counseling and testing, access to high-quality services for sexually transmitted infections (STIs), and access to ART.

The government of Ethiopia has expended great effort to increase the availability and accessibility of HIV prevention services, which has resulted in a substantial reduction in new infection and prevalence. However, HIV/AIDS is still a major health and socioeconomic challenge for the country, and prevention efforts targeting youth (in school and out of school) and most-at-risk populations need be further strengthened.

The fifth round of NHA revealed that total national HIV/AIDS expenditure is Birr 4.9 billion (US$306.7 million). This indicates that HIV/AIDS health expenditure increased by Birr 2.6 billion (US$162.8 million) from Birr 2.3 billion (US$248 million) in 2007/08, a 118 percent increase. It should be noted that this increase in HIV/AIDS expenditure might be attributed to the inclusion of HIV/AIDS expenditure data from donors that did not report in 2007/08.

Spending on HIV/AIDS non-health expenditures[28] increased from Birr 56,387,740 in 2007/08 to Birr 85,078,584 in 2010/11.[29] The per capita HIV/AIDS NHE for the total population of country grew from US$3.27 to US$3.88, and the per capita per adult population living with HIV/AIDS grew from US$180 to US$252[30] in the same period.

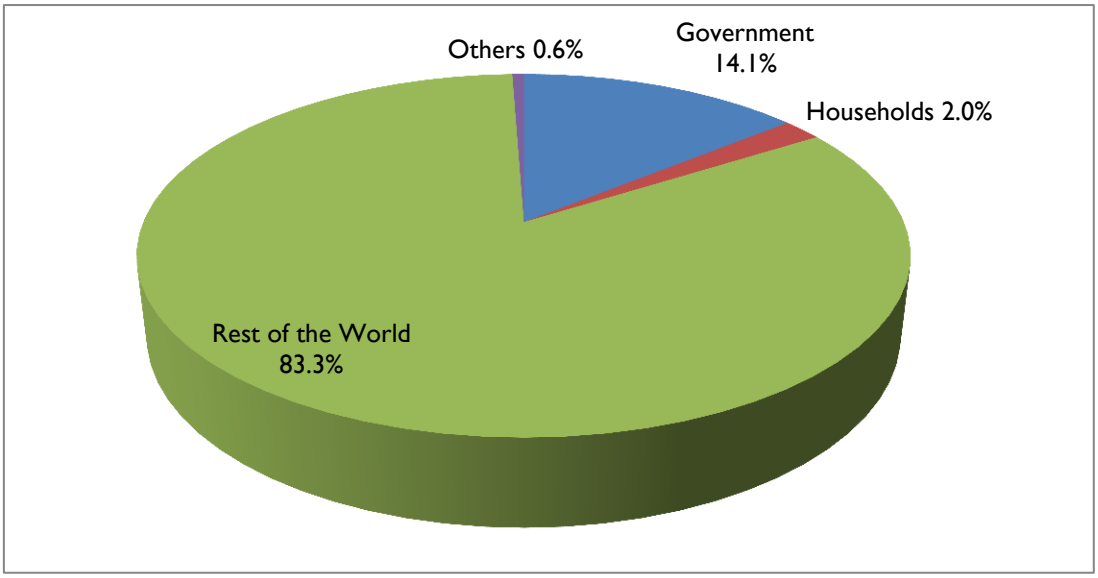
4.2 Financing Sources of HIV/AIDS Health Care

With the onset of the global economic downturn, international support for HIV/AIDS services in low- and middle-income countries began to show a decline (UNAIDS 2012). This situation forces recipient countries to consider how to mobilize local resources for their HIV/AIDS programs. However, evidence suggests that the majority of these countries still rely heavily on international assistance.

As depicted in Figure 4.1, the rest of the world provides a significant share of HIV/AIDS financing in Ethiopia, Birr 4.1 billion (US$248.8 million) (83.3 percent). The government contributes US$42million (14.1 percent). PLHIV (principally out of pocket) spent about US$6 million (2.0 percent), and other entities contribute US$1,792,361 (0.6 percent). Private spending on HIV/AIDS (PLHIV out-of-pocket and private employers) was less than 3 percent of NHE on HIV/AIDS.

Contributions (share) of the rest of the world decreased slightly between 2007/08 and 2010/11, from 84 percent to 83.3 percent. Spending by PLHIV (out of pocket) [31] and private employers fell from 4.6 percent to 2.0 percent and from 1 percent to 0.6 percent, respectively.

Figure 4.1: Spending on HIV/AIDS Care, by Financing Source



[28] Non-health activities are those whose principal purpose is not health care, but rather mitigation of the impact of HIV/AIDS on individuals and the population, such as care for orphans and vulnerable children, and policy advocacy. Though the NHA team attempted to gather comprehensive data on non-health HIV/AIDS spending, this might be substantially underestimated.

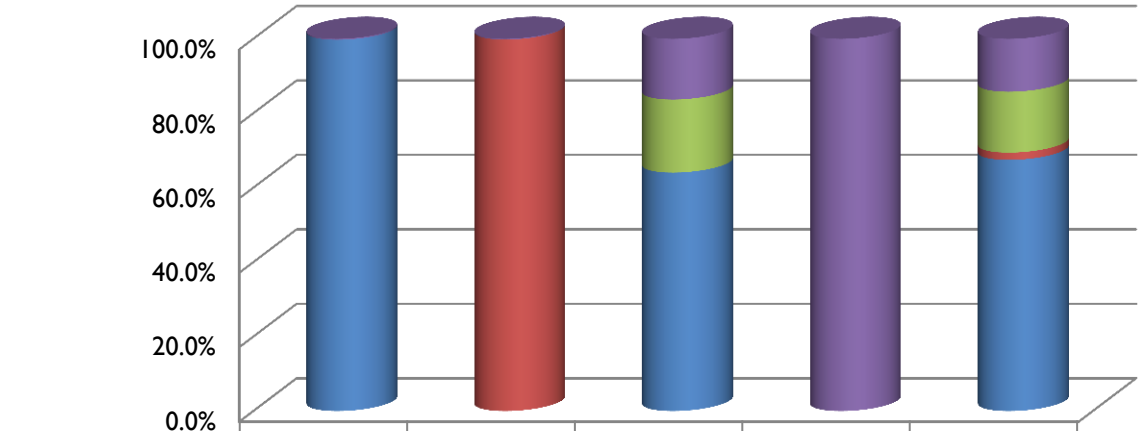
[29] The growth is negative when considered in terms of U.S. dollars.

[30] The total PLHIV population (1,216,908) is from FMOH (2011).

[31] The total number of people in need of ART in 2010/2011 was 400,251 as estimated by the PLHIV survey done for this NHA. (FMOH, 2014b). The PLHIV survey covered members of PLHIV associations and networks almost all of whom are either under ART or in need of ART, and the survey represents this segment of the PLHIV population.

As depicted in Figure 4.2, government and household originated resources are managed by themselves. On the other hand most of the rest of the world resource (64.1 percent) is managed by government.

Figure 4.2: Flow of HIV/AIDS Funds from Financing Source to Financing Agent



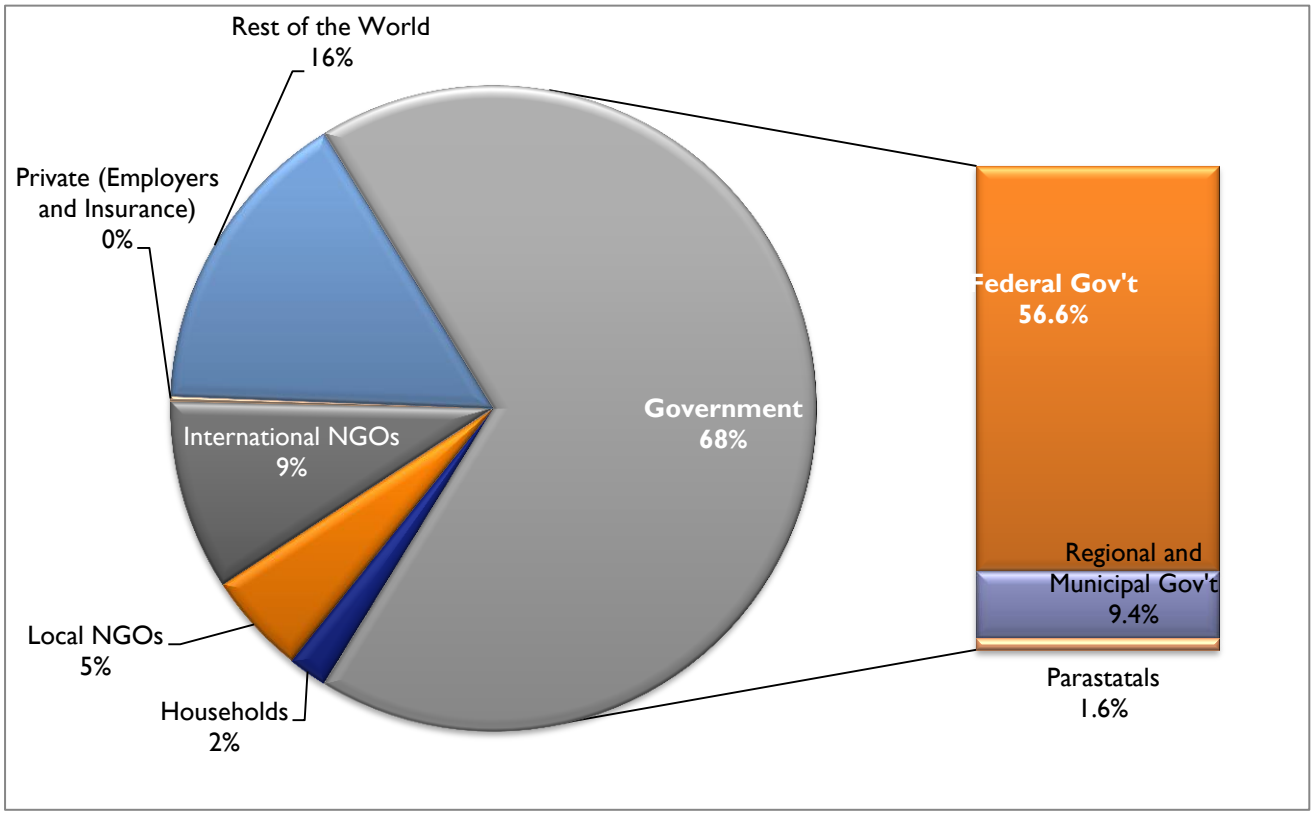
	Government	Households	Rest of the World	Others	Total
Others	0.3%	0.2%	16.3%	100.0%	14.2%
Rest of the World			19.6%		16.4%
Households		99.8%			2.0%
Government	99.7%		64.1%		67.5%

4.3 Financing Agents of HIV/AIDS Health Care

As shown in Figure 4.3, the major financing agent of HIV/AIDS funds was the government, which manages more than two-thirds (68 percent) of the expenditures; the federal government manages 57 percent, regional and local governments 9 percent, and parastatals 2 percent. The government share is followed, distantly, by the rest of the world (16 percent). Other entities, such as international and local NGOs, managed 14 percent of total HIV/AIDS expenditures. PLHIV out-of-pocket payments accounted for 2 percent. Finally, private entities (employers and insurance) accounted for less than 1 percent.

In the fourth round of NHA, the government, the rest of the world, and other private sector entities managed 48.1 percent, 39.7 percent, and 8.7 percent of HIV/AIDS expenditures, respectively. The PLHIV out-of-pocket spending represented 3.5 percent. This shows a shift in programmatic responsibilities for HIV/AIDS funds, from the rest of the world and other private sector entities to the government. This shift will contribute greatly to meeting the national goals in the fight against HIV/AIDS.

Figure 4.3: Spending HIV/AIDS Health Care, by Financing Agent

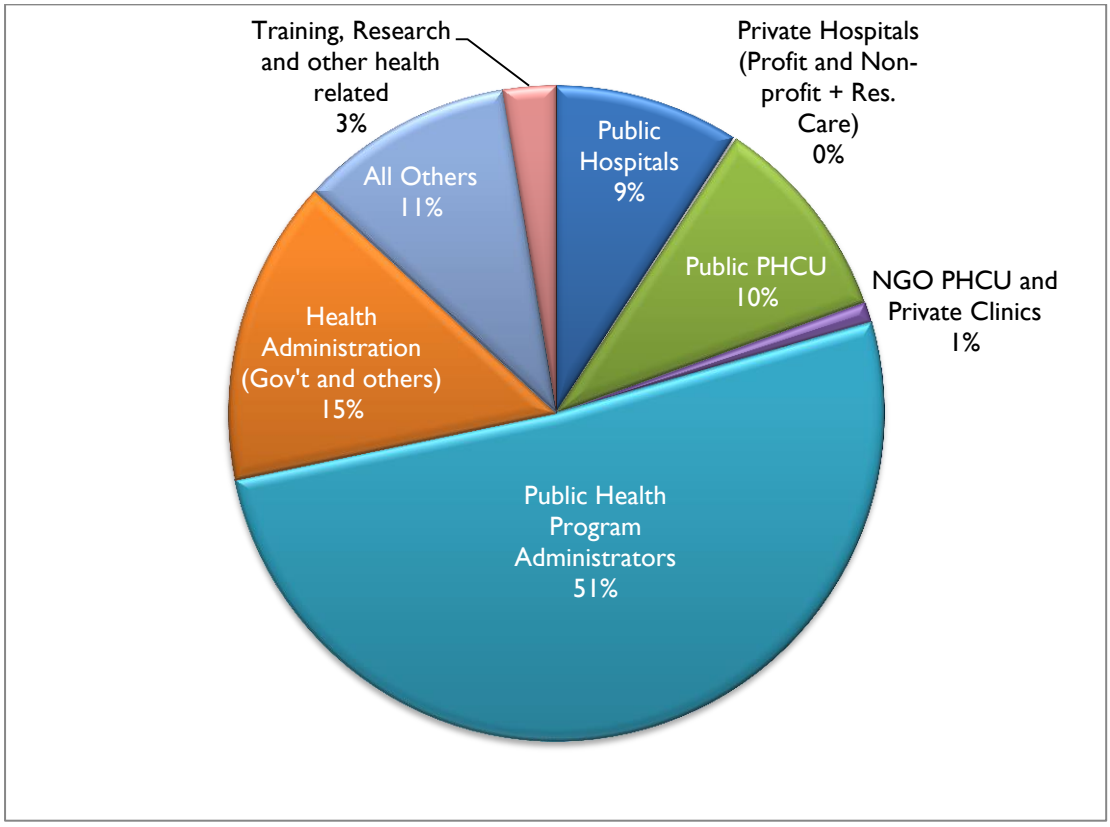


4.4 Providers of HIV/AIDS Care

Figure 4.4 shows the breakdown of HIV/AIDS expenditure by providers. Provision and administration of public health programs receives just over half of total HIV/AIDS spending, 51 percent. The second largest share of spending (15 percent) goes to general health administration (government and others). Public PHCUs get 10 percent; public hospitals 9 percent; education, training, and research institutions 3 percent; and all other providers get about 12 percent.

These percentages reflect changes since the 2007/08 when over 72 percent of HIV/AIDS funds was spent on the provision and administration of public health programs, 15 percent on public PHCUs, and slightly more than 5 percent on providers of general health administration.

Figure 4.4: Spending on HIV/AIDS Care, by Provider



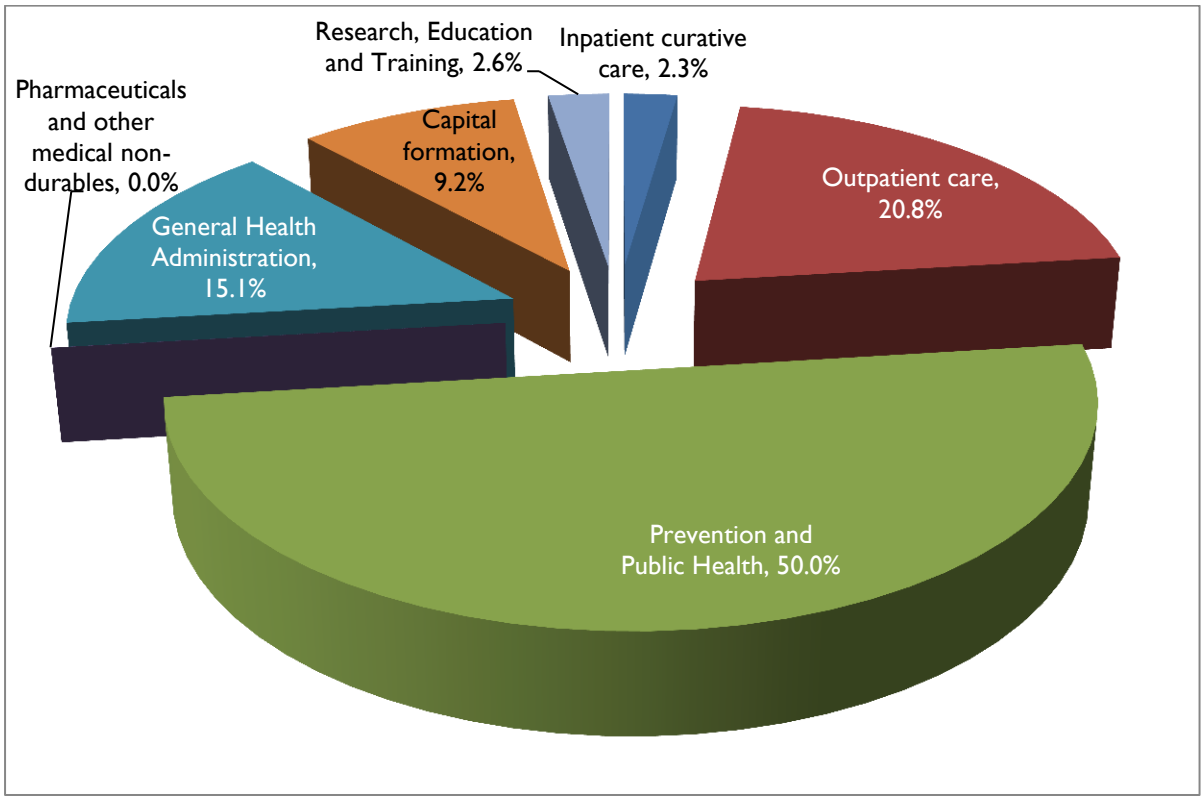
4.5 Functions of HIV/AIDS Health Care

In 2010/11, almost all (US$298,835,076, or 97.4 percent) of the total national HIV/AIDS expenditure was spent on core health functions: prevention of HIV transmission, HIV curative care services, government general administration of services, pharmaceuticals and other medical non-durables, and capital formation (Figure 4.5). HIV/AIDS health-related services (basically education, training, and research) consumed US$7,850,627 (2.6 percent).

Out of the total national HIV/AIDS expenditure which is Birr 4.9 billion (US$306.7 million), Birr 2.5 billion (US$153.5 million) (50.0 percent) is spent on prevention of HIV transmission, Birr 1 billion (US$63.9 million) or 20.8 percent on HIV outpatient care, about Birr 745 million (US$46.3 million) or 15.1 percent on general health administration of HIV services, Birr 455 million (US$28 million) or 9.2 percent on HIV capital formation.

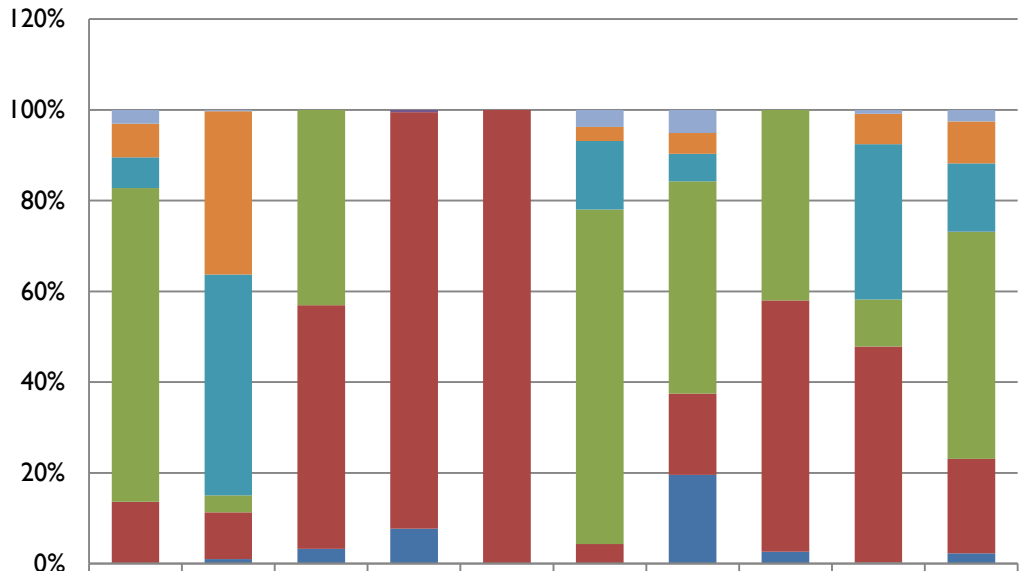
The significant proportions of HIV/AIDS funds (50 percent) spent on the prevention of HIV transmission reflects the government's successful effort to reduce the number of new HIV infections, as evidenced by a drop in both incidence and prevalence of HIV. A UNAIDS World AIDS Day Report 2012 indicated that Ethiopia had reduced new infections by 90 percent in the preceding decade (UNAIDS 2012). Similarly, the HIV prevalence rate also declined from 3.6 percent in 2001 to 1.4 percent in 2011 (WHO 2014)

Figure 4.5: Spending on HIV/AIDS Care, by Function



Most federal government (predominantly HAPCO)-managed and international and local NGO-managed HIV/AIDS resources go to prevention and public health programs (Figure 4.6). A good portion of parastatal and private enterprise spending also funds prevention. Household and private insurance company spending goes mostly to outpatient care, with a marginal amount going to inpatient services.

Figure 4.6: Flow of HIV/AIDS Funds from Financing Agents to Functions



	Federal Gov't	Regional and Municipal Gov't	Parastatals	Household	Private insurance	Local NGOs	International NGOs	Private for profit companies	Rest of the World	Sub-Total
Research, Education and Training	3%	0%	0%	0%	0%	4%	5%	0%	1%	3%
Capital formation	7%	36%	0%	0%	0%	3%	5%	0%	7%	9%
General Health Administration	7%	49%	0%	0%	0%	15%	6%	0%	34%	15%
Pharmaceuticals and other medical non-durables	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Prevention and Public Health	69%	4%	43%	0%	0%	74%	47%	42%	10%	50%
Outpatient care	13%	10%	54%	92%	100%	4%	18%	55%	48%	21%
Inpatient curative care	0%	1%	3%	8%	0%	0%	20%	3%	0%	2%

4.6 The Burden of Expenditure by People Living with HIV

PLHIV spent out-of-pocket US$5,986,589 (2.0 percent) of the total US$306,685,703 spent on HIV/AIDS in 2010/11. Though this share is less than the 3.6 percent in 2007/08, the financial burden it imposes cannot be overlooked. It means that on average each of the 400,251 PLHIV in need of ART (FMOH, forthcoming 2014) represented in this round of NHA spent about US$15 in 2010/11 – an amount more than twice the per capita out-of-pocket spending of the general population on overall health care (US$7.25) (FMOH, forthcoming 2014). This burden on HIV-positive Ethiopians is far more than the group can afford, given the socioeconomic situation of those infected.

Table 4.6: PLHIV Out-of-Pocket Spending by Type of Health Services

HIV/AIDS Services and Commodities	Spending (Birr)	Percentage Share
Inpatient care	7,401,645	7.67%
Outpatient care	88,617,851	91.84%
Pharmaceuticals dispensed to outpatients	471,152	0.49%
Total	96,490,649	100.00%

As in 2007/08, although PLHIV get ART drugs for free, they still spend appreciable amount at both government and private pharmacies for drugs to treat HIV-related health problems such as skin lesions and infections, gastro-intestinal infections, prolonged fever, stomach ache, chronic diarrhea, coughing up blood, and white patches on tongue.

PLHIV also make expenditures on HIV preventive products and for both outpatient and inpatient services at the time of illness. Their purchases include condoms, consultations, lab tests, X-rays, treatment of STIs, TB, voluntary counseling and testing, HIV-related information, education and communication, psychological support, antenatal care, and deliveries. They also spent a significant amount on care-related transportation, lodging, and food, including for caregivers.

5. REPRODUCTIVE HEALTH SUBACCOUNT FINDINGS

Summary of Key Findings

- Reproductive health expenditure accounted for 14 percent of the NHE in 2010/11, a 1 percent increase from 2007/08.
- However, the overall spending increased 156 percent, from Birr 1.4 billion (US$150.9 million) in 2007/08 to Birr 3.6 billion (US$224.1 million) in 2010/11.
- The per capita spending per woman of reproductive age was Birr 195 (US$12) compared with Birr 75 (US$8) in 2007/08.
- Financing sources: The major financing sources of reproductive health are the rest of the world (47 percent), households (28 percent), and government (25 percent).
- Financing agents: Government managed the largest share of reproductive health care resources (52 percent), followed by households (28 percent) and others (20 percent).
- Providers: More than 23 percent of reproductive health expenditure is consumed by public hospitals. Providers of public health programs and general health administration together received about 31 percent of the reproductive health spending.
- Functions: Forty-two percent of the funding was spent on outpatient maternal health care; prevention and public health programs of reproductive health care got 16 percent, general government administration of health 15 percent, capital formation 15 percent, and inpatient care 10 percent.

5.1 Introduction

The government of Ethiopia is committed to achieving MDG 5 to improve maternal health, with a target of reducing the maternal mortality ratio by three-quarters over the period 1990 to 2015. As indicated in HSDP-IV, improving access and strengthening facility-based maternal services is one of the approaches the FMOH is using to reduce maternal morbidity and mortality. According to EDHS 2011, only 10 percent of births in Ethiopia take place at a health facility. The maternal mortality ratio was 676 maternal deaths per 100,000 live births for the seven years preceding the survey. This ratio could be reduced if women could more easily access antenatal and postnatal services, as well as skilled attendance of deliveries and family planning services.

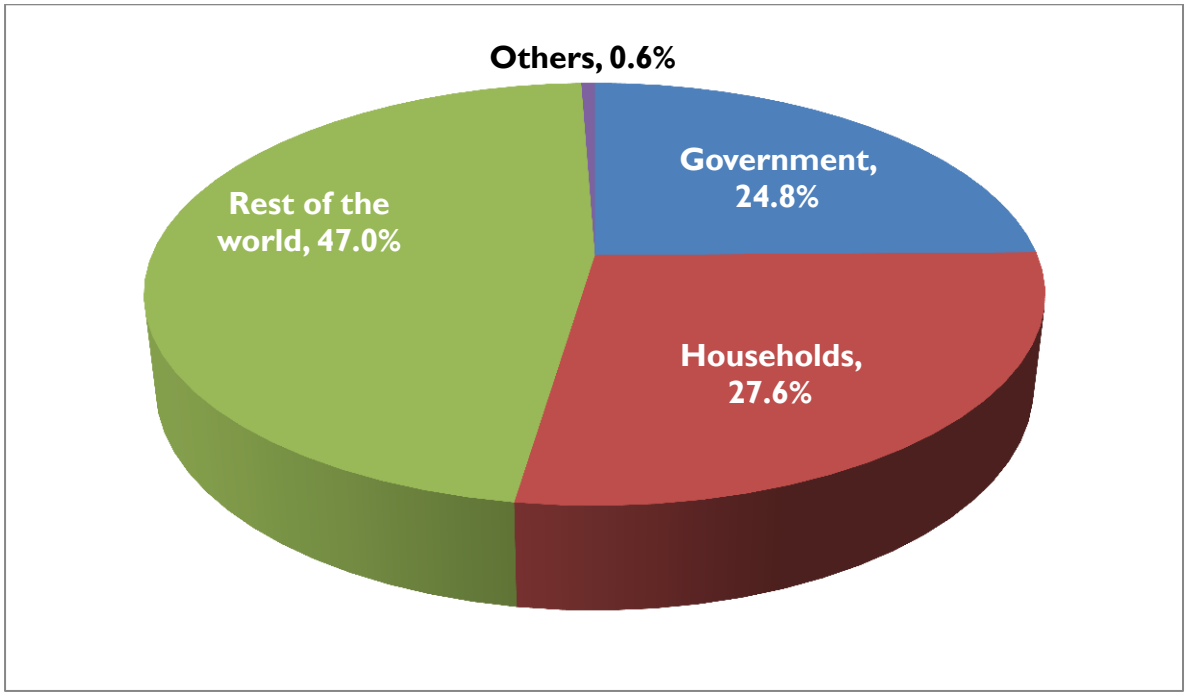
According to the fifth round of NHA, reproductive health spending totaled Birr 3.6 billion (US$224 million) in 2010/11, representing 14 percent of the total NHE and an increase of 1 percentage point

from the share registered by the fourth NHA in 2007/08. Spending per woman of reproductive age (15–49 years32) increased to $12.12 from $8.00 in 2007/08 and $3.60 in 2004/05.

5.2 Financing Sources of Reproductive Health Care

Main sources of reproductive health care in Ethiopia were the rest of the world (47.0 percent), followed by households (27.6 percent) and government revenue (24.8 percent). The contribution from others was less than 1 percent (Figure 5.1).

Figure 5.1: Spending on Reproductive Health Care, by Financing Source



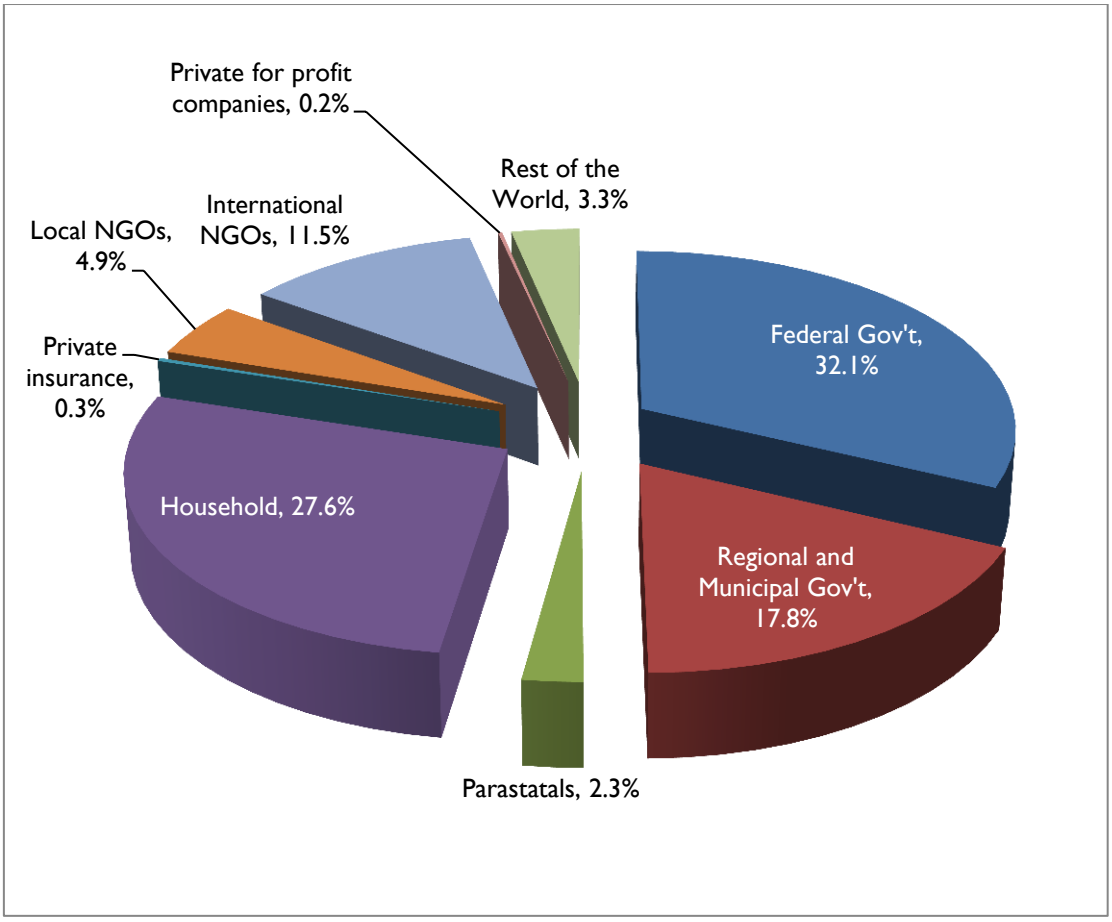
The fifth round NHA further revealed (Figure 5.1) an increase both in the share of the rest of the world and the households from its level of 44 percent and 25 percent in the fourth round NHA to 47 percent and 27.6 percent, respectively, in the current round NHA. On the other hand, the share of government spending on reproductive health care registered a drop from 30 percent in 2007/08 to 24.8 percent in 2010/11.

[32] As indicated in the Health and Health Related Indicators, 2010/11 (FMOH 2011), women of reproductive age are estimated to be 23.4 percent of the country's total population.

5.3 Managerial Responsibility of Reproductive Health Funding

Figure 5.2 shows that, in 2010/11, the government managed the largest share (52.2 percent) of reproductive health expenditures in Ethiopia, of which the federal government ministries managed 32.1 percent, regional and local governments 17.8 percent, and parastatal companies 2.3 percent. Rest of the world, international and local NGOs, and all others together managed 19.7 percent, a decline from 28 percent in 2007/08. In contrast, the household share increased, from 25 percent in 2007/08 to 27.6 percent in 2010/11. Moreover, private for-profit companies and private insurance managed the remaining less than 1 percent in 2010/11.

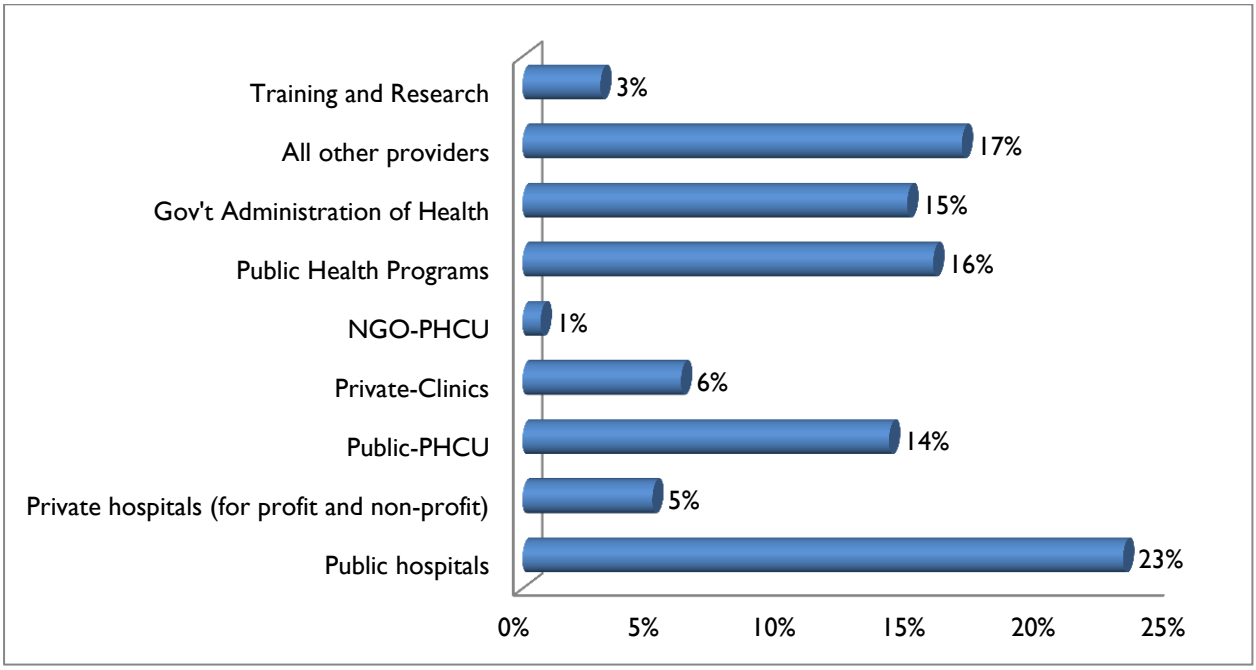
Figure 5.2: Spending on Reproductive Health Care, by Financing Agent



5.4 Providers of Reproductive Health Care

The fifth round of NHA revealed that public hospitals were the major recipients (23 percent) of the reproductive health resources (Figure 5.3). Public health programs got 16 percent, government health administration 15 percent, public PHCUs (health centers and health posts) 14 percent, NGO PHCUs and private clinics 7 percent, private hospitals 5 percent, training and research 3 percent, and all other service providers 17 percent. Of the 23 percent of reproductive health spending that goes to public hospitals, general hospitals received a little over half (51 percent).

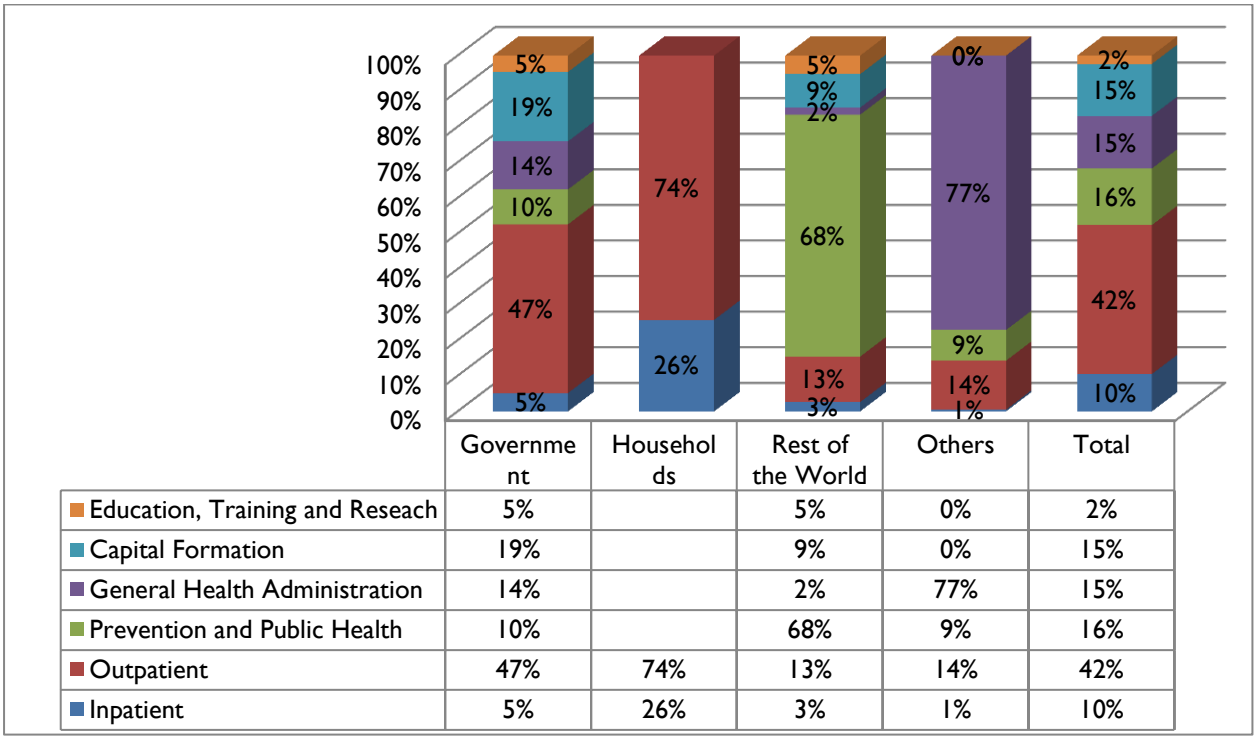
Figure 5.3: Spending on Reproductive Health Care, by Provider



5.5 Functions of Reproductive Health Care

Figure 5.4 shows the breakdown of total reproductive health spending on health care functions in 2010/11. Forty-two percent of the funding went to maternal health outpatient services, followed by prevention and public health programs of reproductive health (16 percent). General health administration and capital formation each received 15 percent. Maternal health inpatient care consumed (10 percent), and education, training, and research consumed (2 percent).

Figure 5.4: Spending Reproductive Health Care, by Function



	Government	Households	Rest of the World	Others	Total
Education, Training and Reseach	5%		5%	0%	2%
Capital Formation	19%		9%	0%	15%
General Health Administration	14%		2%	77%	15%
Prevention and Public Health	10%		68%	9%	16%
Outpatient	47%	74%	13%	14%	42%
Inpatient	5%	26%	3%	1%	10%

Broken down by financing agent, nearly half (47 percent) of the reproductive health funding managed by the government went to maternal health outpatient services; the rest went to capital formation (19 percent), general health administration (14 percent), prevention and public health (10 percent), maternal health inpatient care (5 percent), and education, training, and research on reproductive health care (5 percent). Households directed their out-of-pocket spending to maternal health outpatient (74 percent) and inpatient services (26 percent). A little over two-thirds (68 percent) of the reproductive health resources managed by the rest of the world was spent on reproductive health prevention and public health programs.

6. CHILD HEALTH SUBACCOUNT FINDINGS

Summary of Key Findings

- Child health expenditure accounted for 11 percent of NHE in 2010/11, a 1 percent increase from 2007/08.
- Overall child health spending increased 173 percent (in local currency), from Birr 1.1 billion (US$114 million) in 2007/08 to about Birr 3.0 billion (US$184 million) in 2010/11.
- Per capita spending per child under 5 years was Birr 256 (US$16) in 2010/11, compared with Birr 82 (US$9) in 2007/08.
- Financing sources: The major financing sources of child health services are households (48 percent), rest of the world (27 percent), and government (25 percent).
- Financing agents: Households manage the largest share of child health care resources (48 percent). Government, the rest of the world, and NGOs manage 39 percent, 8 percent, and 5 percent, respectively.
- Providers: A quarter of child health expenditure goes to government hospitals. Public PHCUs (health centers and health posts) receive more than 23 percent. Providers of public health programs consume 15 percent, private clinics 14 percent, and private hospitals 10 percent.
- Functions: Sixty-three percent of child health resources are spent on outpatient child health care services, 15 percent on prevention and public health services, 10 percent on inpatient care, and 5 percent each on capital formation and government administration. Health-related expenditures account for about 2 percent of the THE on child health.

6.1 Introduction

The size of Ethiopia's under-five population is estimated to be 11.8 million, approximately 15 percent of the total population (FMOH 2011). The 2011 EDHS found that between 2000 and 2011, the under-five mortality rate declined by 47 percent, from 166 deaths per 1,000 live births to 88 deaths per 1,000 live births (EDHS 2011). This represents good progress towards achieving the MDG of reducing under-five mortality by two-thirds between 1990 and 2015.

The decline in under-five mortality is attributable to strategies and programs that the government of Ethiopia has been implementing to improve the status of children's health: increasing immunization coverage, improving nutritional status of children, expanding the Integrated Management of Childhood Illnesses, and improving sanitation and hygiene (FMOH 2012a). Since 2003, the HEP has been providing promotive, preventive, and selected curative health care services with a special focus on children and mothers in rural areas. And since 2008, the National Nutrition Program has been improving the nutritional status of children: 11 million under-five children have received vitamin A supplementation and deworming, community management of acute malnutrition has been scaled up to more than 10,000 health facilities, community-based direct interventions have been scaled up to more than 500 woredas, and nutrition and HIV interventions have been scaled up to 400 health

facilities. Zinc supplementation for diarrhea has been included in the HEP's integrated community case management. A salt iodization legal framework was developed and is being enforced.

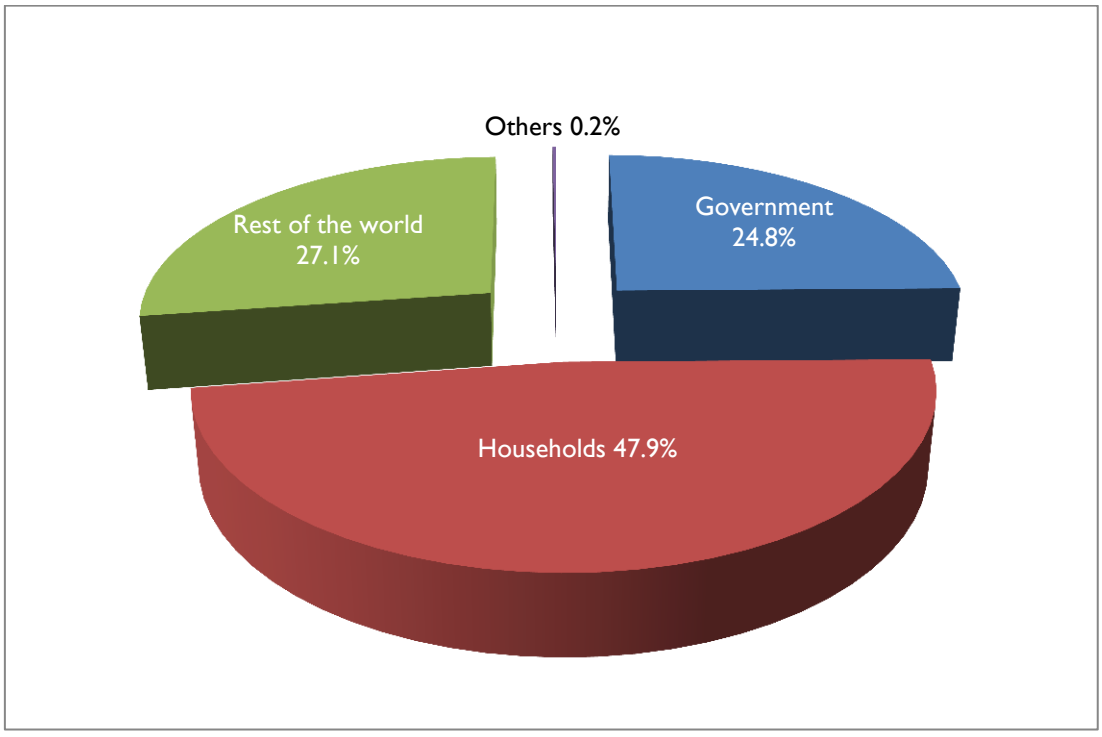
Moreover, since 1980, the EPI in Ethiopia has increased coverage for all antigens. Other strategies for improvement in immunization include Enhanced Outreach Strategy/Child Health Days, Enhanced Routine Immunization activities targeting pastoralist areas, and the Reaching Every Districts initiative (FMOH 2012b).

Child health care expenditures accounted for about 11 percent of NHE in 2010/11, an increase from 10 percent in 2007/08. Overall spending increased from Birr 1.1 billion (US$114 million) in 2007/08 to approximately Birr 3.0 billion (US$184 million) in 2010/11. The per capita spending per under-five child increased from Birr 82.5 (US$8.8) in 2007/08 to Birr 258 (US$16.0) in 2010/11.

6.2 Financing Sources of Child Health Care

Household out-of-pocket spending, the rest of the world, and the government were the main financing sources of child health expenditure in 2010/11, accounting for 47.9 percent, 27.1 percent, and 24.8 percent, respectively (Figure 6.1). The government share breaks down to 13.1 percent from the federal government, 11.6 percent from regional and local governments. Other contributors, private companies, local NGOs, and other private funds, contributed less than 1 percent of the child health spending.

Figure 6.1: Spending on Child Health Care, by Financing Source



This breakdown represents a change from the fourth round NHA, when child health care expenditures were financed predominantly by the rest of the world (63 percent) and households (24 percent), and government contributed only 12 percent.

6.3 Financing Agents of Child Health Care

Figure 6.2 shows that households manage the largest share of child health care resources (48 percent) in 2010/11, double their 24 percent in 2007/08. Government manages 39 percent (federal 27 percent, regional and local 12 percent), less than its 47 percent in 2007/08. The rest of the world manages 8 percent, international NGOs 4 percent, and local NGOs 1 percent.

Figure 6.2: Spending on Child Health Care, by Financing Agent

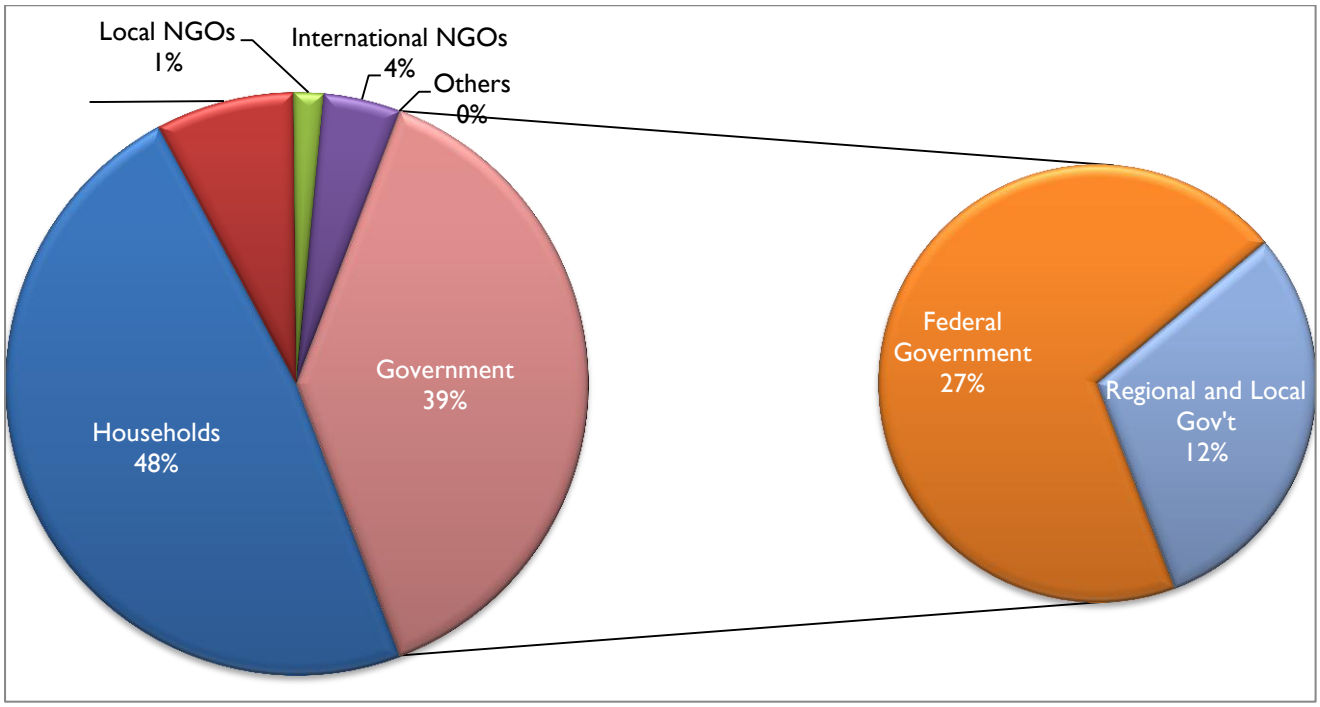
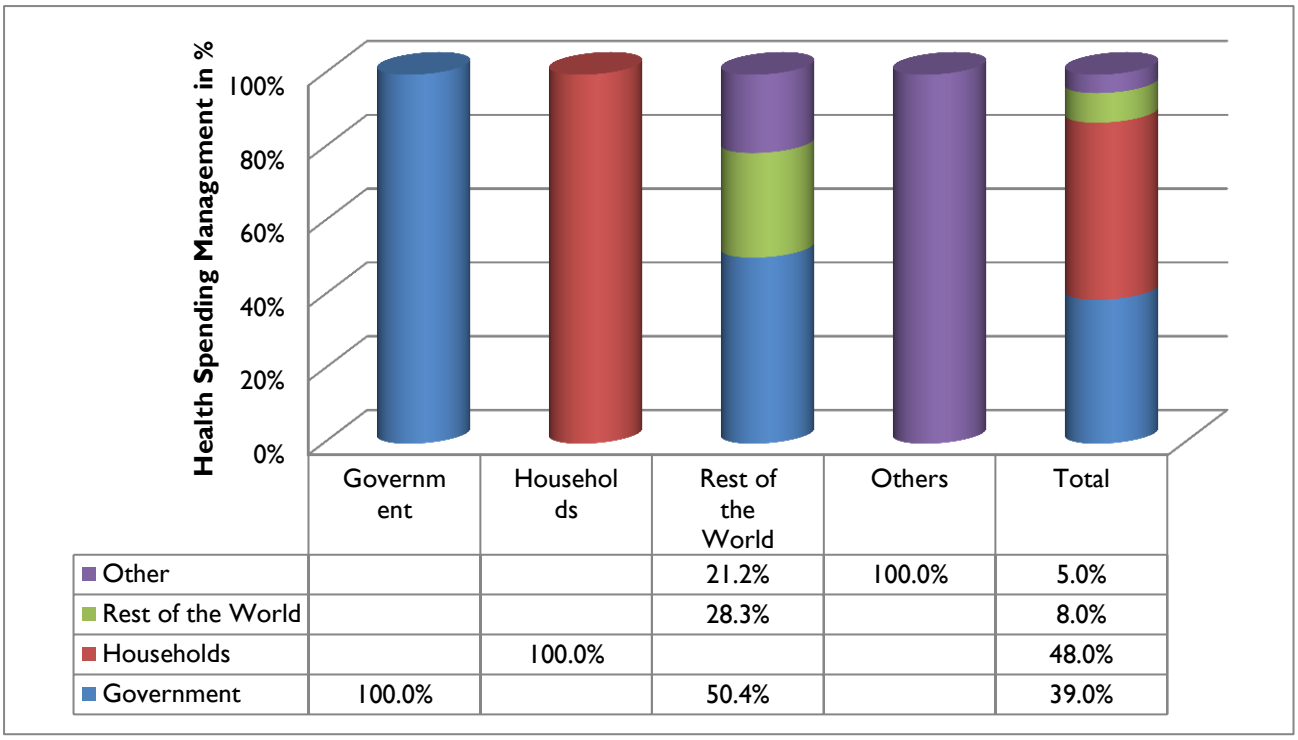


Figure 6.3 shows that households manage their entire contribution to child health by spending out of pocket. Likewise, all child health resources from the government and "other" are managed by the financing sources themselves. However, of funding from the rest of the world, 50.4 percent is managed by the government, 28.3 percent by rest of the world itself, and 21.2 percent by "other."

Figure 6.3: Flow of Child Health Funds from Financing Sources to Financing Agents

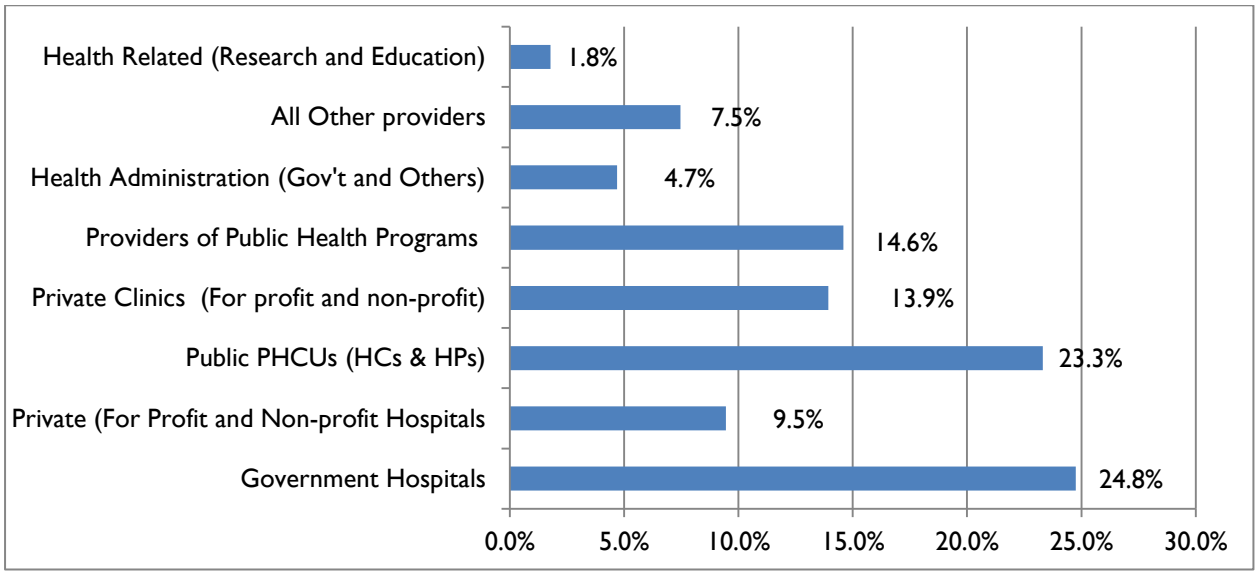


	Government	Households	Rest of the World	Others	Total
Other			21.2%	100.0%	5.0%
Rest of the World			28.3%		8.0%
Households		100.0%			48.0%
Government	100.0%		50.4%		39.0%

6.4 Providers of Child Health Care

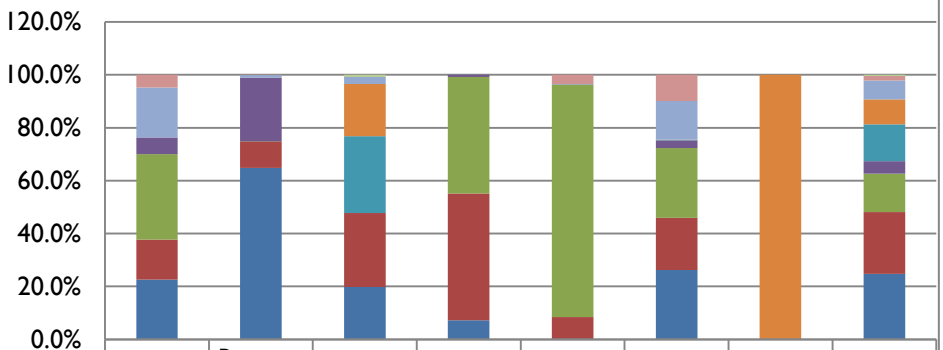
The largest share of child health expenditure (24.8 percent) went to government hospitals, followed by public PHCUs (health centers and health posts) (23.3 percent), providers of public health programs (14.6 percent), and private clinics (for-profit and nonprofit) (13.9 percent) (Figure 6.4). Smaller percentages went to private hospitals (9.5 percent), all other providers (7.5 percent), health administration (4.7 percent), and health-related training and (1.8 percent).

Figure 6.4: Spending on Child Health Care, by Provider



As shown in Figure 6.5, government-managed child health funding is predominantly received by public health facilities (hospitals and PHCUs), providers of public health programs, and health administrators. Most household-managed money went to NGO PHCUs and private clinics, public PHCUs, and public and private hospitals. Public PHCUs, providers of public health programs, and public hospitals were the main recipients of funds managed by the rest of the world. Over 72 percent of child health funds managed by international NGOs are received by providers of public health programs, public hospitals, and public PHCUs.

Figure 6.5: Flow of Child Health Funds from Financing Agents to Providers

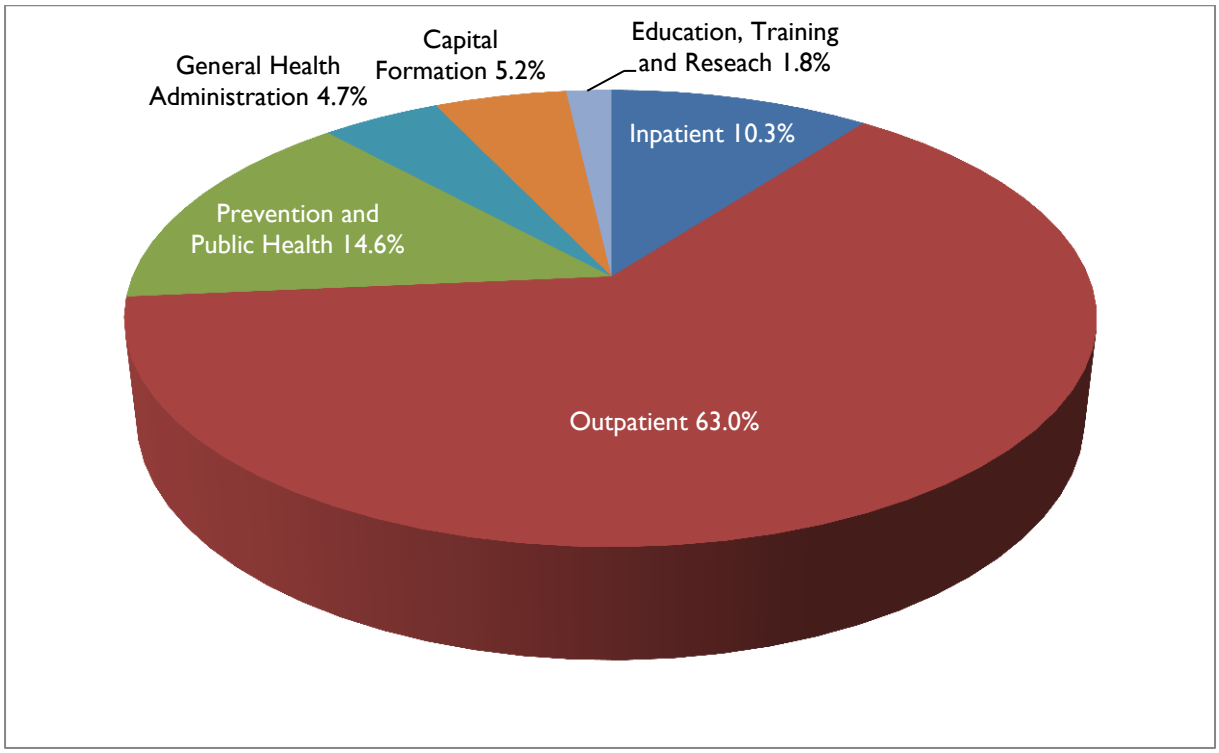


	Federal Government	Regional and Local Gov't	Households	Rest of the world	Local NGOs	International NGOs	Others	Total
Pharmacies (Public and Private)	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.4%
Training & Research	4.8%	0.1%	0.0%	0.0%	3.6%	9.9%	0.0%	1.8%
All others service providers	18.9%	0.9%	2.7%	0.0%	0.0%	14.7%	0.0%	7.1%
Private Hospitals (Profit and Non-Profit)	0.0%	0.0%	19.7%	0.0%	0.0%	0.1%	100.0%	9.5%
NGO PHCUs and Private Clinics	0.0%	0.0%	29.1%	0.0%	0.2%	0.1%	0.0%	13.9%
Health Administration	6.3%	24.1%	0.0%	0.8%	0.0%	2.9%	0.0%	4.7%
Providers of Public Health Programs	32.2%	0.0%	0.0%	44.1%	87.7%	26.4%	0.0%	14.6%
Public PHCUs	15.1%	10.1%	28.0%	47.9%	8.4%	19.7%	0.0%	23.3%
Public Hospitals	22.6%	64.8%	19.7%	7.2%	0.0%	26.2%	0.0%	24.8%

6.5 Functions of Child Health Care

A significant portion (63.0 percent) of child health resources was spent on outpatient services, followed by prevention and public health services (14.6 percent) (Figure 6.6) 33. Child health-related inpatient curative care, capital formation, and general health administration accounted for 10.3 percent, 5.2 percent, and 4.7 percent of the child health spending, respectively. The balance (1.8 percent) was spent on child health-related education, training, and research.

Figure 6.6: Spending on Child Health Care, by Function



[33] Though this shows a significant shift from public health programs to health facility-based outpatient and inpatient care, this could be mainly a shift in provision of immunization and other campaign-based public health programs on child health to more health facility-based provision of these services, or it may be attributable to the way most donors reporting linked such preventive services.

7. MALARIA SUBACCOUNT FINDINGS

Summary of Key Findings

- Malaria health expenditure accounted for 15 percent of country's NHE in 2010/11, an increase of 10 percentage points from 2007/08.
- The overall spending increased more than sevenfold (in local currency), from Birr 519 million (US$55.5million) in 2007/08 to Birr 3.9 billion (US$242 million) in 2010/11.
- Financing sources: The major financing sources of malaria expenditures are the rest of the world (79 percent), households (14 percent), and government (7 percent).
- Financing agents: Government (federal, regional, parastatals) manage the largest share of malaria health care resources (82 percent). Households and "Other" manage 14 percent and 4 percent, respectively.
- Providers: More than two-thirds (69 percent) of malaria expenditure goes to public health program administrators. Public PHCUs (health centers and health posts) receive 11 percent, NGO PHCUs and private clinics 6 percent, public hospitals 4 percent, and health administration 3 percent.
- Functions: Sixty-nine percent of the malaria resources are spent on malaria prevention and public health services; ITNs alone accounts for 52 percent of the resources. Malaria outpatient curative care and general health administration consume 21 percent and 5 percent, respectively. Capital formation, malaria inpatient care, and health-related functions of malaria together consume 5 percent.
- Health-related expenditures account for about 1 percent of the total NHE on malaria.

7.1 Introduction

Malaria is a major cause of morbidity and mortality in Ethiopia. In 2010/11, it accounted for 12 percent of outpatient consultations and 13 percent of hospital admissions (FMOH 2010/11). Almost 75 percent of the land is malarious and 68 percent of the population lives in areas at risk of malaria. Malaria has a serious impact on the country's economic productivity as it strikes during planting and harvesting seasons. Studies revealed that the country has made tremendous progress in mobilization of resources for and implementation of a wide range of malaria prevention and control interventions that have resulted in reduction of malaria-caused morbidity and mortality (FMOH and EHNRI 2008). Nevertheless, lack of effective utilization of vector control tools is observed at the individual and community levels, a serious problem that requires regular follow-up.

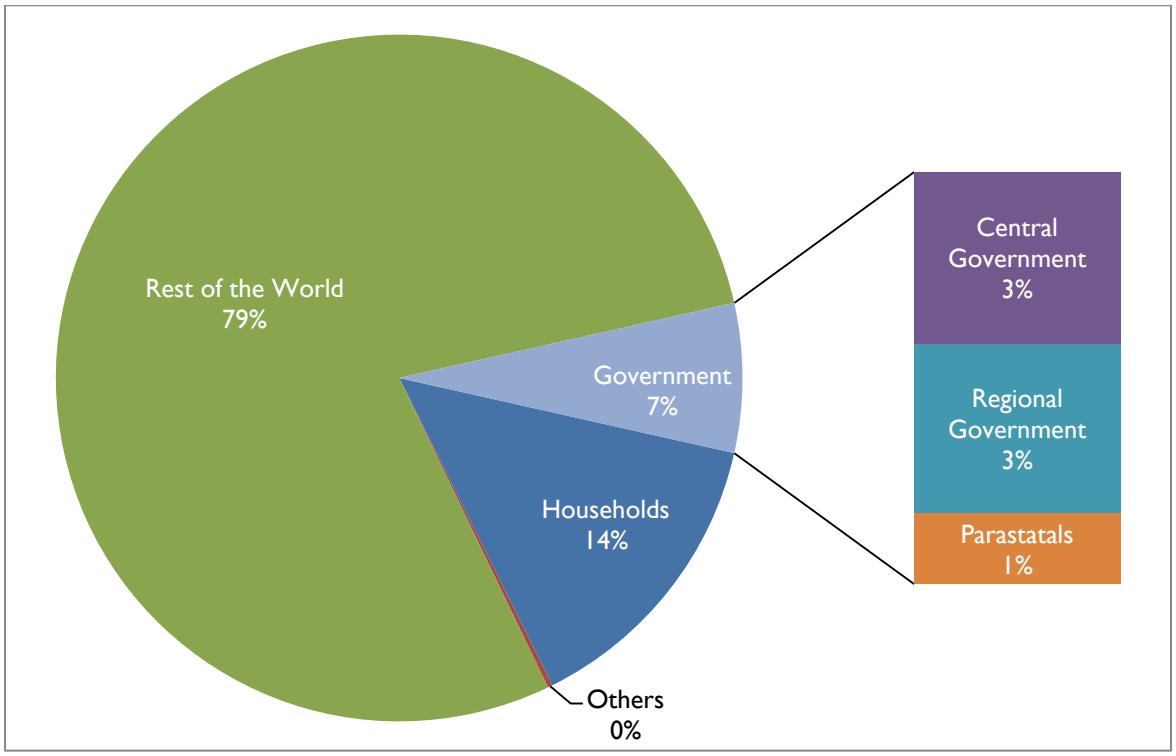
In 2010/11, the total NHE on malaria was Birr 3,891,885,761(US$241,465,073), a per capita expenditure of Birr 72.41 (US$4.50)34 compared with Birr 10.30 (US$1.10) in 2007/08. In this round NHA, the spending on malaria accounts for 15 percent of the total NHE, against its 5 percent share in 2007/08.

[34] The per capita spending for malaria is calculated as total malaria spending divided by the total population living in malarious areas in the country, 53,750,939 (i.e., 68 percent of the total population during the study period).

7.2 Financing Sources of Malaria Health Care

In 2010/11, the rest of the world and households are the primary financing sources of malaria expenditure, accounting for 79 percent and 14 percent, respectively (Figure 7.1). The remaining 7 percent comes from the government (central government and regional government 3 percent each, and parastatals 1 percent).

Figure 7.1: Spending on Malaria Health Care, by Financing Source



7.3 Financing Agents of Malaria Health Care

As shown in Figure 7.2, the government manages the largest share (82 percent) of malaria spending in 2010/11. The federal government accounts for most (78 percent), while the share of regional/municipal governments and parastatals is 3 percent and 1 percent, respectively. Households manage 14 percent, making their own decisions on use of resources at the time of illness. Other entities (rest of the world, international and local NGOs, private employers, etc.) play only a small role (4 percent) in managing malaria resource.

Figure 7.2: Spending on Malaria Health Care, by Financing Agent

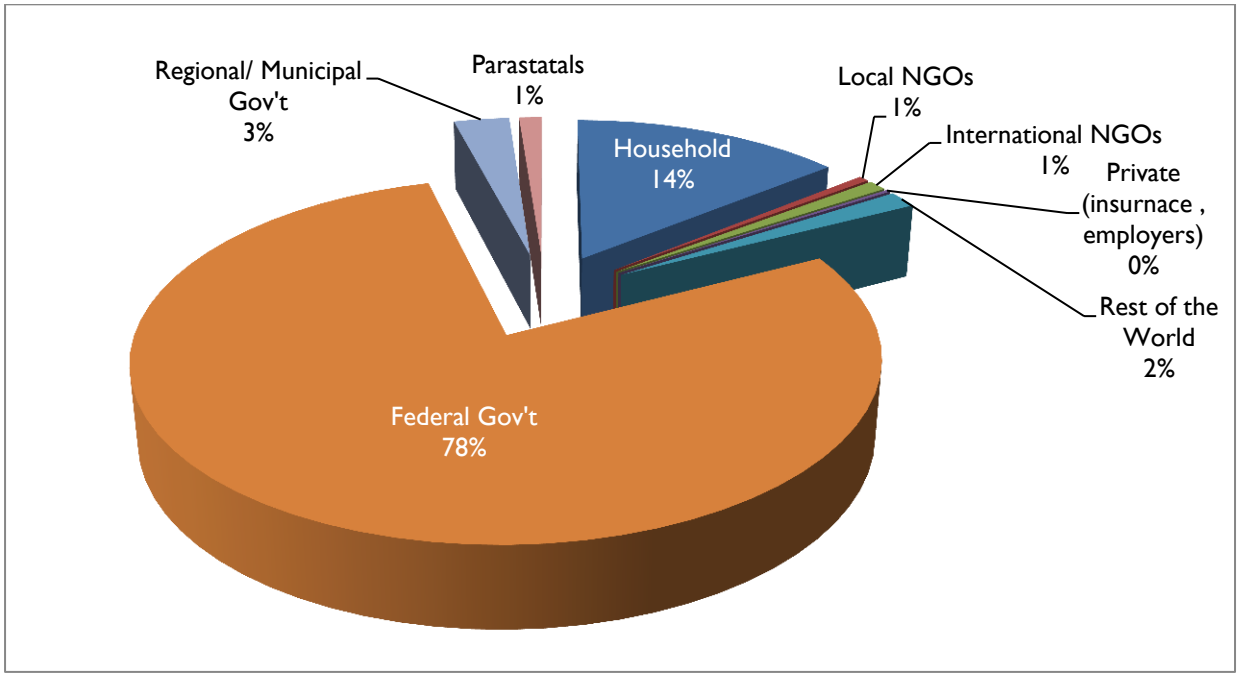
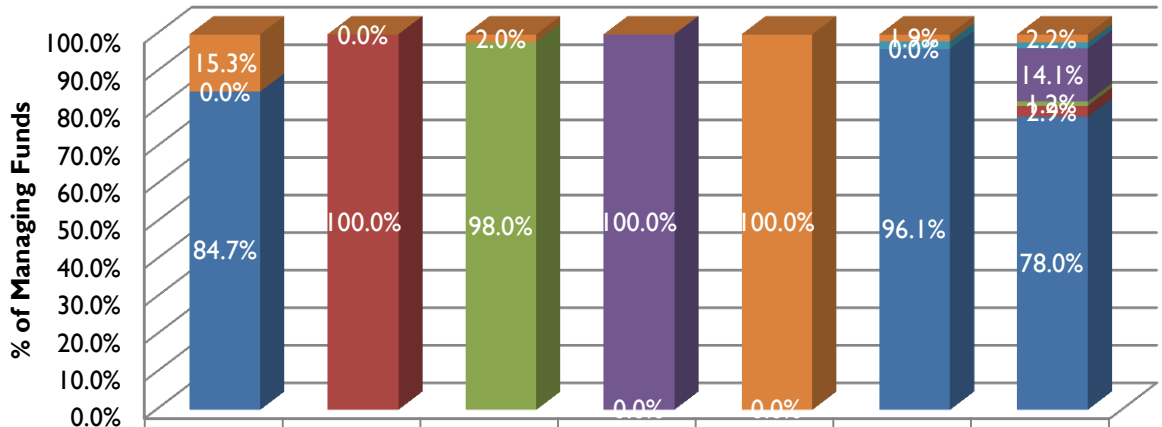


Figure 7.3 shows the flow of malaria resources from originators of the funding to those who have programatic control regarding utilization of the funds. Households and "other" manage all the malaria resources they generate. The central government manages 84.7 percent of the malaria funding sourced from itself. Other entitites manage the remaining 15.3 percent of central government malaria funding. Parastatal companies manage almost all (98 percent) of their malaria funding; "other" manages the remaining 2 percent. Malaria resources from the rest of the world are managed by central government (96.1 percent), the rest of the world itself (2.0 percent), and others (1.9 percent).

Figure 7.3: Flow of Malaria Funding from Financing Sources to Financing Agents

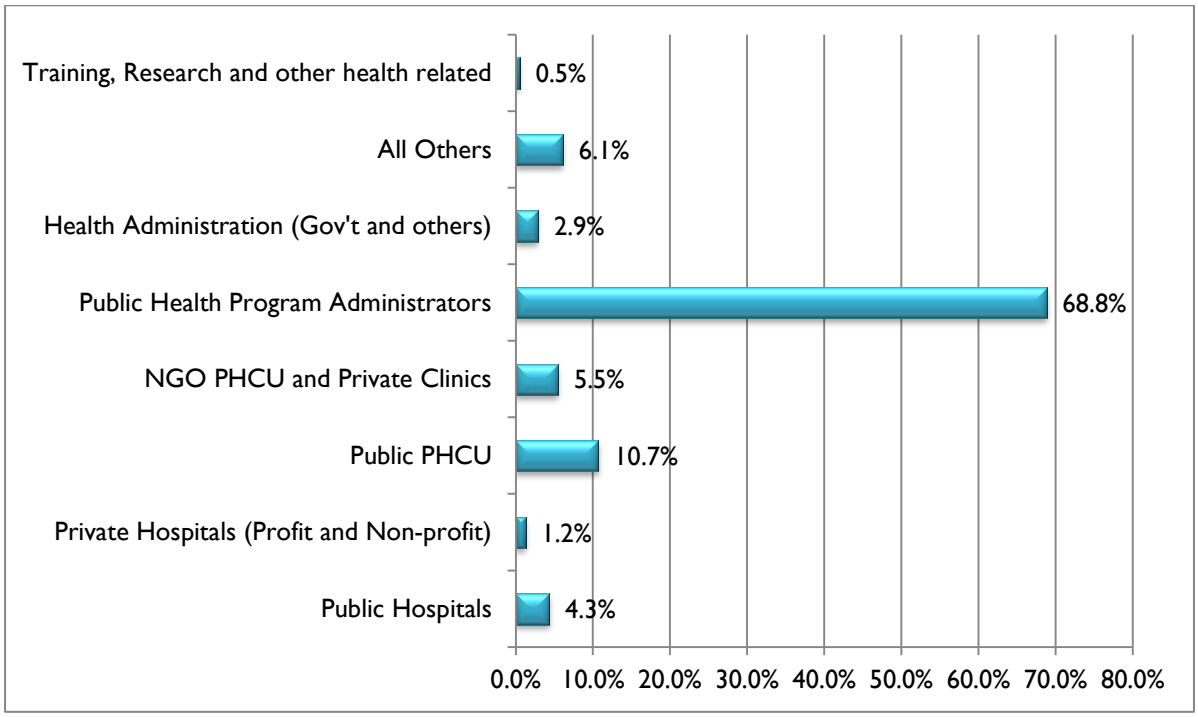


	Central Govt	Regional & Municipal Govt	Parastatals	Households	Others	Rest of the World	Total
Others	15.3%	0.0%	2.0%	0.0%	100.0%	1.9%	2.2%
Rest of the World	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	1.6%
Households	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	14.1%
Parastatals	0.0%	0.0%	98.0%	0.0%	0.0%	0.0%	1.2%
Regional &Mun Govt	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	2.9%
Central Govt	84.7%	0.0%	0.0%	0.0%	0.0%	96.1%	78.0%

7.4 Providers of Malaria Health Care

The NHA study found that the largest share (68.8 percent) of malaria spending goes to public health program administrators, followed by public PHCUs (health centers and health posts) (10.7 percent) (Figure 7.4). NGO PHCUs and private clinics, public hospitals, health administration, private hospitals, and training and research account for 5.5 percent, 4.3 percent, 2.9 percent, 1.2 percent, and 0.5 percent, respectively. All other providers consume the remaining 6.1 percent.

Figure 7.4: Spending on Malaria Health Care, by Provider



7.5 Functions of Malaria Health Care

Prevention and public health programs associated with malaria consume more than two-thirds (69 percent) of malaria resources; ITNs alone consume 52 percent (Figure 7.5). Malaria outpatient care accounts for 21 percent of the overall malaria spending. General health administration, malaria inpatient curative care, capital formation, and health-related functions (education, research, and training) together consume the remaining 10 percent.

Figure 7.5: Spending on Malaria Health Care, by Function

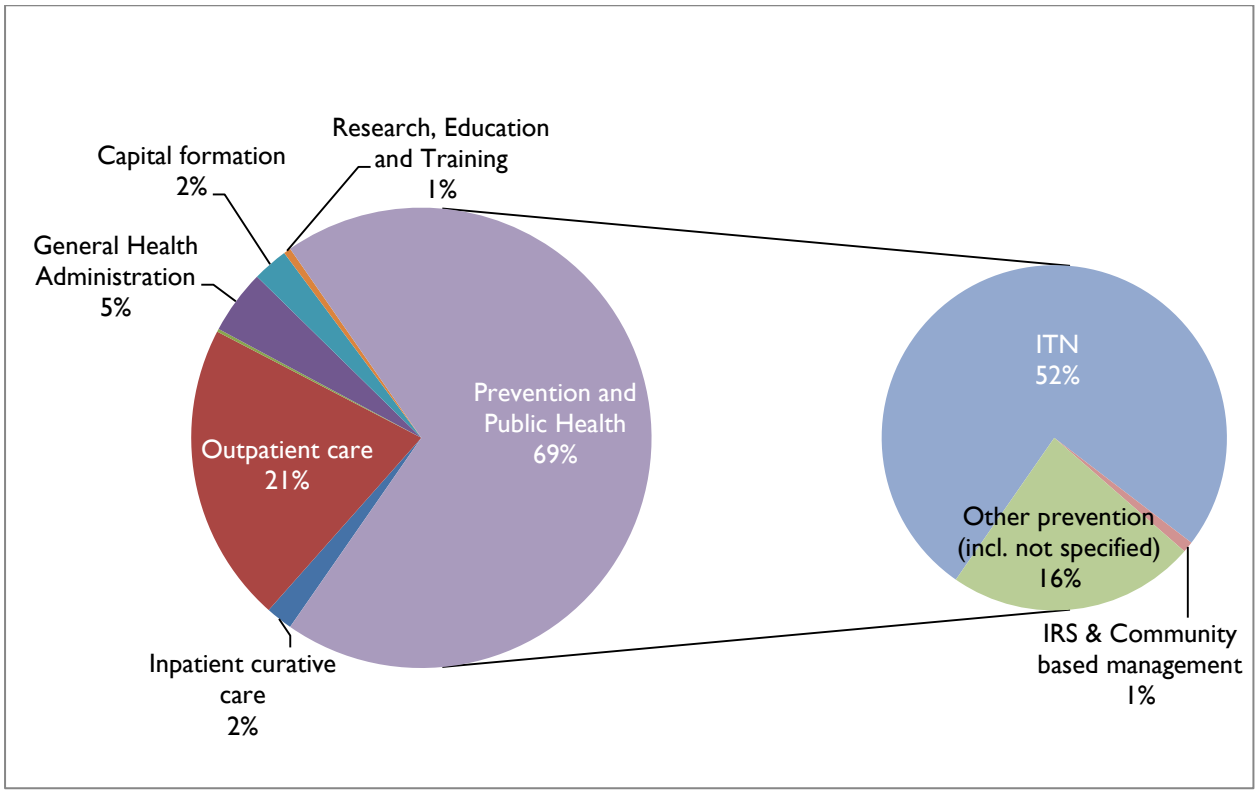
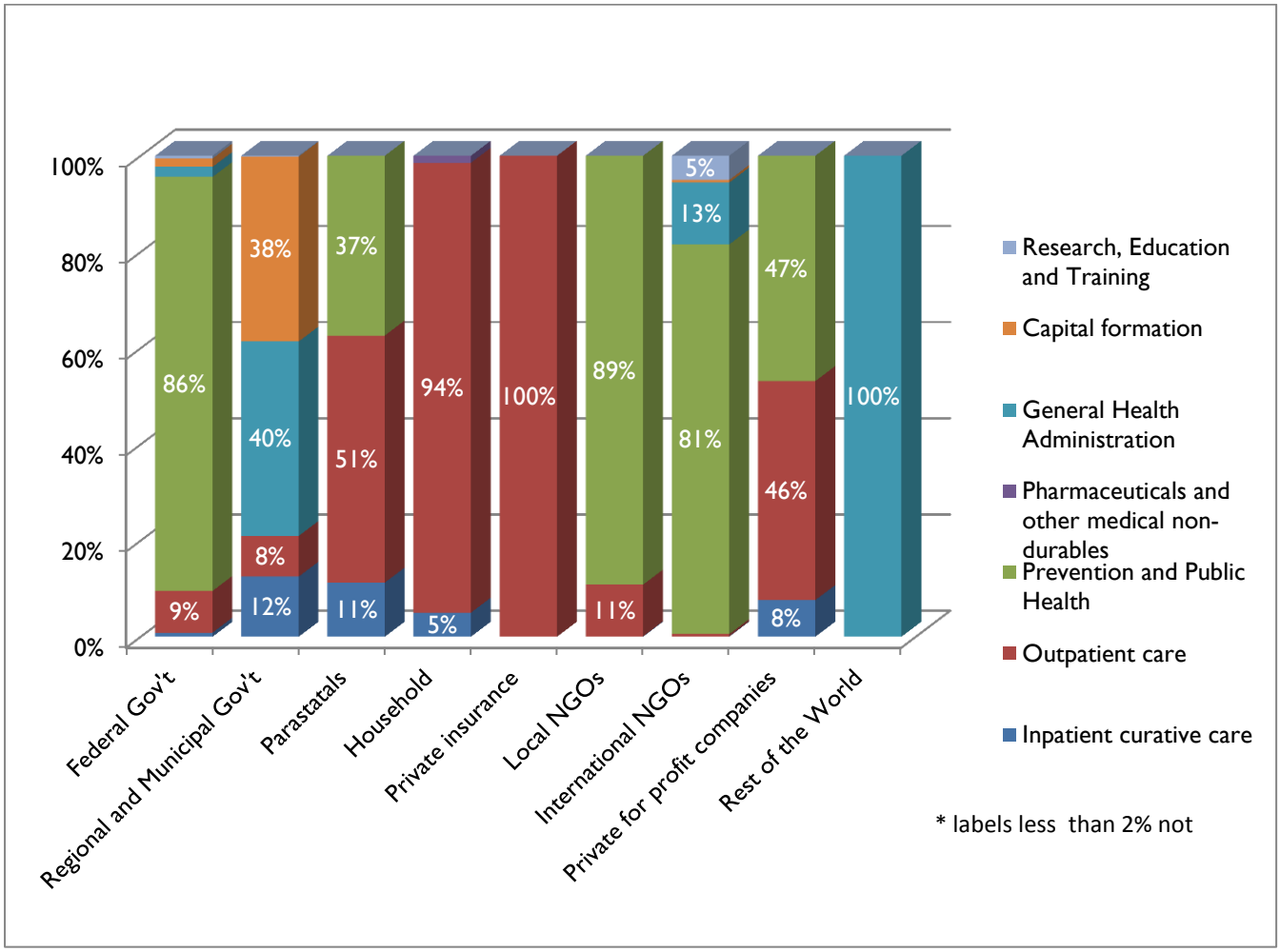


Figure 7.6 shows management of the various malaria-related services/functions by the different financing agents. More than 80 percent of the spending managed by the federal government, international NGOs, and local NGOs is spent on malaria prevention. Ninety-four percent of the spending managed by households goes to malaria-related outpatient care. All the money administered by the rest of the world and private insurance is spent on general health administration and malaria outpatient care, respectively. Seventy-eight percent of the funding managed by regional and municipal governments is spent on general health administration and capital formation. More than 50 percent of parastatal companies' managed money goes to malaria outpatient care.

Figure 7.6: Flow of Malaria Resources from Financing Agents to Functions



8. TUBERCULOSIS SUBACCOUNT FINDINGS

Summary of Key Findings

- TB health expenditure accounted for 3 percent of Country's NHE in 2010/11, a 1 percentage point reduction from 2007/08.
- The overall spending, however, increased 85 percent (in local currency), from Birr 447 billion (US$48 million) in 2007/08 to Birr 825 billion (US$51 million) in 2010/11.
- Financing sources: The major financing sources of TB health expenditures are the rest of the world (51percent), households (36 percent), and government (12 percent).
- Financing agents: Government managed the largest share of TB care resources (49 percent); households and the rest of the world manage 36 percent and 12 percent, respectively.
- Providers: Thirty percent of TB care expenditure is received by public PHCUs (health centers and health posts). Other major providers are private hospitals (15 percent), public hospitals (14 percent), and other providers (25 percent).
- Functions: Sixty-one percent of TB care resources are spent on TB outpatient curative services, while 20 percent go to TB prevention and public health programs. TB inpatient care and general health administration consume 8 percent and 7 percent of the resources, respectively.
- In 2010/11, health-related expenditure accounts for 2 percent of the total national TB

8.1 Introduction

TB is a potentially fatal contagious disease that can affect almost any part of the body but mainly infects the lungs. It is caused by a bacterial microorganism, known as tubercle bacillus or Mycobacterium tuberculosis. Although TB can be treated, cured, or prevented if persons at risk take certain medicines, scientists have never been able to eradicate it. According to WHO's Global TB report 2012, TB remains a major global health problem. It causes ill health among millions of people each year and ranks as the second leading cause of death from an infectious disease worldwide, after HIV. In 2011, there were an estimated 8.7 million new cases of TB (13 percent co-infected with HIV) and 1.4 million people died from TB, including almost one million deaths among HIV-negative individuals and 430,000 among people who were HIV positive (WHO 2012).

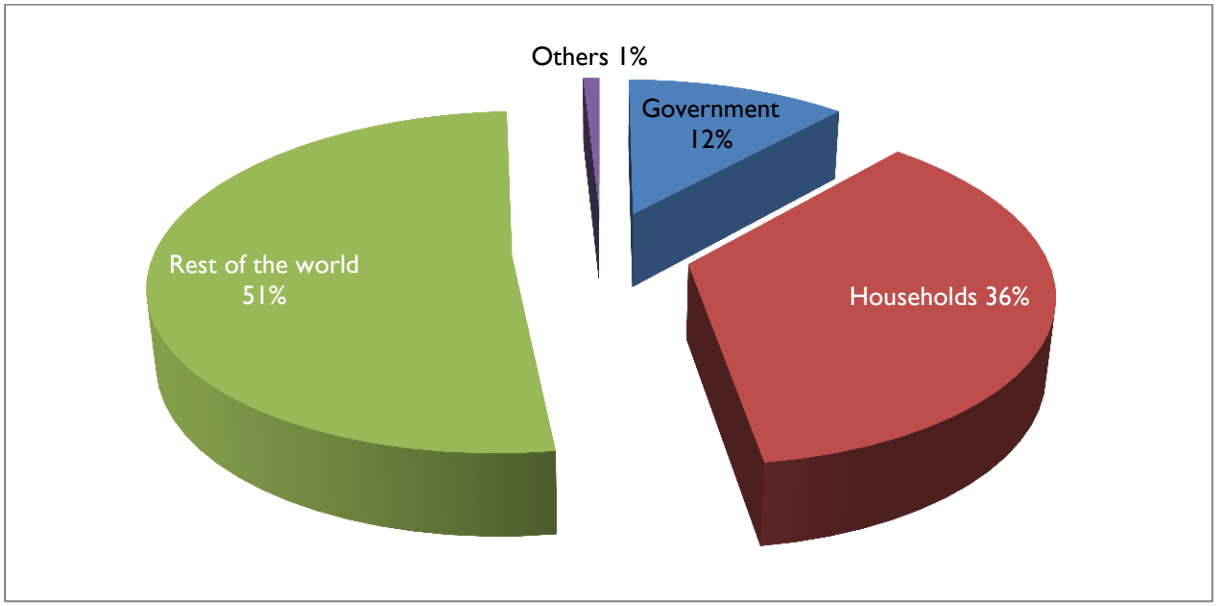
Ethiopia ranks seventh in the world and third in Africa for TB burden. The most recent WHO estimates for Ethiopia are: annual TB incidence (including HIV-positive) of 210 per 100,000, prevalence (including HIV-positive) of 230 per 100,000, and mortality (excluding HIV) of 18 per 100,000 people (WHO 2013; and EHNRI 2011).

The current NHA study found that in 2010/11, Birr 824, 619, 769 (US$51,162,055) was spent on TB care. This amount accounted for about 3 percent of the country's total NHE, down from 4 percent in the fourth round NHA, 2007/08. Per capita TB spending during the current round is estimated to be Birr 10.43 (US$0.65) against Birr 6.05 (US$0.65)35 during the fourth NHA.

8.2 Financing Sources of Tuberculosis Care

Like the NHA for general health and the other subaccounts, resources spent on TB originated from different sources. In this round of NHA, the rest of the world is the major financing source for TB care, contributing 51 percent of the total spending on TB (Figure 8.1). Household out-of-pocket spending is the second major financing source at 36 percent. The remaining shares are funded by the government (12 percent) and private employers (1 percent). These findings show that TB funding has shifted dramatically from households, which financed the largest share of TB services (63 percent) in 2007/08. If TB control and treatment continues relying on donor funding, there is a sustainability issue.

Figure 8.1: Spending on TB Care, by Financing Source

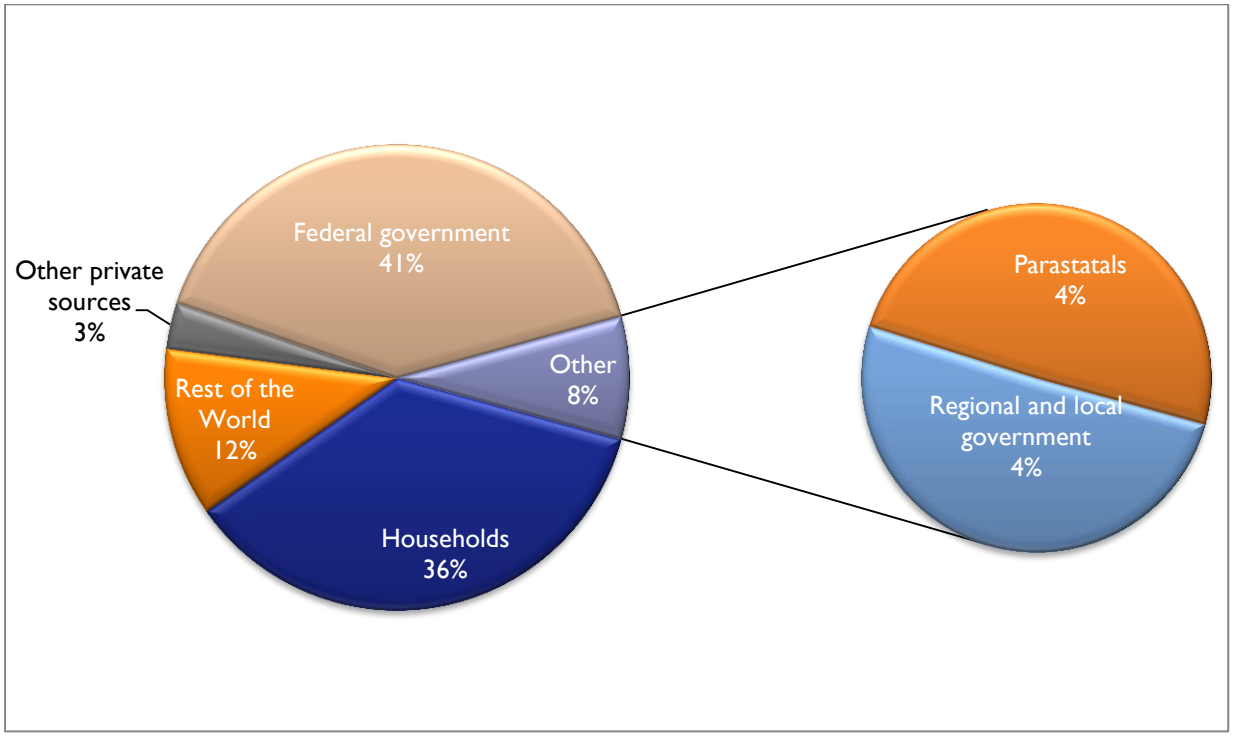


[35] This is an increase in terms of the Birr, but remained the same in terms of US$.

8.3 Financing Agents of Tuberculosis Care

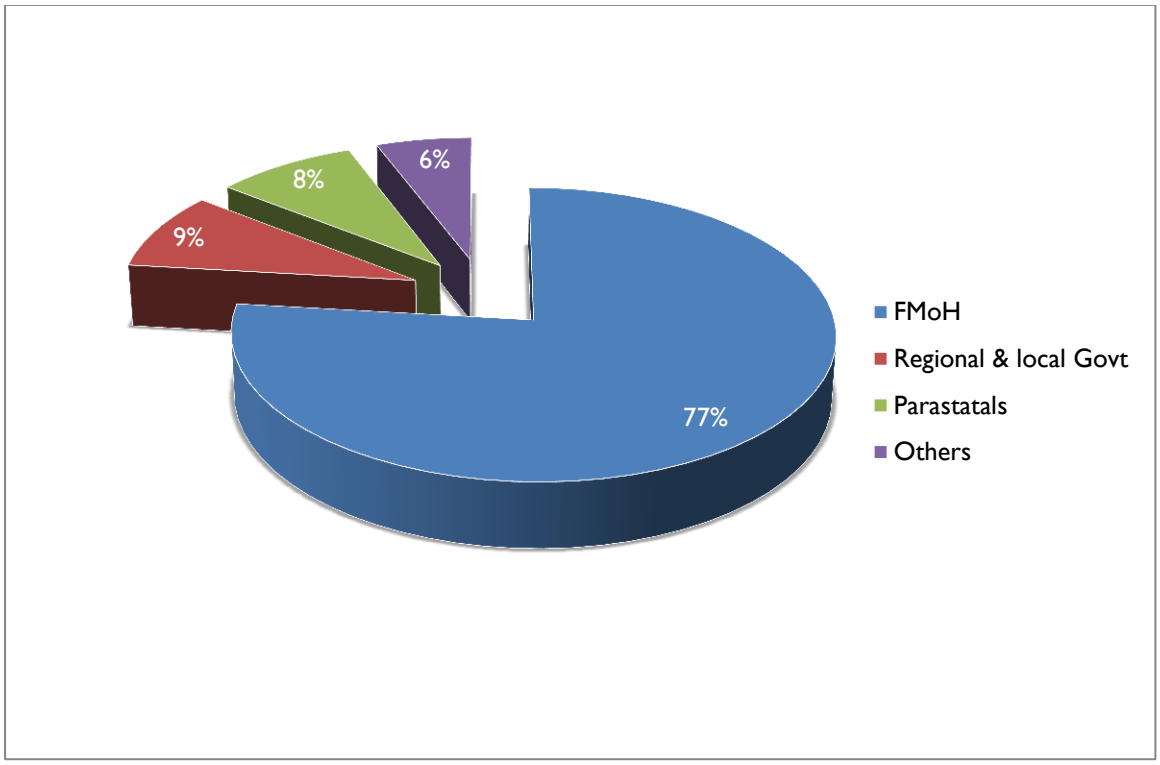
The current round of NHA (2010/11) found that government entities at various levels are the main financing agents, managing 49.0 percent of TB resources (Figure 8.2). The second main financing agents are households, which manage 36.0 percent. They are followed by the rest of the world, at 11.8 percent. The remaining 3.2 percent if resources is managed by "others," which include international NGOs (2.1 percent), private insurance-nonsocial (0.6 percent), private for-profit companies (0.4 percent), and local NGOs (about 0.1 percent).

Figure 8.2: Spending on TB Care, by Financing Agent



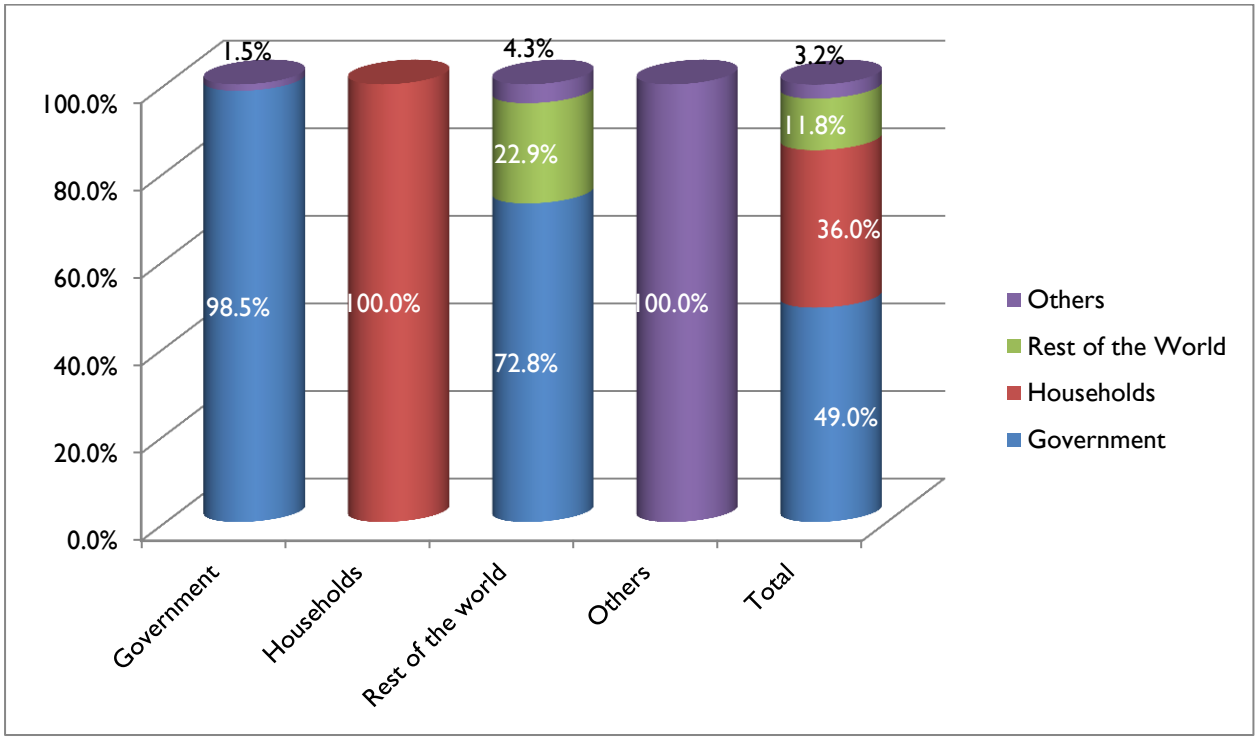
Looking only at government's share in managing the TB resources, it can be broken down as follows: FMOH, 77 percent; regional, municipal, and local governments, 9 percent; parastatal companies, 8 percent, and all other central government bodies combined, 6 percent (Figure 8.3).

Figure 8.3: Public Sector Financing Agents of TB Care Funds



As seen in Figure 8.4, financing provided by households and others also is fully managed by them. In contrast, of the total TB resources provided by the rest of the world, 72.8 percent is managed by the government, 22.9 percent by the rest of the world itself, and 4.3 percent by others. The government manages almost all its own financing, 98.5 percent, while the remaining 1.5 percent is managed by other entities.

Figure 8.4: Flow of TB Funds from Financing Sources to Financing Agents

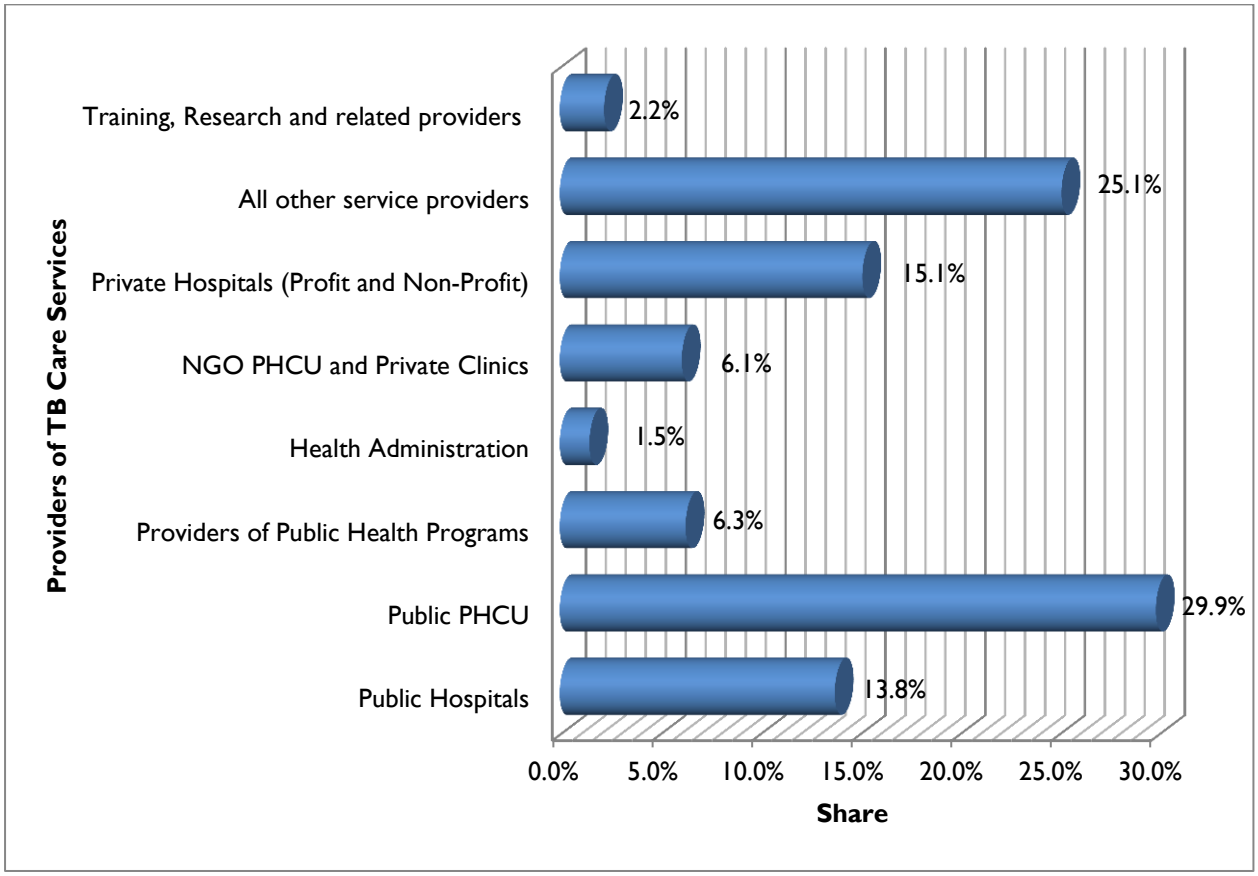


8.4 Providers of Tuberculosis Care

As seen in Figure 8.5, the largest share of the TB spending (29.9 percent) goes to public PHCUs, followed by all other TB care service providers (25.1 percent). Private hospitals and public hospitals receive 15.1 percent and 13.8 percent, respectively. Providers of public health programs, NGO PHCUs and private clinics, training, research, and related providers, and health administration consume 6.8 percent, 6.1 percent, 2.2 percent, and 1.5 percent, respectively.

In 2007/08, about 88 percent of the TB funding went to four major TB care service providers: private for-profit hospitals (36 percent), administration of public health programs (22 percent), federal hospitals (21 percent), and public PHCUs (9 percent).

Figure 8.5: Spending on TB Care, by Provider

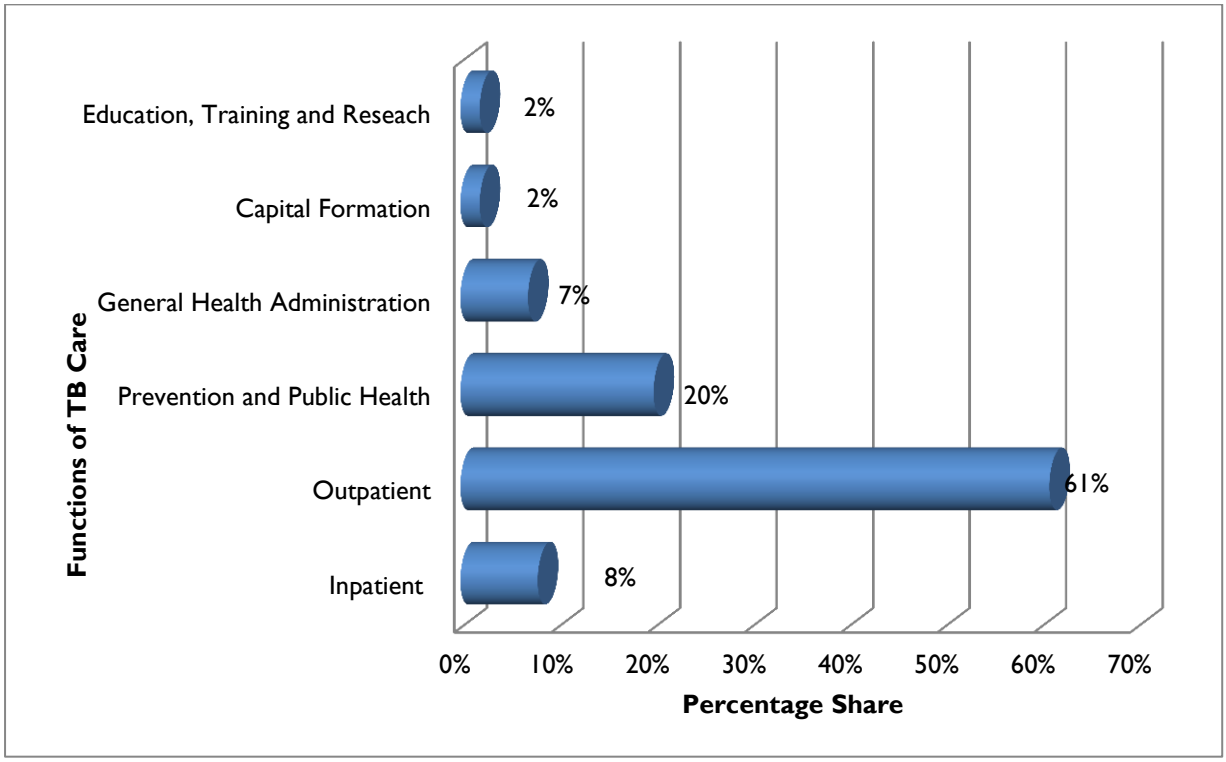


8.5 Functions of Tuberculosis Care

In 2010/11, TB outpatient services consume the largest share of TB resources (61 percent) of TB funding. Prevention and public health program on TB account for 20 percent, TB-related inpatient curative care for 8 percent, and general health administration for 7 percent (Figure 8.6). Other notable TB care functions were capital formation of health care provider institutions and education, training, and research, at 2 percent each.

These findings do not differ much from those of 2007/08, when the main TB intervention areas were TB outpatient services (62 percent), TB prevention (17 percent), capital formation (6 percent), and TB inpatient care (5 percent).

Figure 8.6: Spending on TB Care, by Function



9. CONCLUSION AND POLICY RECOMMENDATIONS OF NHA 2010/11

9.1 General NHA Conclusions

Ethiopia has made tremendous effort and exhibited remarkable progress in improving health service coverage, access, quality, and use. Its achievements have moved the country toward its MDG health targets. Implementation of high-impact intervention packages at all levels, including HEP packages at the family and community level, and expansion of outreach services and medium- to high-level clinical care, were particularly responsible for progress. Between 2000 and 2011, infant mortality declined by 39 percent, from 97 deaths per 1,000 live births to 59 deaths per 1,000 live births. Over the same period, under-five mortality declined by 47 percent, from 166 deaths per 1,000 live births in 2000 to 88 deaths per 1,000 live births in 2011. This year, it was declared that Ethiopia already achieved the MDG 4 of reducing under-five child mortality by two-thirds, from 204 deaths per 1,000 in 1990 to 68 per 1,000 in 2012 (UNICEF 2013).

Though these are encouraging developments in terms of improving health status, Ethiopia still has a wide range of problems in the health service delivery and health status of Ethiopians is still very poor. The life expectancy at birth of only 54 years is among the lowest in the world. One in every 17 Ethiopian children dies before the first birthday, and one in every 11 dies before the fifth birthday. There are also inequalities in health across regions, between rural and urban residents, and socioeconomic groups. Childhood mortality is higher in rural areas than in urban areas. By region, these rates were highest in Benishangul-Gumuz and lowest in Addis Ababa. The neonatal mortality rate is 37 deaths per 1,000 live births, the post-neonatal mortality rate was 22 deaths per 1,000 live births, and the perinatal mortality rate was 46 per 1,000 pregnancies (DHS 2011).

Among the major bottlenecks to be tackled under HSDP-IV implementation, "lack of resources and weak implementation capacity" are considered as priorities. HSDP-IV projected substantial resource needs for implementation of the program. Even under the best-case scenario, there is a need to mobilize an additional US$11.96 per capita per year on average over the five program years in order to reduce under-five mortality by 31.8 percent and maternal mortality by 54.8 percent. Resource need for the best-case scenario is even higher up to US$13.96 per capita per year, to bring down under-five mortality by 46 percent and maternal mortality by 56.6 percent.

It is evident that Ethiopia needs more resources to further the gains it has made so far. It also needs more aggressive demand-side interventions, including a reduction of myriad bottlenecks such as financial barriers and awareness-raising of the general public through strengthening of the HEP. To reduce financial barriers and encourage risk pooling and financial protection of the population, Ethiopia is moving to ensure universal coverage through SHI and CBHI schemes. The community- and household-level health service promotion and prevention activities done through the HEP are further strengthened through the HDA.

Overall health care financing trends: NHE increased substantially between 2007/08 and 2010/11 in absolute amount and also in terms of per capita spending on health. Nominally, NHE increased by 138 percent from Birr 11.1 billion (US$1.2 billion) in 2007/08 to over Birr 26.5 billion (US$1.6 billion) in 2010/11. Per capita NHE also grew by 29 percent, from US$16.09 per capita per annum in 2007/08 to US$20.77 in 2010/11. Health is still underfinanced and there is strong need to make more resources available to the sector to improve the health status of the population. This

figure is far below the HSDP-IV per capita spending target of US$32. It is also far below the US$34 per capita spending amount recommended by the Commission for Macroeconomic and Health (WHO 2001), which has been revised to $60 for 2015 (WHO 2010b).

Financers of general health care services: The contributions of all major financers (government, households, and the rest of the world) substantially increased between the fourth and fifth rounds. Government contributions grew by 67 percent in the same period. However, most of the increment came from households and the rest of the world; their respective contributions grew by 116 percent and 202 percent. In fact, the Ethiopian health sector is highly donor financed, as half of the total spending came from the rest of the world in 2010/11. Households are substantially burdened by high spending on health (34 percent of THE), costs that they usually incur at time of sickness and care seeking. It is critical to work on sustainability of financing as well as on reducing the financing burden on households, particularly at time of sickness, through introduction of prepayment mechanisms.

Managers of health resources: The government is the major manager of health resources, but households also play a significant role. All government (federal, regional, woreda, and parastatal) together managed nearly half (48.9 percent) of NHE in 2010/11. This is a change in a lead managerial responsibility, which shifted from the private sector in 2007/08 to the government in 2010/11. In this reporting year, households together with other private sector manage only 34.4 percent of THE. Donors and international NGOs continue playing a significant role in management of health resources, managing 14 percent of NHE. The bulk of resources managed by government originate from donors. Though sustainability and predictability of donor resources is always a challenge, in the short term the fact that the bulk of donor resources is being channeled through government gives the opportunity to influence allocation and prioritization in use of these resources.

Providers of health care services: Government health facilities are major recipients of the 2010/11 spending, accounting for nearly 34 percent. (PHCUs account for nearly 15 percent a decrease from 21 percent, and hospitals for 18.9 percent, an increase from 13 percent.) Providers of public health programs are also major recipients of health resources, accounting for 27 percent of the overall health spending. Private providers (both for-profit and nonprofit) received 16 percent of NHE.

Spending on health care functions: Curative health care services are still the major functions on which health resources are spent. They account for 51.6 percent of NHE (43.8 percent outpatient, up from 35 percent, and nearly 8 percent inpatient), an increase from 42 percent in 2007/08. Prevention of communicable diseases including prevention related to maternal and child health account for 27 percent. Expenditures on general health administration remain more or less the same, nearly 8 percent as it was in 2007/08. Capital investment in the health sector, and education, pre-service training, and research account for 7 percent and 5 percent of NHE, respectively. Spending on pharmaceuticals and other medical nondurables through independent pharmacies is negligible; it is believed that households might have reported their spending for medicines as outpatient and inpatient spending.

9.2 Subaccounts Conclusions

9.2.1 HIV/AIDS Subaccount

The national HIVAIDS expenditure of nearly Birr 5 billion (US$306 million) in 2010/11 is the largest amount of spending on a specific disease. It accounts for more than 19 percent of THE. The per capita HIV/AIDS expenditure based on the total population of the country was Birr 62.53 (US$3.88), while the per capita HIV/AIDS expenditure based on the total population of PLHIV is Birr 4,062 ($252), an increase from Birr 1,684 (US$180) in 2007/08.

HIV/AIDS is highly donor financed. In 2010/11, 83 percent of spending on HIV/AIDS, Birr 4.1 billion (US$255.6 million), originated from the rest of the world. Government spending (federal, regional, and parastatal) was Birr 698 million (US$43million, or about 14 percent) of total HIV/AIDS spending.

PLWIH shouldered a higher financial burden for their health care. PLHIV contributed Birr 96,684,908 (US$5,998,642) (2 percent) of the total spending on HIV/AIDS. Of the 400,251 people represented in this round of NHA survey, those who are HIV positive and need ART (both not in ART and under ART) spent an average Birr 241.77 or $15. This is more than double the per capita amount spent out of pocket by the general population on overall health, which was about Birr 112.93 or US$7.01 per person. All other private sources, including local NGOs and private for-profit organizations, covered only 1 percent.

There is strong need to devise a long-term HIV/AIDS financing strategy aimed at reducing donor dependency and sustainability as well as reducing the financial burden on PLHIV for treatment of opportunistic infections and other diseases. The current out-of-pocket spending can be either prohibitive, preventing people from accessing services, or catastrophic if they do, especially for citizens who are HIV positive.

9.2.2 Reproductive Health Subaccount

Reproductive health accounted for 13 percent of the total health spending in both 2007/08 and 2010/11, but total expenditure on reproductive health more than doubled in the same period (from Birr 1.4 billion or US$151 million to Birr 3.6 billion or US$224 million). This gives a per capita spending per woman of reproductive age (15–49 years) of Birr 195 or US$12 (an increase from Birr 74.6 or about US$8 in 2007/08).

The share of government financing for reproductive health substantially decreased. The Ethiopian government (federal and regional) covered about one-fourth (24.8 percent) of the total reproductive health spending which is a reduction in share from 29 percent of the total reproductive health spending in 2007/08. However, the rest of the world still contributed the highest proportion, 47 percent in 2010/11 (from 44 percent in 2007/08). Households covered about 28 percent of the total reproductive health spending.

Reproductive health financing strategy that is sustainable with less donor dependency as well as reducing the burden on households needs to be strengthened. Speedy scale-up of health insurance and prioritization of maternal and reproductive health care services in health insurance benefit packages needs to be ensured.

9.2.3 Child Health Subaccount

Child health expenditures accounted for about 11 percent of THE in 2010/11, a slight increase from 10 percent in 2007/08. The overall amount of spending on child health increased almost threefold (179 percent) from Birr 1.1 billion (US$114.1 million) in 2007/08 to nearly Birr 3 billion (US$184.5 million). The per capita spending on individual child of under five years old increased to Birr 256 (US16) compared to Birr 82 (US$9) in the previous NHA.

Child health is financed primarily by household out-of-pocket spending. In 2010/11, households are the major source (48 percent) of child health spending. In 2007/08 the rest of the world provided 63 percent of the spending. Currently, the rest of the world contributes 27 percent, and government 25 percent.

9.2.4 Malaria Subaccount

In 2010/11, a total of Birr 3,891,885,761 (US$241,465,073) was spent on malaria. This is an enormous increase (over sevenfold) from the amount spent in 2007/08 (Birr 519.5 million, or US$55.5 million). This brought malaria's share of NHE to 15 percent in 2010/11, from only 5

percent in 2007/08. This increase is mainly because of substantial donor funding for malaria programs including for procurement of ITNs. It is a positive development to see both the absolute amount and share of malaria spending increased substantially as malaria is among the major causes of mortality and morbidity in the country. Ethiopia's focus on prevention and control of malaria is commendable.

Malaria is predominantly donor financed. Donor funding accounted for 79 percent of the total spending on malaria, followed by households and government, which contributed 14 and 7 percent, respectively. The spending by government almost doubled (increased by about 82 percent); and household spending more than doubled (134 percent) compared to the amount spent in 2007/08.

The managerial role of government substantially increased in 2010/11. Government (FMOH, RHBs, WorHOs, and parastatals) managed 82 percent of the overall resources spent on malaria. This is understandable as the FMOH manages malaria spending originating from PBS and Global Fund. Households manage all of their spending on malaria (14 percent). The rest of the world manages only 2 percent of the total spending, while local and international NGOs manage 1 percent. Financing from domestic sources shall be increased to ensure sustainability of malaria prevention services, including procurement and distribution of ITNs.

9.2.5 Tuberculosis Subaccount

The overall spending on TB increased from a total of Birr 447,461,443 (US$47.8 million) in 2007/08 to Birr 824,619,769 (US$51,162,055) in 2010/11. This amount accounted for 3 percent of overall NHE. The resources spent on TB originated from different sources.

The rest of the world (donors and international NGOs) is the major financing source for TB. In 2010/11, the rest of the world covered more than half (51 percent) of TB spending), followed by households (36 percent). Government and all other sources accounted for 12 and 1 percent, respectively.

Government is the major manager of TB resources. In 2010/11, government manages about half of TB spending. Households manage the second largest amount, 36 percent, all the resources originating from them. The rest of the world manages about 12 percent and other agents manage the remaining 3 percent.

As with other priority areas, sustainability of TB funding needs to be studied further and efforts made to increase financing of TB programs from domestic sources. Because TB is a potential public health threat, adequate public funding for the programs needs to be ensured.

9.3 Policy Recommendations

Increase health spending focusing on increasing domestic financing: As noted above, Ethiopia's overall per capita spending as well as spending on selected priority areas remains inadequate. There is a great need to mobilize more resources for health to continue improving the quality of health care, and equity and access to care. While it is critical that Ethiopia needs continued donor support in the short term, the country also needs in the long term to reduce its donor dependency by increasing domestic resource mobilization as the country's economy transitions to that of a middle-income country. The Ethiopian government needs to meet the Abuja target/commitment by African leaders of spending 15 percent of the total government budget on health. Additionally, Ethiopia needs to explore innovative financing mechanisms to increase domestic financing for health.

Expedite expansion of risk pooling to reduce financial burden/barrier on households: Households provide a substantial amount of health financing out of pocket (over one-third of NHE). Such spending at time of sickness can be catastrophic or prohibitive. The health insurance initiative needs to be implemented expeditiously to cover all Ethiopians so that timely use of health care is ensured as well as catastrophic spending at time of sickness will be avoided.

Enhance protection of the poor and provision of health care services that are a public good: In the short term, there is a great need to ensure proper functioning of the fee waiver system in all regions and woredas as well as to provide exempted services to all targeted groups to both protect the poor and other marginalized groups and promote use of public health programs.

Continue generation and use of evidence for policy initiation and use: In addition to the need for further exploration and use of the data gathered for this round of NHA (household, PLHIV, and institutional surveys/data), the FMOH in collaboration with other stakeholders may need to do studies to gain an even more in-depth understanding of spending on health care. Conducting Public Expenditure Tracking Surveys to examine health spending thoroughly at the woreda and facility level, to see if there are some leakages and wastages where the sector can have some efficiency gains, is of paramount importance.

Continue building a more efficient and responsive health system: In light of the still-inadequate level of per capita spending on health, the progress in bringing change and improving health status of Ethiopians is very impressive. However, WHO estimated a global 20 to 40 percent inefficiency-related loss of resources in the health sector, and it underlined that every country has room for improving efficiency in the health sector. Efficient use of resources is also an important case to make when arguing for increased investments in health from government, private sector, and development partners.

Continue integration of different health programs and vertical support mechanisms: In Ethiopia, the various vertical programs are well integrated with the overall health system, in line with the principle of three ones, i.e., "One Plan, One Budget and One Report." This is increasingly possible, as the government system is being used by more programs such as The Global Fund, GAVI, MDG Performance Pool Fund, Technical Assistance Pool Fund, and PBS. The FMOH and health sector partners need to continue building on this experience.

Reducing the financial burden and barriers to household use of care: Household spending is very high both in absolute terms and on a per capita basis. Given the level of income and high poverty, household spending can be prohibitive to many households and catastrophic to others. In view of this, the health insurance initiative in Ethiopia is commendable. In addition, in the short-term effective implementation of the fee waiver system should be strengthened and ensure that it will be appropriately implemented in all regions and woredas.

Track and estimate voluntary contributions and other health expenditure: In the future, Ethiopia should try to estimate financial values of the wide range of community contributions including through the HDA initiative.

Increase understanding of NCDs and other diseases: Half of the total spending in the reporting year is consumed by health services and programs outside the four subaccounts (HIV/AIDS, reproductive health, malaria, and TB), as child health overlaps with three of the subaccounts and other health services and programs. One of the major areas of spending might be NCDs. The household survey done for this NHA revealed that 5 and 7 percent of the causes for outpatient visits and inpatient admissions, respectively, are NCDs (more specifically, cancer, diabetes, and hypertension). The survey also found that 13 percent of deaths were related to these diseases. In view of this, there is strong need to better understand the magnitude and resource implications of financing NCD services.

9.4 Institutionalization of Health Resource Tracking

Health resource tracking, particularly health expenditure tracking, is critical for making policies and other decisions on health financing and health investments. Ethiopia's FMOH and health sector partners have been using evidence generated by earlier rounds of NHA including for introduction of a wide range of health financing reforms, initiation of health insurance, a baseline for HSDPs, tracking spending against major health sector priority areas, and at different levels of the health sector. However, doing an NHA study is a huge undertaking in terms of time, labor, technical capability, and

financial resources, and there is strong need to generate data regularly and in less expensive ways. It is commendable that Ethiopia is incorporating health economics/ financing in the postgraduate programs of selected universities as one way to lay the foundation for such capacity. Other development steps that Ethiopia needs to continue include making use of the updated System of Health Accounts (SHA) 2011 framework and WHO's updated Resource Tracking Production Tool.

Following are suggestions for making the NHA more affordable:

- Piggyback selected general household and targeted group spending-related questions onto other national surveys such as the EDHS. It also might be useful to include some of the NHA household questionnaires in the household, income, and consumption expenditure survey.
- Develop a national donor and NGO health expenditure database with clear reporting mechanisms and formats as needed for health policy making and in accordance with the NHA classification scheme.
- WHO and other major stakeholders on health financing and resource tracking revised the SHA in 2011, and all countries are expected to transition from NHA and use the SHA2011 framework. WHO and other partners are doing capacity building at global, regional, and country levels. In Ethiopia, transition to the SHA2011 framework by building capacity of FMOH and key partners' staff to use the framework and WHO's updated Resource Tracking Tool is underway.
- Engage in continuous dialogue with the MOFED, the CSA, and other relevant partners about the institutionalization of NHA, and on collaboration on regular generation of NHA tables and reports.
- Incorporate financial expenditure data into the routine health management information systems.
- As part of the woreda evidence-based planning, the FMOH, RHBs, and WorHOs are annually doing resource mapping, and in the future, expenditure tracking can help to compare commitments captured during resource mapping with actual spending.
- The initiative to include health economics and financing in pre-service public health programs of major universities is commendable. The FMOH may continuously engage with these universities to assess progress in teaching of the course as well as in additional course revision and updates as needed. In addition, the Ministry may also engage in dialogue with other universities that teach economics and with other relevant departments to incorporate health financing courses with some sessions on resource tracking.

BIBLIOGRAPHY

Chen, L., et al. 2004. "Human resources for health: overcoming the crisis." *The Lancet* 364 (944):1984-1990.

CSA (Central Statistical Agency). 2008. The 2007 Population and Housing Census of Ethiopia. Statistical Report. Addis Ababa, Ethiopia.

CSA (Central Statistical Agency) and ICF International. 2012. Ethiopia Demographic and Health Survey 2011. Addis Ababa, Ethiopia and Calverton, Maryland, USA.

FDRE (Federal Democratic Republic of Ethiopia) Population Census Commission. 2008. Summary and Statistical Report of the 2007 Population and Housing Census. Addis Ababa, Ethiopia: UNFPA.

FMOH (Federal Ministry of Health). 2007. Baseline Assessment of Unit Cost of Health Services at Different Levels of Care. Background study for introducing Social Health Insurance. Addis Ababa, Ethiopia.

_____. 2008. Health Insurance Strategy. Addis Ababa, Ethiopia.

_____. 2009. Health Sector Strategic Plan (HSDP-III), Annual Performance Report. Addis Ababa, Ethiopia.

_____. 2010a. Ethiopia's Fourth National Health Accounts 2007/08. Addis Ababa, Ethiopia.

_____. 2010b. Health Sector Development Program IV 2010/11-2014/15. Addis Ababa, Ethiopia.

_____. 2011. Health and Health Related Indicators EFY 2003 (2010/11). Addis Ababa, Ethiopia.

_____. 2012a. Can Ethiopia reduce U5MR to below 20/1,000 live births by 2035? *Unpublished.* Addis Ababa. Ethiopia.

_____. 2012b. Ethiopian National Immunization Coverage Survey, Addis Ababa, Ethiopia.

_____. 2013. HSDP-IV Annual Performance Report EFY 2005 (2012/13). Addis Ababa, Ethiopia.

_____. Forthcoming 2014a. Household Health Services Utilization and Health Expenditure Survey (forthcoming).

_____. Forthcoming 2014b. NHA Survey of Health Services Utilization and Expenditure among PLHIV (forthcoming).

EHNRI (Ethiopian Health and Nutrition Research Institute). 2008. Five-Year Evaluation of Global Fund Health Impact Evaluation: Health Facility Report. Addis Ababa, Ethiopia.

_____. 2011. First Ethiopian National Population Based Tuberculosis Prevalence Survey. Addis Ababa, Ethiopia.

FMOH (Federal Ministry of Health) and FHAPCO (Federal HIV/AIDS Prevention and Control Office). 2007. Single Point HIV Prevalence Estimate. Addis Ababa, Ethiopia.

MOFED (Ministry of Finance and Economic Development). 2010. Growth and Transformation Plan 2010/11-2014/15. Addis Ababa, Ethiopia.

_____. 2011. National Accounts Statistics (GDP) estimates for 2003 EFY. Addis Ababa, Ethiopia. http://www.mofed.gov.et.

_____. 2012. Growth and Transformation Plan Annual Progress Report 2010/11. Addis Ababa, Ethiopia.

National Bank of Ethiopia. 2010. Annual report 20010/11. Addis Ababa, Ethiopia.

Savedoff W. 2003. How Much Should Countries Spend on Health? Discussion Paper Number 2-2003. Geneva: World Health Organization.

UNAIDS (Joint United Nations Program on HIV/AIDS). 2012. UNAIDS Global Report, 2012.

UNFPA (United Nations Population Fund). 1994. Programme of Action Adopted at the International Conference on Population and Development, Cairo.

_____. 2005. Situation Analysis on Population, Reproductive Health and Gender - Ethiopia. http://www. uneca.org/adfvi/documents/ETHIOPIA-ReproductiveHealth.pdf.

UNICEF (United Nations Children's Fund). 2013. Levels and Trends in Child Mortality Report 2013 Estimates Developed by the UN Inter-agency Group for Child Mortality Estimation.

WHO (World Health Organization), Commission on Macroeconomics and Health. 2001. Macroeconomics and Health: Investing in Health for Economic Development. Geneva.

_____. 2010a. Constraints to scaling up the health Millennium Development Goals: costing and financial gap analysis. Background document for the Taskforce on Innovative International Financing for Health Systems. http://www.internationalhealthpartnership.net//CMS_files/documents/working_group_1_technical_background_report_(world_health_organization)_EN.pdf. Accessed December 16, 2013.

_____. 2010b. The World Health Report: Health Systems Financing: The path to universal coverage.

_____. 2013. Global tuberculosis report 2012 http://www.who.int/tb/publications/global_report/gtbr12_main.pdf. Accessed December 2013.

_____. 2014. TB Country Profile. https://extranet.who.int/sree/Reports?op=Replet&name=%2FWHO_HQ_Reports%2FG2%2FPROD%2FEXT%2FTBCountryProfile&ISO2=ET&LAN=EN&outtype=html. Accessed January 2, 2014.

WHO (World Health Organization), World Bank, and USAID (United States Agency for International Development). 2003. Guide to Producing National Health Accounts: with special applications for low-income and middle-income countries. Geneva: WHO.

ANNEX A: ETHIOPIA FIFTH ROUND NHA CLASSIFICATIONS

Financing Sources

FS.1 Public Funds

- FS.1.1 Territorial Government Funds
  - FS.1.1.1 Central Government Revenue
  - FS.1.1.2 Regional and District government Revenue
- FS.1.2 Other Public Funds
  - FS.1.2.2 Other

FS.2 Private Funds

- FS.2.1 Employer Funds
  - FS.2.1.1 Parastatals
  - FS.2.1.2 Private Employers
  - FS.2.1.99 Other Employer Funds
- FS.2.2 Household funds
- FS.2.3 Non-profit Institutions Serving Individuals
- FS.2.4 Other Private Funds
  - FS.2.4.2 Other

FS.3 Rest of the World Funds

Financing Agents

HF.1 General Government

- HF.1.1 Territorial Government
  - HF.1.1.1 Central Government
    - HF.1.1.1.1 Ministry of Health
    - HF.1.1.1.2 HAPCO
    - HF.1.1.1.3 EHNRI
    - HF.1.1.1.4 FMHACA/DACA
    - HF.1.1.1.5 Ministry of Education
    - HF.1.1.1.6 Ministry of Defense
    - HF.1.1.1.7 Ministry of Justice-Federal Police
    - HF.1.1.1.8 PFSA

HF.1.1.1.99 Other Central Government Ministries and Offices

HF.1.1.2 Regional Government

HF.1.1.2.1 Regional Health Bureau

HF.1.1.2.2 Regional HAPCO

HF.1.1.2.3 Regional Bureau of Education

HF.1.1.2.4 Regional Police

HF.1.1.2.99 Other Regional and District Government

HF.1.1.3 Local/municipal government

HF.2 Private Sector

HF.2.2 Other Private Insurance (Non-social)

HF.2.3 Private Households' Out-of-Pocket Payment

HF.2.4 Non-Profit Institutions

HF.2.4.1 Local NGOs

HF.2.4.2 International NGOs

HF.2.5 Private Firms

HF.2.5.1 Parastatal Companies

HF.2.5.2 Private for Profit Companies

HF.3 Rest of the World

Health Care Providers

HP.1 Hospitals

HP.1.1 General Hospitals

HP.1.1.1 Government Hospitals

HP.1.1.1.1 Federal Hospitals

HP.1.1.1.2 Regional/Zonal Hospitals

HP.1.1.1.99 Other Government General Hospitals

HP.1.1.2 Private Hospitals

HP.1.1.2.1 Private for Profit Hospitals

HP.1.1.2.2 Private not-for-profit Hospitals

HP.1.3 Specialty (Other than Mental Health and Substance Abuse) Hospitals

HP.2 Nursing and Residential Care Facility

HP.2.3 Community Care Facilities for the Elderly

HP.3 Providers of Ambulatory Health Care

- HP.3.1 Offices of Physicians (Private Clinics)
- HP.3.3 Offices of Other Health Practitioners
- HP.3.4 Outpatient Care Centers
  - HP.3.4.1 Family Planning Centers
  - HP.3.4.5 All Other Outpatient Service Centers
    - HP.3.4.5.1 Public PHCU (Health Center and Health Posts)
    - HP.3.4.5.2 Not for Profit (NGO) PHCU- Health Centers, Clinics and Posts
    - HP.3.4.5.99 Other All other Out-patient Multi-specialty and Co-operative Services Centers
  - HP.3.4.9 All Other Out-patient Community and Other Integrated Care Centers
- HP.3.5 Medical and Diagnostic Laboratories
  - HP.3.5.1 Public Medical and Diagnostic Laboratories
- HP.3.6 Providers of Home Health Care Services
- HP.3.9 Other Providers of Ambulatory Health Care
  - HP.3.9.2 Blood and Organ Banks
  - HP.3.9.3 Alternative or Traditional Practitioners
  - HP.3.9.9 Providers of All Other Ambulatory Health Care Services

HP.4 Retail Sale and Other Providers of Medical Goods

- HP.4.1 Dispensing Chemists (Independent Pharmacies and Drug Outlets)
- HP.4.1.1 Private Pharmacies
- HP.4.1.2 Public Pharmacies
- HP.4.2 Retail Sale and Other Suppliers of Optical Glasses and Other Vision Products
- HP.4.4 Retail Sale and Other Suppliers of Medical Appliances (Other than Optical Goods and Hearing Aids)
- HP.4.9 All Other Miscellaneous Sale and Other Suppliers of Pharmaceuticals and Medical Goods

HP.5 Provision and Administration of Public Health Programs

HP.6 General Health Administration and Insurance

- HP.6.1. Government Administration of Health
- HP.6.9 All Other Providers of Health Administration

HP.7 All other Industries (Rest of the Economy)

- HP.7.1 Establishments as Providers of Occupational Health Care Services
- HP.7.3 All Other Industries as Secondary Producers of Health Care

HP.8 Institutions Providing Health-related Services

HP.8.1 Research Institutions

HP.8.2 Education and Training Institutions

HP.8.3 Other Institutions Providing Health-related Services

HP.9 Rest of the World

HP.nsk Provider Not Specified by Kind

HP. AD Providers of Non-health HIV Programs and Services

Health Care Functions

HC.1 Services of Curative Care

HC.1.1 In-patient Curative Care

HC.1.1.1 RH related Inpatient Curative Care

HC.1.1.1.1 Maternal Health (Delivery, Management of Abortion Complication - Inpatient)

HC.1.1.1.99 Other RH Related Inpatient Curative Care (Fistula, Fibroids, Cancer)

HC.1.1.2 HIV Related Inpatient Curative Care

HC.1.1.3 TB Related Inpatient Curative Care

HC.1.1.4 Malaria Related Inpatient Curative Care

HC.1.1.5 CH related Inpatient Curative Care

HC.1.1.99 Other In-patient Curative Care

HC.1.3 Outpatient Care

HC.1.3.1 Basic Medical and Diagnostic Services

HC.1.3.1.1 RH-Basic Medical and Diagnostic Services

HC.1.3.1.1.1 Maternal Health (Ante and Post Natal Care, Outpatient Post Abortion Care)

HC.1.3.1.1.2 Family Planning (Pills, Depo, Norplant, IUCD)

HC.1.3.1.1.99 Other RH-Basic Medical and Diagnostic Services (e.g. STI)

HC.1.3.1.2 HIV-Basic Medical and Diagnostic Services

HC.1.3.1.2.1 HCT

HC.1.3.1.2.2 PMTCT

HC.1.3.1.2.3 ART

HC.1.3.1.2.3.1 Adult ART

HC.1.3.1.2.3.2 Pediatric ART

HC.1.3.1.2.99 Other HIV-Basic Medical and Diagnostic Services

HC.1.3.1.3 TB-Basic Medical and Diagnostic Services

HC.1.3.1.4 Malaria-Basic Medical and Diagnostic Services

HC.1.3.1.5 CH-Basic Medical and Diagnostic Service

HC.1.3.1.5.1 Immunization

HC.1.3.1.5.99 Other CH-Basic Medical and Diagnostic Services

HC.1.3.1.99 Other Basic Medical and Diagnostic Services

HC.1.3.3 All Other Specialized Health Care

HC.1.3.9 All Other Outpatient Curative Care

HC.1.4 Services of Curative Homecare

HC.2 Services of Rehabilitative Care

HC.2.1 Inpatient Rehabilitative Care

HC.2.2 Day Cases of Rehabilitative Care

HC.2.3 Outpatient Rehabilitative Care

HC.2.4 Services of Rehabilitative Homecare

HC.4 Ancillary Services to Health Care

HC.4.1 Clinical Laboratory

HC.4.1.99 Other Clinical Laboratory

HC.4.3 Patient Transport and Emergency Rescue

HC.4.9 All Other Miscellaneous Ancillary Services

HC.5 Medical Goods Dispensed to Outpatients

HC.5.1 Pharmaceutical and Other Medical non-durables

HC.5.1.1 Prescribed Medicines

HC.5.1.3 Other Medical Non-durables

HC.5.1.4 Pharmaceuticals

HC.5.1.4.1 Malaria Pharmaceuticals Dispensed to Outpatients

HC.5.1.4.2 RH Pharmaceuticals Dispensed to Outpatients

HC.5.1.4.3 HIV Pharmaceuticals Dispensed to Outpatients

HC.5.1.4.4 TB Pharmaceuticals Dispensed to Outpatients

HC.5.1.4.5 CH Pharmaceuticals Dispensed to Outpatients

HC.5.1.4.99 Other Pharmaceuticals

HC.5.2 Therapeutic Appliances and Other Medical Durables

HC.5.2.1 Glasses and Other Vision Products

HC.5.2.2 Orthopedic Appliances and Other Prosthetics

HC.5.2.4 Medico-technical Devices Including Wheelchairs

HC.6 Prevention and Public Health Services

HC.6.1 Maternal and Child Health; Family Planning and Counselling (Subaccount Specific)

HC.6.1.1 Reproductive Health Related Prevention and Public Health

HC.6.1.1.1 Family Planning and Counseling

HC.6.1.1.2 Maternal Health (e.g. Campaigns Related to Fistula, Breast Cancer Early Detection...)

HC.6.1.1.99 Other Reproductive Health Related Prevention and Public Health Services (e.g. STI Prevention Campaigns such as Condom Promotion)

HC.6.1.2 Child Health Related Prevention and Public Health Services

HC.6.1.2.1 Immunization Programs (Campaigns and Outreach)

HC.6.1.2.99 Other Child Health Related Prevention and Public Health Services

HC.6.1.99 Other Maternal and Child Health; Family Planning and Counselling

HC.6.2 School Health Services

HC.6.3 Prevention of Communicable Diseases

HC.6.3.1 Prevention of HIV Transmission

HC.6.3.2 Prevention of Malaria

HC.6.3.2.1 ITN Program

HC.6.3.2.2 IRS program

HC.6.3.2.3 Community Based Vector Management Program

HC.6.3.2.99 Other Prevention of Malaria

HC.6.3.3 Prevention of TB

HC.6.3.99 Other Prevention of Communicable Diseases

HC.6.4 Prevention of Non-communicable Diseases

HC.6.5 Occupational Health Care

HC.6.9 All Other Miscellaneous Public Health Services

HC.7 Health Administration and Health Insurance

HC.7.1 General Government Administration of Health

HC.7.1.1 General Government Administration of Health (Except Social Security)

HC.7.1.1.1 RH-General Government Administration of Health

HC.7.1.1.2 HIV-General Government Administration of Health

HC.7.1.1.3 TB-General Government Administration of Health

HC.7.1.1.4 Malaria-General Government Administration of Health

HC.7.1.1.5 CH-General Government Administration of Health

HC.7.1.1.99 Other General government administration of Health (Except Social Security)

HC.nsk Health Functions Not Specified by Kind

HC. R Health Related Activities and Functions

HC.R.1 Capital Formation of Health Care Provider Institutions

- HC.R.1.1 RH-Capital Formation of Health Care Provider Institutions
- HC.R.1.2 HIV-Capital Formation of Health Care Provider Institutions
- HC.R.1.3 TB-Capital Formation of Health Care Provider Institutions
- HC.R.1.4 Malaria-Capital Formation of Health Care Provider Institutions
- HC.R.1.5 CH-Capital Formation of Health Care Provider Institutions
- HC.R.1.99 Other Capital Formation of Health Care Provider Institutions

HC.R.2 Education and Training of Health Personnel

- HC.R.2.1 RH-Education and Training
- HC.R.2.2 HIV-Education and Training
- HC.R.2.3 TB-Education and Training
- HC.R.2.4 Malaria-Education and Training
- HC.R.2.5 CH-Education and Training
- HC.R.2.99 Other Education and Training of Health Personnel

HC.R.3 Research and Development in Health

- HC.R.3.1 RH-Research and Development
- HC.R.3.2 HIV-Research and Development
- HC.R.3.3 TB-Research and Development
- HC.R.3.4 Malaria-Research and Development
- HC.R.3.5 CH-Research and Development
- HC.R.3.99 Other Research and development in Health

HC.R.4 Food, Hygiene, and Drinking Water Control

HC.R.5 Environmental Health

HC.R.6 Administration and Provision of Social Services In-kind to Assist Living with Disease and Impairment

HC.R.7 Administration and Provision of Health-Related Cash-Benefits

AD Addendum Items (non-Health)

AD.1 Mitigation

AD.1.1 Social Support Services

AD.1.2 Non-health Services to Orphans and Vulnerable Children

AD.3 Non-health HIV Information, Education, and Communication (IEC)

AD.4 Empowerment and Organization

AD.nsk Non-health HIV Services Not Specified by Kind

ANNEX B: NHA TABLES

Annex B1: General Health Expenditure Tables

Annex B1.1: Financing Source by Financing Agent (FS x HF)

FSxHF	FS.1.1.1 Central government revenue	FS.1.1.2 Regional and District government revenue	FS.1.2.2 Other	FS.2.1.1 Parastatals	FS.2.1.2 Private employers	FS.2.1.99 Other Employer Funds	FS.2.2 Household funds	FS.2.3 Non-profit institutions serving individuals	FS.2.4.2 Other	FS.3 Rest of the world funds	Row Total
HF.1.1.1.1 Ministry of Health	614,305,795									6,179,537,165	**6,793,842,960**
HF.1.1.1.2 HAPCO	6,050,660									1,844,409,048	**1,850,459,708**
HF.1.1.1.3 EHNRI										101,894,248	**101,894,248**
HF.1.1.1.4 FMHACA/DACA	39,607,113									18,335,973	**57,943,086**
HF.1.1.1.5 Ministry of Education	192,730,198									22,130,721	**214,860,919**
HF.1.1.1.6 Ministry of Defense	48,129,114									15,907,710	**64,036,824**
HF.1.1.1.7 Ministry of Justice-Federal Police	21,566,006									5,016,590	**26,582,596**
HF.1.1.1.8 PFSA			83,560,218								**83,560,218**
HF.1.1.1.99 Other Central Government Ministries and Offices	9,244,292									4,252,617	**13,496,910**
HF.1.1.2.1 Regional Health Bureau		1,804,424,831								121,531,748	**1,925,956,579**
HF.1.1.2.2 Regional HAPCO		47,674,401								13,528,749	**61,203,150**
HF.1.1.2.3 Regional Bureau of Education		7,550,449								250,333	**7,800,782**
HF.1.1.2.4 Regional Police		4,408,648									**4,408,648**
HF.1.1.2.99 Other Regional and District		83,702,438									**83,702,438**

FSxHF	FS.1.1.1 Central government revenue	FS.1.1.2 Regional and District government revenue	FS.1.2.2 Other	FS.2.1.1 Parastatals	FS.2.1.2 Private employers	FS.2.1.99 Other Employer Funds	FS.2.2 Household funds	FS.2.3 Non-profit institutions serving individuals	FS.2.4.2 Other	FS.3 Rest of the world funds	Row Total
Government											
HF.1.1.3 Local/municipal government		194,018,083									**194,018,083**
HF.2.2 Other private insurance (non social)				20,521,272	81,568,528	15,461,282	4,120,893				**121,671,976**
HF.2.3 Private households' out-of-pocket payment							8,922,439,407				**8,922,439,407**
HF.2.4.1 Local NGOs		1,735,116				726,486	194,260	22,511,534	3,620,210	501,477,968	**530,265,574**
HF.2.4.2 International NGOs								15,162,320	3,219,823	2,390,908,134	**2,409,290,277**
HF.2.5.1 Parastatal companies				599,481,488							**599,481,488**
HF.2.5.2 Private for Profit companies					65,811,047						**65,811,047**
HF.3 Rest of the world										1,235,142,727	**1,235,142,727**
Column total (THE)	**931,633,179**	**2,143,513,965**	**83,560,218**	**620,002,761**	**147,379,575**	**16,187,769**	**8,926,754,560**	**37,673,854**	**6,840,033**	**12,454,323,732**	**25,367,869,645**
HF.Health Related	347,970,921				356,182			103,046	8,970,831	739,595,629	**1,023,619,194**
Column Total (NHE)	**1,279,604,099**	**2,143,513,965**	**83,560,218**	**620,002,761**	**147,735,757**	**16,187,769**	**8,926,754,560**	**37,776,900**	**15,810,865**	**13,193,919,361**	**26,464,866,254**
HF.AD			195,343	986,516					24,000	83,872,725	85,078,584
Column Total (THAE)	**1,279,604,099**	**2,143,513,965**	**83,755,562**	**620,989,276**	**147,735,757**	**16,187,769**	**8,926,754,560**	**37,776,900**	**15,834,865**	**13,277,792,086**	**26,549,944,838**

Annex B1.2: Financing Agent by Health Service Provider (HF x HP)

HFxHP	HF.1.1.1.1 Ministry of Health	HF.1.1.1.2 HAPCO	HF.1.1.1.3 EHNRI	HF.1.1.1.4 FMHACA/DACA	HF.1.1.1.5 Ministry of Education	HF.1.1.1.6 Ministry of Defense	HF.1.1.1.7 Ministry of Justice-Federal Police	HF.1.1.1.8 PFSA	HF.1.1.1.99 Other Central Government Ministries and Offices	HF.1.1.2.1 Regional Health Bureau	HF.1.1.2.2 Regional HAPCO	HF.1.1.2.3 Regional Bureau of Education	HF.1.1.2.4 Regional Police	HF.1.1.2.99 Other Regional and District Government	HF.1.1.3 Local/municipal government	HF.2.2 Other private insurance (non social)	HF.2.3 Private households' out-of-pocket payment	HF.2.4.1 Local NGOs	HF.2.4.2 International NGOs	HF.2.5.1 Parastatal companies	HF.2.5.2 Private for Profit companies	HF.3 Rest of the world	Row Total
HP.1.1.1.1 Federal Hospitals	176,493,764				93,882,026				9,244,292							17,165			1,337,176			40,000	281,014,424
HP.1.1.1.2 Regional/Zonal Hospitals	248,889,225				818,189					788,950,057			4,408,648	81,831,272		12,657,445		15,996,041	779,390,190			90,895,570	2,023,836,636
HP.1.1.1.99 Other Government General Hospitals					110,031,122	48,129,114	21,566,006										2,509,661,266		765,646			12,503,847	2,702,657,002
HP.1.1.2.1 Private for Profit Hospitals																17,177,596	1,051,412,343	4,048,212	2,887,143				1,075,525,295
HP.1.1.2.2 Private not-for-profit Hospitals																2,680	87,771,047	6,893,396	2,221,729				96,888,851
HP.1.3 Specialty (other than mental health and substance abuse) hospitals																3,260,161			2,312,799				5,572,960
HP.2.3 Community care facilities for the elderly																			33,080				33,080
HP.3.1 Offices of physicians (Private Clinics)																6,092,864	2,770,915,016	4,881,230	3,768,624				2,785,657,734
HP.3.3 Offices of other health practitioners																			772,872				772,872
HP.3.4.1 Family planning centers																		278,047	1,353,917				1,631,964
HP.3.4.5.1 Public PHCU (Health Center and Health Posts)	718,610,394	2,336,045								127,318,380					194,018,083	6,934,947	2,115,658,623	24,238,876	215,483,787			484,627,292	3,889,226,427
HP.3.4.5.2 Not for profit (NGO) PHCU-Health Centers, clinics and posts																	120,005,927	19,184,275	20,880,816				160,071,018
HP.3.4.5.99 Other All other out-patient multi-speciality and co-operative services centers																		3,267,666	7,815,854				11,083,520
HP.3.4.9 All other out-patient community and other integrated care centers																		271					271
HP.3.5.1 Public Medical and Diagnostic Labratories			38,030,222																				38,030,222
HP.3.6 Providers of home health care services																			112,254				112,254
HP.3.9.2 Blood and organ banks	14,970,133									217,636								166,000	802,043			734,166	16,889,978
HP.3.9.3 Alternative or traditional practitioners																	177,810,521						177,810,521
HP.3.9.9 Providers of all other ambulatory health care services																			15,228,644				15,228,644

HFxHP	HF.1.1.1.1 Ministry of Health	HF.1.1.1.2 HAPCO	HF.1.1.1.3 EHNRI	HF.1.1.1.4 FMHACA/DACA	HF.1.1.1.5 Ministry of Education	HF.1.1.1.6 Ministry of Defense	HF.1.1.1.7 Ministry of Justice-Federal Police	HF.1.1.1.8 PFSA	HF.1.1.1.99 Other Central Government Ministries and Offices	HF.1.1.2.1 Regional Health Bureau	HF.1.1.2.2 Regional HAPCO	HF.1.1.2.3 Regional Bureau of Education	HF.1.1.2.4 Regional Police	HF.1.1.2.99 Other Regional and District Government	HF.1.1.3 Local/municipal government	HF.2.2 Other private insurance (non social)	HF.2.3 Private households' out-of-pocket payment	HF.2.4.1 Local NGOs	HF.2.4.2 International NGOs	HF.2.5.1 Parastatal companies	HF.2.5.2 Private for Profit companies	HF.3 Rest of the world	Row Total
HP.4.1.1 Private Pharmacies																4,642,150	49,235,042		530,000				54,407,193
HP.4.1.2 Public Pharmacies																	8,768,986						8,768,986
HP.4.2 Retail sale and other suppliers of optical glasses and other vision products																			87,621				87,621
HP.4.4 Retail sale and other suppliers of medical appliances (other than optical goods and hearing aids)																		1,386,931					1,386,931
HP.4.9 All other miscellaneous sale and other suppliers of pharmaceuticals and medical goods																		2,000,000	127,778,271				129,778,271
HP.5 Provision and administration of public health programs	3,366,583,344	1,848,123,663	425,038		9,688,567	15,907,710	5,016,590		4,252,617	100,534,741	10,642,266	250,333		973,017				408,711,311	1,122,090,803			197,812,568	7,091,012,569
HP.6.1. Government administration of health	384,501,186		52,250,463	57,943,086	441,014			83,560,218		765,606,350	50,560,884							659,315	10,486,476			11,198,246	1,417,207,238
HP.6.9 All other providers of health administration	33,298,552		11,188,525															38,060,004	54,018,094			437,331,039	573,896,213
HP.7.1 Establishments as providers of occupational health care services														898,148		1,110,824				275,163,598	20,229,088		297,401,659
HP.7.3 All other industries as secondary producers of health care																		200,000			2,573,327		2,773,327
HP.9 Rest of the world																			15,495,108	3,454,545	161,178		19,110,831
HP.nsk Provider not specified by kind	1,850,496,361									143,329,416		7,550,449				69,776,143	31,200,635	294,000	23,637,330	320,863,345	42,847,453		2,489,995,132
Column total (THE)	**6,793,842,960**	**1,850,459,708**	**101,894,248**	**57,943,086**	**214,860,919**	**64,036,824**	**26,582,596**	**83,560,218**	**13,496,910**	**1,925,956,579**	**61,203,150**	**7,800,782**	**4,408,648**	**83,702,438**	**194,018,083**	**121,671,976**	**8,922,439,407**	**530,265,574**	**2,409,290,277**	**599,481,488**	**65,811,047**	**1,235,142,727**	**25,367,869,645**
HP.8.1 Research institutions			43,203,922		654,409					941,063				196,560				3,062,474	18,358,500				66,416,928
HP.8.2 Education and training institutions	784,681				310,545,438					3,361,694								3,298,476	29,025,859		356,182	6,581,887	353,954,216
HP.8.3 Other institutions providing health-related services	492,469,601									1,534,828								27,789,699	154,831,337				676,625,465
Column Total (NHE)	**7,287,097,242**	**1,850,459,708**	**145,098,170**	**57,943,086**	**526,060,766**	**64,036,824**	**26,582,596**	**83,560,218**	**13,496,910**	**1,931,794,164**	**61,203,150**	**7,800,782**	**4,408,648**	**83,898,998**	**194,018,083**	**121,671,976**	**8,922,439,407**	**564,416,224**	**2,611,505,972**	**599,481,488**	**66,167,228**	**1,241,724,614**	**26,464,866,254**
HP.AD Providers of non-health HIV programs and services																		41,156,051	42,936,017	986,516			85,078,584
Column Total (THAE)	**7,287,097,242**	**1,850,459,708**	**145,098,170**	**57,943,086**	**526,060,766**	**64,036,824**	**26,582,596**	**83,560,218**	**13,496,910**	**1,931,794,164**	**61,203,150**	**7,800,782**	**4,408,648**	**83,898,998**	**194,018,083**	**121,671,976**	**8,922,439,407**	**605,572,275**	**2,654,441,989**	**600,468,004**	**66,167,228**	**1,241,724,614**	**26,549,944,838**

Annex B1.3: Health Service Provider by Health Functions/Services and commodities/ (HP x HC)

HPxHC	HP.1.1.1.1 Federal Hospitals	HP.1.1.1.2 Regional/ Zonal Hospitals	HP.1.1.1.99 Other Government General Hospitals	HP.1.1.2.1 Private for Profit Hospitals	HP.1.1.2.2 Private not-for-profit Hospitals	HP.1.3 Specialty (other than mental health and substance abuse) hospitals	HP.2.3 Community care facilities for the elderly	HP.3.1 Offices of physicians (Private Clinics)	HP.3.3 Offices of other health practitioners	HP.3.4.1 Family planning centers	HP.3.4.5.1 Public PHCU (Health Center and Health Posts)	HP.3.45.2 Not for profit (NGO) PHCU- Health Centers, clinics and posts	HP.3.45.99 Other All other out-patient multi-specialty and co-operative services centers	community and other integrated	HP.3.5.1 Public Medical and Diagnostic Labratories	HP.3.6 Providers of home health care services	HP.3.9.2 Blood and organ banks	HP.3.9.3 Alternative or traditional practitioners	HP.3.9.9 Providers of all other ambulatory health care services	HP.4.1.1 Private Pharmacies	HP.4.1.2 Public Pharmacies	HP.4.2 Retail sale and other suppliers of optical glasses and [illegible]	HP.4.3 Retail sale and other suppliers of medical appliances (other than optical goods and [illegible]	HP.4.9 All other miscellaneous sale and other suppliers of pharmaceuticals and medical goods	HP.5 Provision and administration of public health programs	HP.6.1. Government administration of health	HP.6.9 All other providers of health administration	HP.7.1 Establishments as providers of occupational health care services	HP.7.3 All other industries as secondary producers of health care	HP.9 Rest of the world	HP.nsk Provider not specified by kind	**Row Total (THE)**	HP.8.1 Research institutions	HP.8.2 Education and training institutions	HP.8.3 Other institutions providing health-related services	**Row Total (NHE)**	HP.A.D Providers of non-health HIV programs and services	**Row Total (THAE)**
HC.1.3.1 Basical medical and diagnostic services (subaccount specific)	48,711,113	192,650,687	786,932,415	431,739,582	53,657,763	351,511		854,303,328			1,777,980,485	64,430,079	1,420,251					43,048,810	34,026		2,073,204							92,565,842			1,096,250,793	**5,446,149,890**						
HC.1.3.1.99 Other Basical medical and diagnostic services	22,392,332	61,736,999	1,409,616,993	428,482,111	11,783,016	330,883		1,819,643,103			1,279,326,962	75,743,150	5,058,223					134,819,789	15,194,618									393,432			473,774,709	**5,738,296,320**						
HC.1.3.3 All other specialized health care												569,326																			**569,326**						
HC.1.3.9 All other out-patient curative care	7,630	11,610,304		8,927,121	320,951	1,811,707	33,080	4,430,701			7,767,713	8,291,559	1,723,547							1,009								156,579,536			213,982,764	**415,487,622**						
HC.1.4 Services of curative home care											18,889					112,254															**131,144**						
HC.2.1 In-patient rehabilitative care		70,321			345,349							256,964	677,537																		**1,350,171**						
HC.2.2 Day cases of rehabilitative care						330,883																									**330,883**						
HC.2.3 Out-patient rehabilitative care											163,744	152,461																			**316,205**						
HC.2.4 Services of rehabilitative home care																												200,000		2,521,617	**2,721,617**						
HC.4.1.99 Other Clinical laboratory												310,000																		262,885	**572,885**						

HP×HC	HP.1.1.1.1 Federal Hospitals	HP.1.1.1.2 Regional/ Zonal Hospitals	HP.1.1.1.99 Other Government General Hospitals	HP.1.1.2.1 Private for Profit Hospitals	HP.1.1.2.2 Private not-for-profit Hospitals	HP.1.3 Specialty (other than mental health and substance abuse) hospitals	HP2.3 Community care facilities for the elderly	HP3.1 Offices of physicians (Private Clinics)	HP3.3 Offices of other health practitioners	HP3.4.1 Family planning centers	HP.3.4.5.1 Public PHCU (Health Center and Health Posts)	HP.3.4.5.2. Not for profit (NGO) PHCU- Health Centers, clinics and posts	HP.3.4.5.99 Other All other out-patient multi-specialty and co-operative services centers	community and other integrated	HP3.5.1 Public Medical and Diagnostic Laboratories	HP.3.6 Providers of home health care services	HP3.9.2 Blood and organ banks	HP3.9.3 Alternative or traditional practitioners	HP3.9.9 Providers of all other ambulatory health care services	HP.4.1.1 Private Pharmacies	HP.4.1.2 Public Pharmacies	HP.4.2 Retail sale and other suppliers of optical glasses and [illegible] products	suppliers of medical appliances (other than optical goods and	HP.4.9 All other miscellaneous sale and other suppliers of pharmaceuticals and medical goods	HP.5 Provision and administration of public health programs	HP.6.1. Government administration of health	HP.6.9 All other providers of health administration	HP.7.1 Establishments as providers of occupational health care services	HP.7.3 All other industries as secondary producers of health care	HP.9 Rest of the world	HP.nsk Provider not specified by kind	**Row Total (THE)**	HP.8.1 Research institutions	HP.8.2 Education and training institutions	HP.8.3 Other institutions providing health-related services	**Row Total (NHE)**	HP.AD Providers of non-health HIV programs and services	**Row Total (THAE)**
HC.4.3 Patient transport and emergency rescue																														280,930	**280,930**							
HC.4.9 All other miscellaneous ancillary services																	1,444,802														**1,444,802**							
HC.5.1.1 Prescribed medicines								5,815												4,641,141											**4,646,956**							
HC.5.1.3 Other medical non-durables																				530,000				127,075,191							**127,605,191**							
HC.5.1.4 Pharmaceuticals (subaccount specific)																				14,521,228	6,349,370										**20,870,598**							
HC.5.1.4.4 TB Pharmaceticals dispensed to out-patients																					346,412										**346,412**							
HC.5.1.4.99 Other Pharmaceuticals																				34,713,815											**34,713,815**							
HC.5.2.1 Glasses and other vision products																						87,621								2,234	**89,855**							
HC.5.2.2 Orthopaedic appliances and other prosthetics						245,087																	1,236,586	2,703,080							**4,184,753**							
HC.5.2.4 Medico-technical devices, including wheelchairs																							150,346								**150,346**							

HP×HC	HP.1.1.1.1 Federal Hospitals	HP.1.1.1.2 Regional/ Zonal Hospitals	HP.1.1.1.99 Other Government General Hospitals	HP.1.1.2.1 Private for Profit Hospitals	HP.1.1.2.2 Private not-for-profit Hospitals	HP.1.3 Specialty (other than mental health and substance abuse) hospitals	HP2.3 Community care facilities for the elderly	HP3.1 Offices of physicians (Private Clinics)	HP3.3 Offices of other health practitioners	HP3.4.1 Family planning centers	HP.3.4.5.1 Public PHCU (Health Center and Health Posts)	HP.3.4.5.2 Not for profit (NGO) PHCU- Health Centers, clinics and posts	HP.3.4.5.99 Other All other out-patient multi-specialty and co-operative services centers	community and other integrated	HP3.5.1 Public Medical and Diagnostic Laboratories	HP.3.6 Providers of home health care services	HP3.9.2 Blood and organ banks	HP3.9.3 Alternative or traditional practitioners	HP3.9.9 Providers of all other ambulatory health care services	HP.4.1.1 Private Pharmacies	HP.4.1.2 Public Pharmacies	HP.4.2 Retail sale and other suppliers of optical glasses and [illegible] products	suppliers of medical appliances (other than optical goods and	HP.4.9 All other miscellaneous sale and other suppliers of pharmaceuticals and medical goods	HP.5 Provision and administration of public health programs	HP.6.1. Government administration of health	HP.6.9 All other providers of health administration	HP.7.1 Establishments as providers of occupational health care services	HP.7.3 All other industries as secondary producers of health care	HP.9 Rest of the world	HP.nsk Provider not specified by kind	**Row Total (THE)**	HP.8.1 Research institutions	HP.8.2 Education and training institutions	HP.8.3 Other institutions providing health-related services	**Row Total (NHE)**	HP.AD Providers of non-health HIV programs and services	**Row Total (THAE)**
HC.6.1 Maternal and child health; family planning and counselling (subaccount specific)										1,353,917	1,287,483	53,080													982,485,203			120,886				**985,300,569**						
HC.6.1.99 Other Maternal and child health; family planning and counselling																									12,873,046							**12,873,046**						
HC.6.2 School health services																									246,651							**246,651**						
HC.6.3 Prevention of communicable diseases (subaccount specific)		603,583									1,185,003														5,276,256,543			7,734,936			49,273,853	**5,335,053,918**						
HC.6.3.99 Other Prevention of communicable diseases																									447,731,543							**447,731,543**						
HC.6.4 Prevention of non-communicable diseases																									707,499							**707,499**						
HC.6.5 Occupational health care																		189							83,247			3,190,778	2,573,327		4,813,407	**10,660,948**						
HC.6.9 All other miscellaneous public health services											1,340,741						802,043								370,570,761	1,708,172	74,065	54,714				**374,550,495**						

HPxHC	HP.1.1.1.1 Federal Hospitals	HP.1.1.1.2 Regional/ Zonal Hospitals	HP.1.1.1.99 Other Government General Hospitals	HP.1.1.2.1 Private for Profit Hospitals	HP.1.1.2.2 Private not-for-profit Hospitals	HP.1.3 Specialty (other than mental health and substance abuse) hospitals	HP.2.3 Community care facilities for the elderly	HP.3.1 Offices of physicians (Private Clinics)	HP.3.3 Offices of other health practitioners	HP.3.4.1 Family planning centers	HP.3.4.5.1 Public PHCU (Health Center and Health Posts)	HP.3.4.5.2 Not for profit (NGO) PHCU- Health Centers, clinics and posts	HP.3.4.5.99 Other All other out-patient multi-specialty and co-operative services centers	community and other integrated	HP.3.5.1 Public Medical and Diagnostic Labratories	HP.3.6 Providers of home health care services	HP.3.9.2 Blood and organ banks	HP.3.9.3 Alternative or traditional practitioners	HP.3.9.9 Providers of all other ambulatory health care services	HP.4.1.1 Private Pharmacies	HP.4.1.2 Public Pharmacies	HP.4.2 Mean sale and other suppliers of optical glasses and [illegible] products	suppliers of medical appliances (other than optical goods and	HP.4.9 All other miscellaneous sale and other suppliers of pharmaceuticals and medical goods	HP.5 Provision and administration of public health programs	HP.6.1. Government administration of health	HP.6.9 All other providers of health administration	HP.7.1 Establishments as providers of occupational health care services	HP.7.3 All other industries as secondary producers of health care	HP.9 Rest of the world	HP.nsk Provider not specified by kind	**Row Total (THE)**	HP.8.1 Research institutions	HP.8.2 Education and training institutions	HP.8.3 Other institutions providing health-related services	**Row Total (NHE)**	HP.AD Providers of non-health HIV programs and services	**Row Total (THAE)**
HC.7.1.1 General government administration of health (except social security) (subaccount specific)											105,211															958,901,220	562,169,833					**1,521,176,264**						
HC.7.1.1.99 Other General government administration of health (except social security)																										455,859,785	11,652,314					**467,512,100**						
HC.nsk Health functions not specified by kind								70,000						271																466,053,466	**466,123,737**						
HC.R.1 Capital formation of health care provider institutions (subaccount specific)	44,837,337	471,700,077						4,147,650	772,872	278,047	519,503,506	1,789,395	421,760		38,030,222		14,643,133														213,236	**1,096,337,236**						
HC.R.1.99 Other Capital formation of health care provider institutions	25,221,002	476,096,748	682,037		6,325,955			369,000			256,890,552	1,061,144	698,314													738,061		8,614,339			147,069	**776,844,221**						
Column total (THE)	**141,169,414**	**1,214,468,719**	**2,197,231,446**	**869,148,813**	**72,433,034**	**3,070,071**	**33,080**	**2,682,969,597**	**772,872**	**1,631,964**	**3,845,570,288**	**152,657,158**	**9,999,632**	**271**	**38,030,222**	**112,254**	**16,889,978**	**177,868,787**	**15,228,644**	**54,407,193**	**8,768,986**	**87,621**	**1,386,931**	**129,778,271**	**7,090,954,492**	**1,417,207,238**	**573,896,213**	**269,254,463**	**2,773,327**	**0**	**2,307,576,965**	**23,295,377,947**						
HC.R.2 Education and training of health personnel (subaccount specific)																																	180,451,761	45,866,059	**226,317,820**		

HPxHC	HP.1.1.1.1 Federal Hospitals	HP.1.1.1.2 Regional/ Zonal Hospitals	HP.1.1.1.99 Other Government General Hospitals	HP.1.1.2.1 Private for Profit Hospitals	HP.1.1.2.2 Private not-for-profit Hospitals	HP.1.3 Specialty (other than mental health and substance abuse) hospitals	HP2.3 Community care facilities for the elderly	HP3.1 Offices of physicians (Private Clinics)	HP3.3 Offices of other health practitioners	HP3.4.1 Family planning centers	HP.3.4.5.1 Public PHCU (Health Center and Health Posts)	HP.3.4.5.2 Not for profit (NGO) PHCU- Health Centers, clinics and posts	HP.3.4.5.99 Other All other out-patient multi-specialty and co-operative services centers	community and other integrated	HP3.5.1 Public Medical and Diagnostic Laboratories	HP.3.6 Providers of home health care services	HP3.9.2 Blood and organ banks	HP3.9.3 Alternative or traditional practitioners	HP3.9.9 Providers of all other ambulatory health care services	HP.4.1.1 Private Pharmacies	HP.4.1.2 Public Pharmacies	HP.4.2 Retail sale and other suppliers of optical glasses and [illegible] products	suppliers of medical appliances (other than optical goods and	HP.4.9 All other miscellaneous sale and other suppliers of pharmaceuticals and medical goods	HP.5 Provision and administration of public health programs	HP.6.1. Government administration of health	HP.6.9 All other providers of health administration	HP.7.1 Establishments as providers of occupational health care services	HP.7.3 All other industries as secondary producers of health care	HP.9 Rest of the world	HP.nsk Provider not specified by kind	Row Total (THE)	HP.8.1 Research institutions	HP.8.2 Education and training institutions	HP.8.3 Other institutions providing health-related services	Row Total (NHE)	HP.AD Providers of non-health HIV programs and services	Row Total (THAE)
HC.R.2.99 Other Education and training of health personnel																																		172,462,776	18,098,080	**190,560,856**		
HC.R.3 Research and development in health (subaccount specific)																																36,546,978			**36,546,978**		
HC.R.3.99 Other Research and development in health																																29,869,949		175,424	**30,045,373**		
HC.R.4 Food, hygiene, and drinking water control																																		568,941,453	**568,941,453**		
HC.R.5 Environmental health																																	1,039,679	30,549,139	**31,588,818**		
HC.R.6 Administration and provision of social services in kind to assist living with disease and impairment																																		12,813,311	**12,813,311**		
HC.R.7 Administration and provision of health-related cash-benefits																																		182,000	**182,000**		
Column Total (NHE)																																**66,416,928**	**353,954,216**	**676,625,465**	**24,392,374,556**		
AD.1.1 Social support services																																				60,040,828	**60,040,828**	

HPxHC	HP.1.1.1.1 Federal Hospitals	HP.1.1.1.2 Regional/ Zonal Hospitals	HP.1.1.1.99 Other Government General Hospitals	HP.1.1.2.1 Private for Profit Hospitals	HP.1.1.2.2 Private not-for-profit Hospitals	HP.1.3 Specialty (other than mental health and substance abuse) hospitals	HP2.3 Community care facilities for the elderly	HP3.1 Offices of physicians (Private Clinics)	HP.3.3 Offices of other health practitioners	HP3.4.1 Family planning centers	HP.3.4.5.1 Public PHCU (Health Center and Health Posts)	HP.3.4.5.2 Not for profit (NGO) PHCU- Health Centers, clinics and posts	HP.3.4.5.99 Other All other out-patient multi-specialty and co-operative services centers	community and other integrated	HP.3.5.1 Public Medical and Diagnostic Labratories	HP.3.6 Providers of home health care services	HP3.9.2 Blood and organ banks	HP.3.9.3 Alternative or traditional practitioners	HP.3.9.9 Providers of all other ambulatory health care services	HP.4.1.1 Private Pharmacies	HP.4.1.2 Public Pharmacies	HP.4.2 Retail sale and other suppliers of optical glasses and [illegible] products	suppliers of medical appliances (other than optical goods and	HP.4.9 All other miscellaneous sale and other suppliers of pharmaceuticals and medical goods	HP.5 Provision and administration of public health programs	HP.6.1. Government administration of health	HP.6.9 All other providers of health administration	HP.7.1 Establishments as providers of occupational health care services	HP.7.3 All other industries as secondary producers of health care	HP.9 Rest of the world	HP.nsk Provider not specified by kind	**Row Total (THE)**	HP.8.1 Research institutions	HP.8.2 Education and training institutions	HP.8.3 Other institutions providing health-related services	**Row Total (NHE)**	HP.AD Providers of non-health HIV programs and services	**Row Total (THAE)**
AD.1.2 Non-health services to orphans and vulnerable children																																						7,041,922	**7,041,922**
AD.3 Non-health HIV information, education, and communication (IEC)																																						7,146,416	**7,146,416**
AD.4 Empowerment and organization																																						1,034,911	**1,034,911**
AD.nsk Non-health HIV services not specified by kind																																						9,814,506	**9,814,506**
Column Total (THAE)																																						**85,078,584**	**24,477,453,140**

Annex B1.4: Financing Agent by Health Functions (Services and Commodities) (FH x HC)

HFxHC	HF.1.1.1.1 Ministry of Health	HF.1.1.1.2 HAPCO	HF.1.1.1.3 EHNRI	HF.1.1.1.4 FMHACA/ DACA	HF.1.1.1.5 Ministry of Education	HF.1.1.1.6 Ministry of Defense	HF.1.1.1.7 Ministry of Justice-Federal Police	HF.1.1.1.8 PFSA	HF.1.1.1.99 Other Central Government Ministries and Offices	HF.1.1.2.1 Regional Health Bureau	HF.1.1.2.2 Regional HAPCO	HF.1.1.2.3 Regional Bureau of Education	HF.1.1.2.4 Regional Police	HF.1.1.2.99 Other Regional and District Government	HF.1.1.3 Local/ municipal government	HF.2.2 Other private insurance (non social)	HF.2.3 Private households' out-of-pocket payment	HF.2.4.1 Local NGOs	HF.2.4.2 International NGOs	HF.2.5.1 Parastatal companies	HF.2.5.2 Private for Profit companies	HF.3 Rest of the world	Row Total
HC.1.1 In-patient curative care (subaccount specific)	60,076,853				28,968,881	7,219,367	3,234,901		1,386,644	56,425,684		1,132,567	661,297	12,301,635		88,134	328,479,218	8,951,264	138,754,052	18,677,057	1,466,145	1,513,439	**669,337,140**
HC.1.1.99 Other In-patient curative care	143,189,038				102,147,005	25,508,430	11,429,983		4,899,475	199,291,874		4,001,738	2,336,583	43,424,463		17,245,228	415,860,551	2,651,710	381,871,347	45,707,605	3,589,528		**1,403,154,558**
HC.1.3.1 Basical medical and diagnostic services (subaccount specific)	1,311,167,238				52,415,129	10,107,114	4,528,861		1,941,301	89,228,087		1,585,594	925,816	17,723,456		26,228,178	3,016,153,503	23,351,605	163,586,349	174,430,343	17,887,762	534,889,553	**5,446,149,890**
HC.1.3.1.99 Other Basical medical and diagnostic services	475,819,342				21,200,322	5,294,203	2,372,261		1,016,872	41,872,677		830,549	484,951	9,279,866			5,106,015,310	6,700,269	66,857,120	552,578			**5,738,296,320**
HC.1.3.3 All other specialized health care																			569,326				**569,326**
HC.1.3.9 All other out-patient curative care																73,444,589		9,392,721	6,746,801	295,445,970	30,457,541		**415,487,622**
HC.1.4 Services of curative home care																18,889			112,254				**131,144**
HC.2.1 In-patient rehabilitative care																		934,501	415,670				
HC.2.2 Day cases of rehabilitative care																			330,883				**330,883**
HC.2.3 Out-patient rehabilitative care																		152,461	163,744				**316,205**
HC.2.4 Services of rehabilitative home care																		200,000	2,521,617				**2,721,617**
HC.4.1.99 Other Clinical laboratory																			310,000	262,885			**572,885**
HC.4.3 Patient transport and emergency rescue																				280,930			**280,930**
HC.4.9 All other miscellaneous ancillary services	327,000									217,636								166,000				734,166	**1,444,802**
HC.5.1.1 Prescribed medicines																4,646,956							**4,646,956**
HC.5.1.3 Other medical non-durables																			127,605,191				**127,605,191**
HC.5.1.4 Pharmaceuticals (subaccount specific)																	20,870,598						**20,870,598**
HC.5.1.4.4 TB Pharmaceticals dispensed to out-patients																	346,412						**346,412**
HC.5.1.4.99 Other Pharmaceuticals																	34,713,815						**34,713,815**

HFxHC	HF.1.1.1.1 Ministry of Health	HF.1.1.1.2 HAPCO	HF.1.1.1.3 EHNRI	HF.1.1.1.4 FMHACA/ DACA	HF.1.1.1.5 Ministry of Education	HF.1.1.1.6 Ministry of Defense	HF.1.1.1.7 Ministry of Justice-Federal Police	HF.1.1.1.8 PFSA	HF.1.1.1.99 Other Central Government Ministries and Offices	HF.1.1.2.1 Regional Health Bureau	HF.1.1.2.2 Regional HAPCO	HF.1.1.2.3 Regional Bureau of Education	HF.1.1.2.4 Regional Police	HF.1.1.2.99 Other Regional and District Government	HF.1.1.3 Local/ municipal government	HF.2.2 Other private insurance (non social)	HF.2.3 Private households' out-of-pocket payment	HF.2.4.1 Local NGOs	HF.2.4.2 International NGOs	HF.2.5.1 Parastatal companies	HF.2.5.2 Private for Profit companies	HF.3 Rest of the world	**Row Total**
HC.5.2.1 Glasses and other vision products																			87,621	2,234			**89,855**
HC.5.2.2 Orthopaedic appliances and other prosthetics																		3,236,586	948,167				**4,184,753**
HC.5.2.4 Medico-technical devices, including wheelchairs																		150,346					**150,346**
HC.6.1 Maternal and child health; family planning and counselling (subaccount specific)	343,145,566				7,904				4,252,617	46,225,752		250,333						189,150,377	289,409,475	120,886		112,737,660	**985,300,569**
HC.6.1.99 Other Maternal and child health; family planning and counselling			425,038															7,908,658	691,160			3,848,190	**12,873,046**
HC.6.2 School health services																		246,651					**246,651**
HC.6.3 Prevention of communicable diseases (subaccount specific)	2,829,357,008	1,848,123,663			9,326,244	15,907,710	5,016,590			13,269,530	10,642,266							205,268,735	260,783,893	51,223,443	5,785,347	80,349,488	**5,335,053,918**
HC.6.3.99 Other Prevention of communicable diseases										34,938,085								1,470,348	411,323,110				**447,731,543**
HC.6.4 Prevention of non-communicable diseases										707,499													
HC.6.5 Occupational health care																		83,247		6,700,777	3,876,924		**10,660,948**
HC.6.9 All other miscellaneous public health services	197,805,049				354,420					5,393,875				973,017				4,872,471	164,219,718		54,714	877,230	**374,550,495**
HC.7.1.1 General government administration of health (except social security) (subaccount specific)	301,649,117		62,525,138	36,996,655				53,478,540		487,025,136	50,560,884							38,525,464	45,024,975			445,390,355	**1,521,176,264**
HC.7.1.1.99 Other General government administration of health (except social security)	116,150,621		913,850	20,946,431				30,081,678		278,284,167								225,000	17,771,423			3,138,929	**467,512,100**
HC.nsk Health functions not specified by kind	322,929,406									142,995,656								70,271			128,404		**466,123,737**
HC.R.1 Capital formation of health care provider institutions (subaccount specific)	453,199,534	2,336,045	38,030,222							339,061,679					124,171,573			20,086,059	67,788,407			51,663,717	**1,096,337,236**

HFxHC	HF.1.1.1.1 Ministry of Health	HF.1.1.1.2 HAPCO	HF.1.1.1.3 EHNRI	HF.1.1.1.4 FMHACA/ DACA	HF.1.1.1.5 Ministry of Education	HF.1.1.1.6 Ministry of Defense	HF.1.1.1.7 Ministry of Justice-Federal Police	HF.1.1.1.8 PFSA	HF.1.1.1.99 Other Central Government Ministries and Offices	HF.1.1.2.1 Regional Health Bureau	HF.1.1.2.2 Regional HAPCO	HF.1.1.2.3 Regional Bureau of Education	HF.1.1.2.4 Regional Police	HF.1.1.2.99 Other Regional and District Government	HF.1.1.3 Local/ municipal government	HF.2.2 Other private insurance (non social)	HF.2.3 Private households' out-of-pocket payment	HF.2.4.1 Local NGOs	HF.2.4.2 International NGOs	HF.2.5.1 Parastatal companies	HF.2.5.2 Private for Profit companies	HF.3 Rest of the world	Row Total
HC.R.1.99 Other Capital formation of health care provider institutions	239,027,188				441,014					191,019,242					69,846,510			6,470,830	261,397,974	6,076,781	2,564,682		**776,844,221**
Column total (THE)	**6,793,842,960**	**1,850,459,708**	**101,894,248**	**57,943,086**	**214,860,919**	**64,036,824**	**26,582,596**	**83,560,218**	**13,496,910**	**1,925,956,579**	**61,203,150**	**7,800,782**	**4,408,648**	**83,702,438**	**194,018,083**	**121,671,976**	**8,922,439,407**	**530,265,574**	**2,409,290,277**	**599,481,488**	**65,811,047**	**1,235,142,727**	**25,367,869,645**
HC.R.2 Education and training of health personnel (subaccount specific)	376,647				152,371,434					1,873,613								11,852,249	53,261,990			6,581,887	**226,317,820**
HC.R.2.99 Other Education and training of health personnel	408,034				158,174,004					1,488,081								6,781,435	23,353,120		356,182		**190,560,856**
HC.R.3 Research and development in health (subaccount specific)			20,625,348		134,080					451,710								2,634,573	12,701,267				**36,546,978**
HC.R.3.99 Other Research and development in health			22,578,573		520,329					489,353				196,560				427,901	5,832,657				**30,045,373**
HC.R.4 Food, hygiene, and drinking water control	492,469,601									1,534,828								6,000,429	68,936,596				**568,941,453**
HC.R.5 Environmental health																		6,213,832	25,374,986				**31,588,818**
HC.R.6 Administration and provision of social services in kind to assist living with disease and impairment																		58,230	12,755,081				**12,813,311**
HC.R.7 Administration and provision of health-related cash-benefits																		182,000					**182,000**
Column Total (NHE)	**7,287,097,242**	**1,850,459,708**	**145,098,170**	**57,943,086**	**526,060,766**	**64,036,824**	**26,582,596**	**83,560,218**	**13,496,910**	**1,931,794,164**	**61,203,150**	**7,800,782**	**4,408,648**	**83,898,998**	**194,018,083**	**121,671,976**	**8,922,439,407**	**564,416,224**	**2,611,505,972**	**599,481,488**	**66,167,228**	**1,241,724,614**	**26,464,866,254**
AD.1.1 Social support services																		36,213,260	23,555,574	271,993			**60,040,828**
AD.1.2 Non-health services to orphans and vulnerable children																		3,054,506	3,987,417				**7,041,922**
AD.3 Non-health HIV information, education, and communication (IEC)																		164,260	6,267,634	714,522			**7,146,416**
AD.4 Empowerment and organization																		836,211	198,700				**1,034,911**
AD.nsk Non-health HIV services not specified by kind																		887,814	8,926,692				**9,814,506**
Column Total (THAE)	**7,287,097,242**	**1,850,459,708**	**145,098,170**	**57,943,086**	**526,060,766**	**64,036,824**	**26,582,596**		**13,496,910**	**1,931,794,164**	**61,203,150**	**7,800,782**	**4,408,648**	**83,898,998**	**194,018,083**	**121,671,976**	**8,922,439,407**	**605,572,275**	**2,654,441,989**	**600,468,004**	**66,167,228**	**1,241,724,614**	**26,466,384,620**

Annex B2: HIV/AIDS Health Expenditure Tables

Annex B2.1: HIV/AIDS Financing Source by Financing Agent (FS x HF)

HSxHF	FS.1.1.1 Central government revenue	FS.1.1.2 Regional and District government revenue	FS.1.2.2 Other	FS.2.1.1 Parastatals	FS.2.1.2 Private employers	FS.2.2 Household funds	FS.2.3 Non-profit institutions serving individuals	FS.2.4.2 Other	FS.3 Rest of the world funds	Row Total
HF.1.1.1.1 Ministry of Health	44,426,032								630,478,329	674,904,362
HF.1.1.1.2 HAPCO	6,050,660								1,844,409,048	1,850,459,708
HF.1.1.1.3 EHNRI									86,466,269	86,466,269
HF.1.1.1.4 FMHACA/DACA	9,109,636								4,561,241	13,670,877
HF.1.1.1.5 Ministry of Education	17,345,718								21,327,383	38,673,101
HF.1.1.1.6 Ministry of Defense	4,331,620								15,907,710	20,239,330
HF.1.1.1.7 Ministry of Justice-Federal Police	1,940,941								5,016,590	6,957,530
HF.1.1.1.8 PFSA			19,218,850							19,218,850
HF.1.1.1.99 Other Central Government Ministries and Offices	831,986									831,986
HF.1.1.2.1 Regional Health Bureau		329,620,374							17,605,506	347,225,880
HF.1.1.2.2 Regional HAPCO		47,674,401							13,528,749	61,203,150
HF.1.1.2.3 Regional Bureau of Education		679,540								679,540
HF.1.1.2.4 Regional Police		396,778								396,778
HF.1.1.2.99 Other Regional and District Government		7,562,407								7,562,407
HF.1.1.3 Local/municipal government		44,624,159								44,624,159
HF.2.2 Other private insurance (non social)				1,722,770	4,657,057					6,379,827
HF.2.3 Private households' out-of-pocket payment						96,490,649				96,490,649
HF.2.4.1 Local NGOs		86,619				194,260	15,502,062	277,370	226,807,583	242,867,894
HF.2.4.2 International NGOs								84,560	444,754,061	444,838,621
HF.2.5.1 Parastatal companies				79,198,897						79,198,897
HF.2.5.2 Private for Profit companies					7,851,872					7,851,872
HF.3 Rest of the world									765,822,298	765,822,298
Column total (THE)	**84,036,593**	**430,644,280**	**19,218,850**	**80,921,667**	**12,508,929**	**96,684,908**	**15,502,062**	**361,930**	**4,076,684,767**	**4,816,563,987**
HF.HealthRelated	83,274,889							254,403	43,005,538	126,534,830
Column Total (NHE)	**167,311,482**	**430,644,280**	**19,218,850**	**80,921,667**	**12,508,929**	**96,684,908**	**15,502,062**	**616,334**	**4,119,690,305**	**4,943,098,817**
HF.AD				986,516				24,000	84,068,069	85,078,584
Column Total (THAE)	**167,311,482**	**430,644,280**	**19,218,850**	**81,908,183**	**12,508,929**	**96,684,908**	**15,502,062**	**640,334**	**4,203,758,373**	**5,028,177,401**

Annex B2.2: HIV/AIDS Financing Agent by Health Service Provider (HF x HP)

HFxHP	HF.1.1.1.1 Ministry of Health	HF.1.1.1.2 HAPCO	HF.1.1.1.3 EHNRI	HF.1.1.1.4 FMHACA/DACA	HF.1.1.1.5 Ministry of Education	HF.1.1.1.6 Ministry of Defense	HF.1.1.1.7 Ministry of Justice-Federal Police	HF.1.1.1.8 PFSA	Central Government Ministries and	HF.1.1.2.1 Regional Health Bureau	HF.1.1.2.2 Regional HAPCO	HF.1.1.2.3 Regional Bureau of Education	HF.1.1.2.4 Regional Police	HF.1.1.2.99 Other Regional and District Government	HF.1.1.3 Local/municipal government	HF.2.2 Other private insurance (non social)	HF.2.3 Private households' out-of-pocket payment	HF.2.4.1 Local NGOs	HF.2.4.2 International NGOs	HF.2.5.1 Parastatal companies	HF.2.5.2 Private for Profit companies	HF.3 Rest of the world	Row Total
HP.1.1.1.1 Federal Hospitals	31,148,136				8,449,382				831,986														40,429,505
HP.1.1.1.2 Regional/Zonal Hospitals	57,244,522				818,189					134,025,989			396,778	7,364,814				2,068,067	102,137,161			90,895,570	394,951,091
HP.1.1.1.99 Other Government General Hospitals					20,079,286	4,331,620	1,940,941										37,242,211					7,807,483	71,401,541
HP.1.1.2.1 Private for Profit Hospitals																	6,494,873						6,494,873
HP.1.1.2.2 Private not-for-profit Hospitals																	1,934,553						1,934,553
HP.3.1 Offices of physicians (Private Clinics)																	24,447,223	4,035,109	1,541,559				30,023,891
HP.3.3 Offices of other health practitioners																			772,872				772,872
HP.3.4.1 Family planning centers																		120,358					120,358
HP.3.4.5.1 Public PHCU (Health Center and Health Posts)	80,210,459	2,336,045								31,224,639					44,624,159		17,928,558	11,229,078	59,019,235			322,266,112	568,838,284
HP.3.4.5.2 Not for profit (NGO) PHCU- Health Centers, clinics and posts																		1,066,996	3,813,449				4,880,444
HP.3.4.5.99 Other All other out-patient multi-speciality and co-operative services centers																		96,580	2,078,748				2,175,328
HP.3.5.1 Public Medical and Diagnostic Laboratories			38,030,222																				38,030,222
HP.3.9.2 Blood and organ banks	14,643,133																						14,643,133
HP.3.9.9 Providers of all other ambulatory health care services																			34,026				
HP.4.1.1 Private Pharmacies																	471,152						471,152
HP.5 Provision and administration of public health programs	53,687,120	1,848,123,663			9,326,244	15,907,710	5,016,590			6,891,904	10,642,266							185,999,767	218,740,458			80,349,488	2,434,685,211
HP.6.1. Government administration of health	74,835,023		38,030,249	13,670,877				19,218,850		175,006,589	50,560,884											8,059,317	379,381,789
HP.6.9 All other providers of health administration	33,298,552		10,405,797															37,985,938	28,387,755			256,444,329	366,522,371
HP.7.1 Establishments as providers of occupational health care services														197,593		99,974				24,668,186	4,260,056		29,225,809
HP.9 Rest of the world																				138,182	6,447		144,629
HP.nsk Provider not specified by kind	329,837,416									76,759		679,540				6,279,853	7,972,077	266,000	28,313,358	54,392,529	3,585,368		431,402,902
Column total (THE)	**674,904,362**	**1,850,459,708**	**86,466,269**	**13,670,877**	**38,673,101**	**20,239,330**	**6,957,530**	**19,218,850**	**831,986**	**347,225,880**	**61,203,150**	**679,540**	**396,778**	**7,562,407**	**44,624,159**	**6,379,827**	**96,490,649**	**242,867,894**	**444,838,621**	**79,198,897**	**7,851,872**	**765,822,298**	**4,816,563,987**
HP.8.1 Research institutions			10,279,795							225,855								2,580,173	935,124				14,020,947

HFxHP	HF.1.1.1.1 Ministry of Health	HF.1.1.1.2 HAPCO	HF.1.1.1.3 EHNRI	HF.1.1.1.4 FMHACA/DACA	HF.1.1.1.5 Ministry of Education	HF.1.1.1.6 Ministry of Defense	HF.1.1.1.7 Ministry of Justice-Federal Police	HF.1.1.1.8 PFSA	Central Government Ministries and	HF.1.1.2.1 Regional Health Bureau	HF.1.1.2.2 Regional HAPCO	HF.1.1.2.3 Regional Bureau of Education	HF.1.1.2.4 Regional Police	HF.1.1.2.99 Other Regional and District Government	HF.1.1.3 Local/municipal government	HF.2.2 Other private insurance (non social)	HF.2.3 Private households' out-of-pocket payment	HF.2.4.1 Local NGOs	HF.2.4.2 International NGOs	HF.2.5.1 Parastatal companies	HF.2.5.2 Private for Profit companies	HF.3 Rest of the world	Row Total
HP.8.2 Education and training institutions	188,323				74,607,621					1,186,807								913,146	2,491,552			6,581,887	85,969,337
HP.8.3 Other institutions providing health-related services																		6,017,886	20,526,661				26,544,547
Column Total (NHE)	**675,092,685**	**1,850,459,708**	**96,746,064**	**13,670,877**	**113,280,722**	**20,239,330**	**6,957,530**	**19,218,850**	**831,986**	**348,638,541**	**61,203,150**	**679,540**	**396,778**	**7,562,407**	**44,624,159**	**6,379,827**	**96,490,649**	**252,379,099**	**468,791,958**	**79,198,897**	**7,851,872**	**772,404,185**	**4,943,098,817**
HP.AD Providers of non-health HIV programs and services																		41,156,051	42,936,017	986,516			85,078,584
Column Total (THAE)	**675,092,685**	**1,850,459,708**	**96,746,064**	**13,670,877**	**113,280,722**	**20,239,330**	**6,957,530**		**831,986**	**348,638,541**	**61,203,150**	**679,540**	**396,778**	**7,562,407**	**44,624,159**	**6,379,827**	**96,490,649**	**293,535,150**	**511,727,975**	**80,185,413**	**7,851,872**	**772,404,185**	**5,008,958,551**

Annex B2.3: HIV/AIDS Health Service Provider by Function (Services and Commodities) (HP x HC)

HPxHC	HP.1.1.1.1 Federal Hospitals	HP.1.1.1.2 Regional/Zonal Hospitals	HP.1.1.1.99 Other Government General Hospitals	HP.1.1.2.1 Private for Profit Hospitals	HP.1.1.2.2 Private not-for-profit Hospitals	HP.3.1 Offices of physicians (Private Clinics)	HP.3.3 Offices of other health practitioners	HP.3.4.1 Family planning centers	HP.3.4.5.1 Public PHCU (Health Center and Health Posts)	HP.3.4.5.4 Non for profit (NGO) PHCU-Health Centers, clinics and other out-patient multi-speciality and co-operative service	HP.3.5.1 Public Medical and Diagnostic Labratories	HP.3.9.2 Blood and organ banks	of all other ambulatory health	HP.4.1.1 Private Pharmacies	HP.5 Provision and administration of public health programs	HP.6.1. Government administration of health	HP.6.9 All other providers of health administration	Establishments as providers of occupational health care	HP.9 Rest of the world	HP.nsk Provider not specified by kind	Row Total (THE)	HP.8.1 Research institutions	HP.8.2 Education and training institutions	HP.8.3 Other institutions providing health-related services	Row Total (NHE)	HP.AD Providers of non-health HIV programs and services	Row Total (THAE)
HC.1.1.2 HIV related inpatient curative care	2,068,640	95,433,759	1,916,493	237,879		4,342,798			4,404,925		333,317								1,122,647	144,629	1,662,912	**111,667,998**						
HC.1.3.1.2.1 HCT						1,541,559			40,473,352	770,278	768,143			34,026							256,000	**43,843,359**						
HC.1.3.1.2.2 PMTCT		12,033,989							42,665,962	233,386												**54,933,338**						
HC.1.3.1.2.3.1 Adult ART	5,962,115	63,568,122	10,731,807						211,591,942	638,125											9,641,767	**302,133,879**						
HC.1.3.1.2.3.2 Pediatric ART		8,558,004	7,807,483						31,031,610												18,671,591	**66,068,688**						
HC.1.3.1.2.3.99 Other ART									502,296													**502,296**						
HC.1.3.1.2.99 Other HIV-Basic medical and diagnostic services	16,285,332	41,289,912	50,945,758	6,256,995	1,934,553	20,139,535			29,821,096	2,986,881	652,108								22,582,527		369,221,006	**562,115,702**						
HC.5.1.4.3 HIV Pharmaceticals dispensed to out-patients															471,152							**471,152**						
HC.6.3.1 Prevention of HIV transmission		603,583							924,303							2,434,685,211			5,520,635		31,872,994	**2,473,606,726**						
HC.7.1.1.2 HIV-General Government Administration of Health																	379,381,789	366,522,371				**745,904,159**						
HC.R.1.2 HIV-Capital formation of health care provider institutions	16,113,418	173,463,721				4,000,000	772,872	120,358	207,422,797	251,773	421,760	38,030,222	14,643,133								76,632	**455,316,688**						
Column total (THE)	**40,429,505**	**394,951,091**	**71,401,541**	**6,494,873**	**1,934,553**	**30,023,891**	**772,872**	**120,358**	**568,838,284**	**4,880,444**	**2,175,328**	**38,030,222**	**14,643,133**	**34,026**	**471,152**	**2,434,685,211**	**379,381,789**	**366,522,371**	**29,225,809**	**144,629**	**431,402,902**	**4,816,563,987**						
HC.R.2.2 HIV-Education and Training																								85,969,337	26,544,547	**112,513,883**		
HC.R.3.2 HIV-Reasearch and Development																							14,020,947			**14,020,947**		
Column Total (NHE)																							**14,020,947**	**85,969,337**	**26,544,547**	**126,534,830**		**4,943,098,817**
AD.1.1 Social support services																											60,040,828	**60,040,828**
AD.1.2 Non-health services to orphans and vulnerable children																											7,041,922	**7,041,922**
AD.3 Non-health HIV information, education, and communication (IEC)																											7,146,416	**7,146,416**
AD.4 Empowerment and organization																											1,034,911	**1,034,911**
AD.nsk Non-health HIV services not specified by kind																											9,814,506	**9,814,506**
Column Total (THAE)																											**85,078,584**	**211,613,414**

Annex B2.4: HIV/AIDS Financing Agent by Function (Services and Commodities) (HF x HC)

HFxHC	HF.1.1.1.1 Ministry of Health	HF.1.1.1.2 HAPCO	HF.1.1.1.3 EHNRI	HF.1.1.1.4 FMHACA/DACA	HF.1.1.1.5 Ministry of Education	HF.1.1.1.6 Ministry of Defense	HF.1.1.1.7 Ministry of Justice-Federal Police	HF.1.1.1.8 PFSA	Other Central Government Ministries and	HF.1.1.2.1 Regional Health Bureau	HF.1.1.2.2 Regional HAPCO	HF.1.1.2.3 Regional Bureau of Education	HF.1.1.2.4 Regional Police	HF.1.1.2.99 Other Regional and District Government	HF.1.1.3 Local/municipal government	HF.2.2 Other private insurance (non social)	HF.2.3 Private households' out-of-pocket payment	HF.2.4.1 Local NGOs	HF.2.4.2 International NGOs	HF.2.5.1 Parastatal companies	HF.2.3.2 Private for Profit companies	HF.3 Rest of the world	Row Total
HC.1.1.2 HIV related inpatient curative care	1,037,376				1,986,653	481,291	215,660		92,443	3,758,283		75,504	44,086	818,313			7,401,645	46,583	91,464,189	2,570,305	202,227	1,473,439	111,667,998
HC.1.3.1.2.1 HCT																		2,194,079	41,649,280				43,843,359
HC.1.3.1.2.2 PMTCT																		233,386				54,699,952	54,933,338
HC.1.3.1.2.3.1 Adult ART	5,962,115				10,731,807					4,188,160								7,253,004	9,915,746			264,083,047	302,133,879
HC.1.3.1.2.3.2 Pediatric ART																		1,281	21,394,270			44,673,137	66,068,688
HC.1.3.1.2.99 Other HIV-Basic medical and diagnostic services																		502,296					502,296
HC.1.3.1.2.99 Other HIV-Basic medical and diagnostic services	337,872,643				16,628,397	3,850,329	1,725,281		739,543	35,530,653		604,036	352,692	6,744,094		6,379,827	88,617,851	581,105	11,228,770	42,533,531	4,351,077	4,375,873	562,115,702
HC.5.1.4.3 HIV Pharmaceuticals dispensed to out-patients																	471,152						471,152
HC.6.3.1 Prevention of HIV transmission	54,543,705	1,848,123,663			9,326,244	15,907,710	5,016,590			6,891,904	10,642,266							186,198,648	219,212,879	34,095,061	3,298,567	80,349,488	2,473,606,726
HC.7.1.1.2 HIV-General Government Administration of Health	108,133,575		48,436,047	13,670,877				19,218,850		175,006,589	50,560,884							37,985,938	28,387,755			264,503,645	745,904,159
HC.R.1.2 HIV-Capital formation of health care provider institutions	167,354,948	2,336,045	38,030,222							121,850,291					44,624,159			7,871,574	21,585,732			51,663,717	2,473,606,726
Column total (THE)	**674,904,362**	**1,850,459,708**	**86,466,269**	**13,670,877**	**38,673,101**	**20,239,330**	**6,957,530**	**19,218,850**	**831,986**	**347,225,880**	**61,203,150**	**679,540**	**396,778**	**7,562,407**	**44,624,159**	**6,379,827**	**96,490,649**	**242,867,894**	**444,838,621**	**79,198,897**	**7,851,872**	**765,822,298**	**4,816,563,987**
HC.R.2.2 HIV-Education and Training	188,323				74,607,621					1,186,807								6,931,032	23,018,213			6,581,887	112,513,883
HC.R.3.2 HIV-Research and Development			10,279,795							225,855								2,580,173	935,124				14,020,947
Column Total (NHE)	**675,092,685**	**1,850,459,708**	**96,746,064**	**13,670,877**	**113,280,722**	**20,239,330**	**6,957,530**	**19,218,850**	**831,986**	**348,638,541**	**61,203,150**	**679,540**	**396,778**	**7,562,407**	**44,624,159**	**6,379,827**	**96,490,649**	**252,379,099**	**468,791,958**	**79,198,897**	**7,851,872**	**772,404,185**	**4,943,098,817**
AD.1.1 Social support services																		36,213,260	23,555,574	271,993			60,040,828
AD.1.2 Non-health services to orphans and vulnerable children																		3,054,506	3,987,417				7,041,922
AD.3 Non-health HIV information, education, and communication (IEC)																		164,260	6,267,634	714,522			7,146,416
AD.4 Empowerment and organization																		836,211	198,700				1,034,911
AD.nsk Non-health HIV services not specified by kind																		887,814	8,926,692				9,814,506
Column Total (THAE)	**675,092,685**	**1,850,459,708**	**96,746,064**	**13,670,877**	**113,280,722**	**20,239,330**	**6,957,530**	**19,218,850**	**831,986**	**348,638,541**	**61,203,150**	**679,540**	**396,778**	**7,562,407**	**44,624,159**	**6,379,827**	**96,490,649**	**293,535,150**	**511,727,975**	**80,185,413**	**7,851,872**	**772,404,185**	**5,028,177,401**

Annex B3: Reproductive Health (RH) Expenditure Tables

Annex B3.1: RH Financing Source by Financing Agent (FS x HF)

FSxHF	FS.1.1.1 Central government revenue	FS.1.1.2 Regional and District government revenue	FS.1.2.2 Other	FS.2.1.1 Parastatals	FS.2.1.2 Private employers	FS.2.2 Household funds	FS.2.3 Non-profit institutions serving individuals	FS.2.4.2 Other	FS.3 Rest of the world funds	Row Total
HF.1.1.1.1 Ministry of Health	71,901,275								928,970,197	1,000,871,471
HF.1.1.1.4 FMHACA/DACA	13,466,418								5,876,910	19,343,328
HF.1.1.1.5 Ministry of Education	36,618,738								7,904	36,626,641
HF.1.1.1.6 Ministry of Defense	9,144,532									9,144,532
HF.1.1.1.7 Ministry of Justice-Federal Police	4,097,541									4,097,541
HF.1.1.1.8 PFSA			28,410,474							28,410,474
HF.1.1.1.99 Other Central Government Ministries and Offices	1,756,416								4,252,617	6,009,033
HF.1.1.2.1 Regional Health Bureau		508,652,397							48,395,645	557,048,043
HF.1.1.2.3 Regional Bureau of Education		1,434,585							250,333	1,684,918
HF.1.1.2.4 Regional Police		837,643								837,643
HF.1.1.2.99 Other Regional and District Government		15,853,312								15,853,312
HF.1.1.3 Local/municipal government		65,966,148								65,966,148
HF.2.2 Other private insurance (non social)				3,062,702	8,279,212					11,341,915
HF.2.3 Private households' out-of-pocket payment						996,845,339				996,845,339
HF.2.4.1 Local NGOs		86,619					4,996,107	92,883	168,532,786	173,708,396
HF.2.4.2 International NGOs								93,770	387,059,495	387,153,265
HF.2.5.1 Parastatal companies				84,539,089						84,539,089
HF.2.5.2 Private for Profit companies					8,443,043					8,443,043

FSxHF	FS.1.1.1 Central government revenue	FS.1.1.2 Regional and District government revenue	FS.1.2.2 Other	FS.2.1.1 Parastatals	FS.2.1.2 Private employers	FS.2.2 Household funds	FS.2.3 Non-profit institutions serving individuals	FS.2.4.2 Other	FS.3 Rest of the world funds	Row Total
HF.3 Rest of the world									119,060,524	119,060,524
Column total (THE)	**136,984,919**	**592,830,706**	**28,410,474**	**87,601,792**	**16,722,255**	**996,845,339**	**4,996,107**	**186,653**	**1,662,406,411**	**3,526,984,656**
HF.HealthRelated	48,577,019								36,270,287	84,847,305
Column Total (NHE)	**185,561,938**	**592,830,706**	**28,410,474**	**87,601,792**	**16,722,255**	**996,845,339**	**4,996,107**	**186,653**	**1,698,676,697**	**3,611,831,961**
FS % of THE	**4.1%**	**17.8%**	**0.0%**	**2.6%**	**0.5%**	**30.0%**	**0.1%**	**0.0%**	**44.8%**	**100.0%**

Annex B3.2: RH Financing Agent by Health Service Provider (HF x HP)

HFxHP	HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 EHNRI	HF.1.1.1.4 FMHACA/DMCA	HF.1.1.1.5 Ministry of Education	HF.1.1.1.6 Ministry of Defense	HF.1.1.1.7 Ministry of Justice-Federal Police	HF.1.1.1.8 PFSA	HF.1.1.1.99 Other Central Government Ministries and Offices	HF.1.1.2.1 Regional Health Bureau	HF.1.1.2.3 Regional Bureau of Education	HF.1.1.2.4 Regional Police	HF.1.1.2.99 Other Regional and District Government	HF.1.1.3 Local/municipal government	HF.2.2 Other private insurance (non social)	HF.2.3 Private households' out-of-pocket payment	HF.2.4.1 Local NGOs	HF.2.4.2 International NGOs	HF.2.5.1 Parastatal companies	HF.2.5.2 Private for Profit companies	HF.3 Rest of the world	Row Total
HP.1.1.1.1 Federal Hospitals	42,903,499			17,837,585				1,756,416													62,497,500
HP.1.1.1.2 Regional/Zonal Hospitals	84,622,336								209,579,987		837,643	15,547,942				9,300,000	25,471,360				345,359,268
HP.1.1.1.99 Other Government General Hospitals				18,781,153	9,144,532	4,097,541									394,255,912						426,279,137
HP.1.1.2.1 Private for Profit Hospitals															167,736,929	4,048,212	28,219				171,813,360
HP.1.1.2.2 Private not-for-profit Hospitals															4,885,122	249,169					5,134,291
HP.3.1 Offices of physicians (Private Clinics)															216,890,971	147,650	235,112				217,273,732
HP.3.4.1 Family planning centers																157,689	1,353,917				1,511,606
HP.3.4.5.1 Public PHCU (Health Center and Health Posts)	118,571,983								42,423,434				65,966,148		194,267,602	4,992,024	83,205,511				509,426,702
HP.3.4.5.2 Not for profit (NGO) PHCU- Health Centers, clinics and posts															5,379,239	8,114,620	8,873,622				22,367,481
HP.3.4.5.99 Other All other out-patient multi-speciality and co-operative services centers																	19,409				19,409
HP.3.9.3 Alternative or traditional practitioners															2,098,143						2,098,143
HP.4.1.1 Private Pharmacies															445,977						445,977
HP.5 Provision and administration of public health programs	108,153,203			7,904				4,252,617	46,225,752	250,333						146,264,717	254,620,874			11,970,954	571,746,354
HP.6.1. Government administration of health	108,649,046		19,343,328				28,410,474		258,705,392							434,315					415,542,555
HP.6.9 All other providers of health administration																	11,207,091			107,089,570	118,296,662
HP.7.1 Establishments as providers of occupational health care services												305,370		177,732				41,728,740	1,818,232		44,030,074
HP.9 Rest of the world																		483,636	22,565		506,201
HP.nsk Provider not specified by kind	537,971,404								113,478	1,434,585				11,164,183	10,885,445		2,138,150	42,326,713	6,602,246		612,636,205
Column total (THE)	**1,000,871,471**	**0**	**19,343,328**	**36,626,641**	**9,144,532**	**4,097,541**	**28,410,474**	**6,009,033**	**557,048,043**	**1,684,918**	**837,643**	**15,853,312**	**65,966,148**	**11,341,915**	**996,845,339**	**173,708,396**	**387,153,265**	**84,539,089**	**8,443,043**	**119,060,524**	**3,407,924,132**
HP.8.1 Research institutions		5,996,547							131,749							54,400	545,489				6,728,185
HP.8.2 Education and training institutions	109,855			47,345,735					400,637							375,253	15,141,145				63,372,626
HP.8.3 Other institutions providing health-related services																2,785,373	11,961,122				14,746,495
Column Total (NHE)	**1,000,981,327**	**5,996,547**	**19,343,328**	**83,972,376**	**9,144,532**	**4,097,541**	**28,410,474**	**6,009,033**	**557,580,429**	**1,684,918**	**837,643**	**15,853,312**	**65,966,148**	**11,341,915**	**996,845,339**	**176,923,422**	**414,801,021**	**84,539,089**	**8,443,043**	**119,060,524**	**3,611,831,961**

Annex B3.3: RH Health Service Provider by Function (Services and Commodities) (HP x HC)

HPxHC	HP. 1.1.1.1 Federal Hospitals	HP.1.1.1.2 Regional/Zonal Hospitals	HP.1.1.99 Other Government General Hospitals	HP.1.1.2.1 Private for Profit Hospitals	HP.1.1.2.2 Private not-for-profit Hospitals	HP.3.1 Offices of physicians (Private Clinics)	HP.3.4.1 Family planning centers	HP.3.4.5.1 Public PHCU (Health Center and Health Posts)	HP.3.4.5.2 Not for profit (NGO) PHCU-Health Centers, clinics and posts	HP.3.4.5.99 Other All other out-patient multi-speciality and co-operative services centers	HP.3.9.3 Alternative or traditional practitioners	HP.4.1.1 Private Pharmacies	HP.5 Provision and administration of public health programs	HP.6.1. Government administration of health	HP.6.9 All other providers of health administration	HP.7.1 Establishments as providers of occupational health care services	HP.9 Rest of the world	HP.nsk Provider not specified by kind	Row Total (THE)	HP.8.1 Research institutions	HP.8.2 Education and training institutions	HP.8.3 Other institutions providing health-related services	Row Total (NHE)
HC.1.1.1.1 Maternal Health (delivery, management of abortion complication-ip)		1,415,917		4,076,431	20,000			2,080,296	7,413,860	19,409									**15,025,913**				
HC.1.1.1.99 Other RH related Inpatient Curative Care (fistula,fiberoids, cancer)	16,285,332	37,232,013	110,740,402	132,389,038	4,736,936	15,361,459		6,451,421								3,947,227	506,201	36,333,207	**363,983,237**				
HC.1.3.1.1.1 Maternal Health (Ante and Post Natal Care, op post abortion care)								6,754,644	7,833,681									30,360,820	**44,949,144**				
HC.1.3.1.1.2 Family Planning (Pills, Depo, Norplant, IUCD)					214,139	235,112		12,888,470	100,000										**13,437,721**				
HC.1.3.1.1.99 Other RH-Basic medical and diagnostic services (e.g. STI)	22,392,332	54,344,532	315,538,735	35,347,890	163,216	201,529,511		230,485,949	5,429,239		2,098,143					40,082,847		545,828,896	**1,453,241,291**				
HC.5.1.4.2 RH Pharmaceticals dispensed to out-patients												445,977							**445,977**				
HC.6.1.1.1 Family planning and Counciling							1,353,917						175,519,335						**176,873,251**				
HC.6.1.1.2 Maternal Health (eg. campaigns related to fistula, breast cancer early detection...)									53,080				185,176,680						**185,229,760**				
HC.6.1.1.99 Other Reproductive Health Related Prevention and Public Health Services (eg. STI prevention campaigns such as condom promotion)								1,266,255					211,050,339						**212,316,595**				
HC.7.1.1.1 RH-General Government Administration of Health								105,211						415,542,555	118,296,662				**533,944,428**				
HC.R.1.1 RH-Capital formation of health care provider institutions	23,819,835	252,366,807				147,650	157,689	249,394,455	1,537,622									113,282	**527,537,340**				
Column total (THE)	**62,497,500**	**345,359,268**	**426,279,137**	**171,813,360**	**5,134,291**	**217,273,732**	**1,511,606**	**509,426,702**	**22,367,481**	**19,409**	**2,098,143**	**445,977**	**571,746,354**	**415,542,555**	**118,296,662**	**44,030,074**	**506,201**	**612,636,205**	**3,526,984,656**				
HC.R.2.1 RH-Education and Training																					63,372,626	14,746,495	**78,119,120**
HC.R.3.1 RH-Reasearch and Development																				6,728,185			**6,728,185**
Column Total (NHE)																				**6,728,185**	**63,372,626**	**14,746,495**	**3,611,831,961**

Annex B3.4: RH Financing Agent by Function (Services and Commodities) (HF x HC)

HFxHC	HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 EHNRI	HF.1.1.1.4 FMHACA/DACA	HF.1.1.1.5 Ministry of Education	HF.1.1.1.6 Ministry of Defense	HF.1.1.1.7 Ministry of Justice-Federal Police	HF.1.1.1.8 PFSA	HF.1.1.1.99 Other Central Government Ministries and Offices	HF.1.1.2.1 Regional Health Bureau	HF.1.1.2.3 Regional Bureau of Education	HF.1.1.2.4 Regional Police	HF.1.1.2.99 Other Regional and District Government	HF.1.1.3 Local/municipal government	HF.2.2 Other private insurance (non social)	HF.2.3 Private households' out-of-pocket payment	HF.2.4.1 Local NGOs	HF.2.4.2 International NGOs	HF.2.5.1 Parastatal companies	HF.2.5.2 Private for Profit companies	HF.3 Rest of the world	Row Total
HC.1.1.1.1 Maternal Health (delivery, management of abortion complication-ip)																8,739,003	6,286,910				15,025,913
HC.1.1.1.99 Other RH related Inpatient Curative Care (fistula,fiberoids, cancer)	38,020,447			15,418,416	3,850,329	1,725,281		739,543	30,100,557	604,036	352,692	6,564,465			256,412,515	135,318	327,546	9,024,298	707,794		363,983,237
HC.1.3.1.1.1 Maternal Health (Ante and Post Natal Care, op post abortion care)	28,222,670															5,498,782	11,227,692				44,949,144
HC.1.3.1.1.2 Family Planning (Pills, Depo, Norplant, IUCD)																994,066	12,443,655				13,437,721
HC.1.3.1.1.99 Other RH-Basic medical and diagnostic services (e.g. STI)	490,811,952			21,200,322	5,294,203	2,372,261		1,016,872	41,889,824	830,549	484,951	9,288,847		11,341,915	739,986,847	966,704	44,506,004	75,514,792	7,735,248		1,453,241,291
HC.5.1.4.2 RH Pharmaceticals dispensed to out-patients															445,977						445,977
HC.6.1.1.1 Family planning and Counciling								2,566,682	18,057,285							27,288,652	118,472,735			10,487,898	176,873,251
HC.6.1.1.2 Maternal Health (eg. campaigns related to fistula, breast cancer early detection...)	28,056,291							674,394	8,084,818							57,718,542	89,212,658			1,483,056	185,229,760
HC.6.1.1.99 Other Reproductive Health Related Prevention and Public Health Services (eg. STI prevention campaigns such as condom promotion)	81,363,167			7,904				1,011,541	20,083,649	250,333						61,310,603	48,289,398				212,316,595
HC.7.1.1.1 RH-General Government Administration of Health	108,649,046		19,343,328				28,410,474		258,705,392							539,526	11,207,091			107,089,570	533,944,428
HC.R.1.1 RH-Capital formation of health care provider institutions	225,747,900								180,126,517				65,966,148			10,517,200	45,179,575				527,537,340
Column total (THE)	**1,000,871,471**	**0**	**19,343,328**	**36,626,641**	**9,144,532**	**4,097,541**	**28,410,474**	**6,009,033**	**557,048,043**	**1,684,918**	**837,643**	**15,853,312**	**65,966,148**	**11,341,915**	**996,845,339**	**173,708,396**	**387,153,265**	**84,539,089**	**8,443,043**	**119,060,524**	**3,526,984,656**
HC.R.2.1 RH-Education and Training	109,855			47,345,735					400,637							3,160,626	27,102,267				78,119,120
HC.R.3.1 RH-Reasearch and Development		5,996,547							131,749							54,400	545,489				6,728,185
Column Total (NHE)	**1,000,981,327**	**5,996,547**	**19,343,328**	**83,972,376**	**9,144,532**	**4,097,541**	**28,410,474**	**6,009,033**	**557,580,429**	**1,684,918**	**837,643**	**15,853,312**	**65,966,148**	**11,341,915**	**996,845,339**	**176,923,422**	**414,801,021**	**84,539,089**	**8,443,043**	**119,060,524**	**3,611,831,961**

Annex B4: Child Health (CH) Expenditure Tables

Annex B4.1: CH Financing Source by Financing Agent (FS x HF)

HFxHC	HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 EHNRI	HF.1.1.1.4 FMHACA/DACA	HF.1.1.1.5 Ministry of Education	HF.1.1.1.6 Ministry of Defense	HF.1.1.1.7 Ministry of Justice-Federal Police	HF.1.1.1.8 PFSA	HF.1.1.1.99 Other Central Government Ministries and Offices	HF.1.1.2.1 Regional Health Bureau	HF.1.1.2.3 Regional Bureau of Education	HF.1.1.2.4 Regional Police	HF.1.1.2.99 Other Regional and District Government	HF.1.1.3 Local/municipal government	HF.2.2 Other private insurance (non social)	HF.2.3 Private households' out-of-pocket payment	HF.2.4.1 Local NGOs	HF.2.4.2 International NGOs	HF.2.5.1 Parastatal companies	HF.3 Rest of the world	Row Total
HC.1.1.5 CH related Inpatient Curative Care 0	58,108,514			53,964,455	13,476,152	6,038,482		2,588,402	105,266,214	2,114,126	1,234,421	22,930,719		88,134		10,614	40,158,032	28,230		306,006,496
HC.1.3.1.2.2 ART 0																1,281	21,394,270		44,673,137	66,068,688
HC.1.3.1.5.1 Immunization 0	41,262,478																4,803,886		81,230,580	127,296,944
HC.1.3.1.5.99 Other CH-Basic medical and diagnostic services 0	171,988,107			21,200,322	5,294,203	2,372,261		1,016,872	41,478,289	830,549	484,951	9,073,292			1,413,578,803	2,486,599	9,954,605	123,875		1,679,882,728
HC.5.1.4.5 CH Pharmaceticals dispensed to out-patients 0															11,835,624					11,835,624
HC.6.1.2.1 Immunization programs (campaigns & outreach) 0	10,642,562															2,008,857	13,489,253			26,140,672
HC.6.1.2.99 Other Child Health Related Prevention and Public Health Services 0	246,609,813								4,948							40,823,723	20,151,104	120,886	100,766,706	408,477,180
HC.7.1.1.5 CH-General Government Administration of Health 0	35,098,134		6,258,136				9,191,624		83,698,803								3,705,497		1,782,020	139,734,214
HC.R.1.5 CH-Capital formation of health care provider institutions 0	73,036,085								58,276,226				21,341,989			1,697,285	1,164,299			155,515,884
Column total (THE)	**636,745,693**	**0**	**6,258,136**	**75,164,777**	**18,770,354**	**8,410,742**	**9,191,624**	**3,605,274**	**288,724,481**	**2,944,675**	**1,719,373**	**32,004,011**	**21,341,989**	**88,134**	**1,425,414,427**	**47,028,359**	**114,820,946**	**272,991**	**228,452,443**	**2,920,958,429**
HC.R.2.5 CH-Education and Training 1	86,315			33,459,885					314,786							1,760,591	1,455,618			37,077,196
HC.R.3.5 CH-Research and Development 1		4,711,572							103,517								11,173,586			15,988,675
Column Total (NHE)	**636,832,008**	**4,711,572**	**6,258,136**	**108,624,663**	**18,770,354**	**8,410,742**	**9,191,624**	**3,605,274**	**289,142,784**	**2,944,675**	**1,719,373**	**32,004,011**	**21,341,989**	**88,134**	**1,425,414,427**	**48,788,950**	**127,450,149**	**272,991**	**228,452,443**	**2,974,024,300**

Annex B4.2: CH Financing Agent by Health Service Provider (HF x HP)

HFxHP	HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 EHNRI	HF.1.1.1.4 FMHACA/DACA	HF.1.1.1.5 Ministry of Education	HF.1.1.1.6 Ministry of Defense	HF.1.1.1.7 Ministry of Justice-Federal Police	HF.1.1.1.8 PFSA	Other Central Government Ministries and	HF.1.1.2.1 Regional Health Bureau	HF.1.1.2.3 Regional Bureau of Education	HF.1.1.2.4 Regional Police	HF.1.1.2.99 Other Regional and District Government	HF.1.1.3 Local/municipal government	private insurance (non	HF.2.3 Private households' out-of-pocket payment	HF.2.4.1 Local NGOs	HF.2.4.2 International NGOs	HF.2.5.1 Parastatal companies	HF.3 Rest of the world	Row Total
HP.1.1.1.1 Federal Hospitals	46,878,149			36,613,990				3,605,274									874,439			87,971,852
HP.1.1.1.2 Regional/Zonal Hospitals	27,377,815								191,275,935		1,719,373	31,914,196					32,513,346		8,558,004	293,358,668
HP.1.1.1.99 Other Government General Hospitals				38,550,787	18,770,354	8,410,742									281,453,601				7,807,483	354,992,968
HP.1.1.2.1 Private for Profit Hospitals														88,134	255,475,267		130,738			255,694,139
HP.1.1.2.2 Private not-for-profit Hospitals															25,409,423					25,409,423
HP.3.1 Offices of physicians (Private Clinics)															396,117,182	88,620	45,324			396,251,126
HP.3.4.5.1 Public PHCU (Health Center and Health Posts)	120,622,793								13,708,087				21,341,989		398,697,722	4,099,187	25,148,019		109,538,230	693,156,027
HP.3.4.5.2 Not for profit (NGO) PHCU- Health Centers, clinics and posts															18,157,277	29,200	90,000			18,276,477
HP.3.4.5.99 Other All other out-patient multi-speciality and co-operative services centers																	1,635			1,635
HP.3.9.3 Alternative or traditional practitioners															38,268,331					38,268,331
HP.4.1.1 Private Pharmacies															7,555,096					7,555,096
HP.4.1.2 Public Pharmacies															4,280,528					4,280,528

HFxHP	HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 EHNRI	HF.1.1.1.4 FMHACA/DACA	HF.1.1.1.5 Ministry of Education	HF.1.1.1.6 Ministry of Defense	HF.1.1.1.7 Ministry of Justice-Federal Police	HF.1.1.1.8 PFSA	Other Central Government Ministries and	HF.1.1.2.1 Regional Health Bureau	HF.1.1.2.3 Regional Bureau of Education	HF.1.1.2.4 Regional Police	HF.1.1.2.99 Other Regional and District Government	HF.1.1.3 Local/municipal government	private insurance (non	HF.2.3 Private households' out-of-pocket payment	HF.2.4.1 Local NGOs	HF.2.4.2 International NGOs	HF.2.5.1 Parastatal companies	HF.3 Rest of the world	Row Total
HP.5 Provision and administration of public health programs	256,842,704								4,948							42,811,352	33,640,357		100,766,706	434,066,067
HP.6.1. Government administration of health	35,098,134		6,258,136				9,191,624		83,698,803											134,246,697
HP.6.9 All other providers of health administration																	3,705,497		1,782,020	5,487,517
HP.7.1 Establishments as providers of occupational health care services												89,815						131,839		221,654
HP.nsk Provider not specified by kind	149,926,098								36,708	2,944,675							18,671,591	141,152		171,720,224
Column total (THE)	**636,745,693**	**0**	**6,258,136**	**75,164,777**	**18,770,354**	**8,410,742**	**9,191,624**	**3,605,274**	**288,724,481**	**2,944,675**	**1,719,373**	**32,004,011**	**21,341,989**	**88,134**	**1,425,414,427**	**47,028,359**	**114,820,946**	**272,991**	**228,452,443**	**2,920,958,429**
HP.8.1 Research institutions		4,711,572							103,517								11,173,586			15,988,675
HP.8.2 Education and training institutions	86,315			33,459,885					314,786								355,828			34,216,815
HP.8.3 Other institutions providing health-related services																1,760,591	1,099,790			2,860,381
Column Total (NHE)	**636,832,008**	**4,711,572**	**6,258,136**	**108,624,663**	**18,770,354**	**8,410,742**	**9,191,624**	**3,605,274**	**289,142,784**	**2,944,675**	**1,719,373**	**32,004,011**	**21,341,989**	**88,134**	**1,425,414,427**	**48,788,950**	**127,450,149**	**272,991**	**228,452,443**	**2,974,024,300**

Annex B4.3: CH Health Service Provider by Function (Services and Commodities) (HP x HC)

HPxHC	HP.1.1.1.1 Federal Hospitals	HP.1.1.1.2 Regional/Zonal Hospitals	HP.1.1.1.99 Other Government General Hospitals	HP.1.1.2.1 Private for Profit Hospitals	HP.1.1.2.2 Private not-for-profit Hospitals	HP.3.1 Offices of physicians (Private Clinics)	HP.3.4.5.1 Public PHCU (Health Center and Health Posts)	HP.3.4.5.2 Not for profit (NGO) PHCU anosts	patient multi-speciality and co-	HP.3.9.3 Alternative or traditional practitioners	HP.4.1.1 Private Pharmacies	HP.4.1.2 Public Pharmacies	HP.5 Provision and administration of public health programs	HP.6.1. Government administration of health	HP.6.9 All other providers of health administration	providers of occupational	HP.nsk Provider not specified by kind	Row Total (THE)	HP.8.1 Research institutions	HP.8.2 Education and training institutions	HP.8.3 Other institutions providing health-related services	Row Total (NHE)
HC.1.1.5 CH related Inpatient Curative Care	57,873,103	160,572,106	47,192,122	198,984		44,896	7,978,101		1,635							17,963	32,127,587	**306,006,496**				
HC.1.3.1.2.2 ART		8,558,004	7,807,483				31,031,610										18,671,591	**66,068,688**				
HC.1.3.1.5.1 Immunization							127,266,944	30,000										**127,296,944**				
HC.1.3.1.5.99 Other CH-Basic medical and diagnostic services	22,392,332	52,147,839	299,993,363	255,495,156	25,409,423	396,206,230	450,756,376	18,246,477		38,268,331						82,805	120,884,396	**1,679,882,728**				
HC.5.1.4.5 CH Pharmaceticals dispensed to out-patients											7,555,096	4,280,528						**11,835,624**				
HC.6.1.2.1 Immunization programs (campaigns & outreach)													26,140,672					**26,140,672**				
HC.6.1.2.99 Other Child Health Related Prevention and Public Health Services							430,899						407,925,395			120,886		**408,477,180**				
HC.7.1.1.5 CH-General Government Administration of Health														134,246,697	5,487,517			**139,734,214**				
HC.R.1.5 CH-Capital formation of health care provider institutions	7,706,417	72,080,719					75,692,098										36,650	**155,515,884**				
Column total (THE)	**87,971,852**	**293,358,668**	**354,992,968**	**255,694,139**	**25,409,423**	**396,251,126**	**693,156,027**	**18,276,477**	**1,635**	**38,268,331**	**7,555,096**	**4,280,528**	**434,066,067**	**134,246,697**	**5,487,517**	**221,654**	**171,720,224**	**2,920,958,429**				
HC.R.2.5 CH-Education and Training																				34,216,815	2,860,381	**37,077,196**
HC.R.3.5 CH-Research and Development																			15,988,675			**15,988,675**
Column Total (NHE)																			**15,988,675**	**34,216,815**	**2,860,381**	**2,974,024,300**

Annex B4.4: CH Financing Agent by Function (Services and Commodities) (HF x HC)

HFxHC		HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 EHNRI	HF.1.1.1.4 FMHACA/DACA	HF.1.1.1.5 Ministry of Education	HF.1.1.1.6 Ministry of Defense	HF.1.1.1.7 Ministry of Justice-Federal Police	HF.1.1.1.8 PFSA	HF.1.1.1.99 Other Central Government Ministries and Offices	HF.1.1.2.1 Regional Health Bureau	HF.1.1.2.3 Regional Bureau of Education	HF.1.1.2.4 Regional Police	HF.1.1.2.99 Other Regional and District Government	HF.1.1.3 Local/municipal government	HF.2.2 Other private insurance (non social)	HF.2.3 Private households' out-of-pocket payment	HF.2.4.1 Local NGOs	HF.2.4.2 International NGOs	HF.2.5.1 Parastatal companies	HF.3 Rest of the world	Row Total
HC.1.1.5 CH related Inpatient Curative Care	0	58,108,514			53,964,455	13,476,152	6,038,482		2,588,402	105,266,214	2,114,126	1,234,421	22,930,719		88,134		10,614	40,158,032	28,230		306,006,496
HC.1.3.1.2.2 ART	0																1,281	21,394,270		44,673,137	66,068,688
HC.1.3.1.5.1 Immunization	0	41,262,478																4,803,886		81,230,580	127,296,944
HC.1.3.1.5.99 Other CH-Basic medical and diagnostic services	0	171,988,107			21,200,322	5,294,203	2,372,261		1,016,872	41,478,289	830,549	484,951	9,073,292			1,413,578,803	2,486,599	9,954,605	123,875		1,679,882,728
HC.5.1.4.5 CH Pharmaceticals dispensed to out-patients	0															11,835,624					11,835,624
HC.6.1.2.1 Immunization programs (campaigns & outreach)	0	10,642,562															2,008,857	13,489,253			26,140,672
HC.6.1.2.99 Other Child Health Related Prevention and Public Health Services	0	246,609,813								4,948							40,823,723	20,151,104	120,886	100,766,706	408,477,180
HC.7.1.1.5 CH-General Government Administration of Health	0	35,098,134		6,258,136				9,191,624		83,698,803								3,705,497		1,782,020	139,734,214
HC.R.1.5 CH-Capital formation of health care provider institutions	0	73,036,085								58,276,226				21,341,989			1,697,285	1,164,299			155,515,884
Column total (THE)	**BASE**	**636,745,693**	**0**	**6,258,136**	**75,164,777**	**18,770,354**	**8,410,742**	**9,191,624**	**3,605,274**	**288,724,481**	**2,944,675**	**1,719,373**	**32,004,011**	**21,341,989**	**88,134**	**1,425,414,427**	**47,028,359**	**114,820,946**	**272,991**	**228,452,443**	**2,920,958,429**
HC.R.2.5 CH-Education and Training	1	86,315			33,459,885					314,786							1,760,591	1,455,618			37,077,196
HC.R.3.5 CH-Research and Development	1		4,711,572							103,517								11,173,586			15,988,675
Column Total (NHE)		**636,832,008**	**4,711,572**	**6,258,136**	**108,624,663**	**18,770,354**	**8,410,742**	**9,191,624**	**3,605,274**	**289,142,784**	**2,944,675**	**1,719,373**	**32,004,011**	**21,341,989**	**88,134**	**1,425,414,427**	**48,788,950**	**127,450,149**	**272,991**	**228,452,443**	**2,974,024,300**

Annex B5: Malaria Health Expenditure Tables

Annex B5.1: Malaria Financing Source by Financing Agent (FS x HF)

	FS.1.1.1 Central government revenue	FS.1.1.2 Regional and District government revenue	FS.1.2.2 Other	FS.2.1.1 Parastatals	FS.2.1.2 Private employers	FS.2.2 Household funds	FS.2.3 Non-profit institutions serving individuals	FS.2.4.2 Other	FS.3 Rest of the world funds	Row Total
HF.1.1.1.1 Ministry of Health	75,746,303								2,938,269,181	3,014,015,483
HF.1.1.1.4 FMHACA/DACA	2,376,427								1,037,102	3,413,529
HF.1.1.1.5 Ministry of Education	9,636,510									9,636,510
HF.1.1.1.6 Ministry of Defense	2,406,456									2,406,456
HF.1.1.1.7 Ministry of Justice-Federal Police	1,078,300									1,078,300
HF.1.1.1.8 PFSA			5,013,613							5,013,613
HF.1.1.1.99 Other Central Government Ministries and Offices	462,215									462,215
HF.1.1.2.1 Regional Health Bureau		95,946,987							408,082	96,355,069
HF.1.1.2.3 Regional Bureau of Education		377,522								377,522
HF.1.1.2.4 Regional Police		220,432								220,432
HF.1.1.2.99 Other Regional and District Government		4,154,434								4,154,434
HF.1.1.3 Local/municipal government		11,641,085								11,641,085
HF.2.2 Other private insurance (non social)				957,094	2,587,254					3,544,348
HF.2.3 Private households' out-of-pocket payment						549,973,912				549,973,912
HF.2.4.1 Local NGOs							636,401		20,726,979	21,363,380
HF.2.4.2 International NGOs								104,930	36,522,958	36,627,888
HF.2.5.1 Parastatal companies				45,825,018						45,825,018
HF.2.5.2 Private for Profit companies					5,308,498					5,308,498
HF.3 Rest of the world									60,881,445	60,881,445
Column total (THE)	**91,706,210**	**112,340,461**	**5,013,613**	**46,782,113**	**7,895,752**	**549,973,912**	**636,401**	**104,930**	**3,057,845,747**	**3,872,299,138**
HF.HealthRelated	17,414,695								2,171,928	19,586,623
Column Total (NHE)	**109,120,904**	**112,340,461**	**5,013,613**	**46,782,113**	**7,895,752**	**549,973,912**	**636,401**	**104,930**	**3,060,017,675**	**3,891,885,761**

Annex B5.2: Malaria Financing Agent by Health Service Provider (HF x HP)

HFxHP	HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 EHNRI	HF.1.1.1.4 FMHACA/DACA	HF.1.1.1.5 Ministry of Education	HF.1.1.1.6 Ministry of Defense	HF.1.1.1.7 Ministry of Justice-Federal Police	HF.1.1.1.8 PFSA	Other Central Government Ministries and	HF.1.1.2.1 Regional Health Bureau	HF.1.1.2.3 Regional Bureau of Education	HF.1.1.2.4 Regional Police	HF.1.1.2.99 Other Regional and District Government	HF.1.1.3 Local/municipal government	HF.2.2 Other private insurance (non social)	HF.2.3 Private households' out-of-pocket payment	HF.2.4.1 Local NGOs	HF.2.4.2 International NGOs	HF.2.5.1 Parastatal companies	HF.2.5.2 Private for Profit companies	HF.3 Rest of the world	Row Total	HP % of THE
HP.1.1.1.1 Federal Hospitals	9,225,517			4,694,101				462,215													14,381,833	**0.4%**
HP.1.1.1.2 Regional/Zonal Hospitals0	14,933,354								43,174,816		220,432	4,091,564				2,314,172					64,734,338	**1.7%**
HP.1.1.1.99 Other Government General Hospitals				4,942,409	2,406,456	1,078,300									80,650,334						89,077,499	**2.3%**
HP.1.1.2.1 Private for Profit Hospitals															43,115,894						43,115,894	**1.1%**
HP.1.1.2.2 Private not-for-profit Hospitals															4,843,303						4,843,303	**0.1%**
HP.3.1 Offices of physicians (Private Clinics)															211,042,069						211,042,069	**5.5%**
HP.3.4.5.1 Public PHCU (Health Center and Health Posts)	201,968,266								7,503,630				11,641,085		194,265,403		425,264				415,803,648	**10.7%**
HP.3.4.5.2 Not for profit (NGO) PHCU- Health Centers, clinics and posts															1,866,653						1,866,653	**0.0%**
HP.3.9.3 Alternative or traditional practitioners															2,682,336						2,682,336	**0.1%**
HP.4.1.1 Private Pharmacies															6,049,003						6,049,003	**0.2%**
HP.4.1.2 Public Pharmacies															4,142,047						4,142,047	**0.1%**
HP.5 Provision and administration of public health programs	2,627,633,294								2,699							19,049,208	31,241,238				2,677,926,439	**69.2%**

HFxHP	HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 EHNRI	HF.1.1.1.4 FMHACA/DACA	HF.1.1.1.5 Ministry of Education	HF.1.1.1.6 Ministry of Defense	HF.1.1.1.7 Ministry of Justice-Federal Police	HF.1.1.1.8 PFSA	Other Central Government Ministries and	HF.1.1.2.1 Regional Health Bureau	HF.1.1.2.3 Regional Bureau of Education	HF.1.1.2.4 Regional Police	HF.1.1.2.99 Other Regional and District Government	HF.1.1.3 Local/municipal government	HF.2.2 Other private insurance (non social)	HF.2.3 Private households' out-of-pocket payment	HF.2.4.1 Local NGOs	HF.2.4.2 International NGOs	HF.2.5.1 Parastatal companies	HF.2.5.2 Private for Profit companies	HF.3 Rest of the world	Row Total	HP % of THE
HP.6.1. Government administration of health	55,306,783		3,413,529				5,013,613		45,653,893								2,659,195				112,047,013	**2.9%**
HP.6.9 All other providers of health administration																	2,302,191			60,881,445	63,183,636	**1.6%**
HP.7.1 Establishments as providers of occupational health care services												62,870		55,541				14,041,153	2,798,976		16,958,540	**0.4%**
HP.9 Rest of the world																		276,364	12,894		289,258	**0.0%**
HP.nsk Provider not specified by kind	104,948,269								20,031	377,522				3,488,807	1,316,870			31,507,501	2,496,628		144,155,629	**3.7%**
Column total (THE)	**3,014,015,483**	**0**	**3,413,529**	**9,636,510**	**2,406,456**	**1,078,300**	**5,013,613**	**462,215**	**96,355,069**	**377,522**	**220,432**	**4,154,434**	**11,641,085**	**3,544,348**	**549,973,912**	**21,363,380**	**36,627,888**	**45,825,018**	**5,308,498**	**60,881,445**	**3,872,299,138**	**100.0%**
HP.8.1 Research institutions		2,207,383							47,053								280,849				2,535,285	
HP.8.2 Education and training institutions	39,234			15,209,039					143,085								165,344				15,556,702	
HP.8.3 Other institutions providing health-related services																	1,494,636				1,494,636	
Column Total (NHE)	**3,014,054,717**	**2,207,383**	**3,413,529**	**24,845,549**	**2,406,456**	**1,078,300**	**5,013,613**	**462,215**	**96,545,207**	**377,522**	**220,432**	**4,154,434**	**11,641,085**	**3,544,348**	**549,973,912**	**21,363,380**	**38,568,717**	**45,825,018**	**5,308,498**	**60,881,445**	**3,891,885,761**	

Annex B5.3: Malaria Health Service Provider by Function (Services and Commodities) (HP x HC)

HPxHC	HP.1.1.1.1 Federal Hospitals	HP.1.1.1.2 Regional/Zonal Hospitals	HP.1.1.99 Other Government General Hospitals	HP.1.1.2.1 Private for Profit Hospitals	HP.1.1.2.2 Private not-for-profit Hospitals	HP.3.1 Offices of physicians (Private Clinics)	HP.3.4.5.1 Public PHCU (Health Center and Health Posts)	HP.3.4.5.2 Not for profit (NGO) PHCU-Health Centers, clinics and posts	HP.3.9.3 Alternative or traditional practitioners	HP.4.1.1 Private Pharmacies	HP.4.1.2 Public Pharmacies	HP.5 Provision and administration of public health programs	HP.6.1. Government administration of health	HP.6.9 All other providers of health administration	Establishments as providers of occupational health care	HP.9 Rest of the world	HP.nsk Provider not specified by kind	Row Total (THE)	HP.8.1 Research institutions	HP.8.2 Education and training institutions	HP.8.3 Other institutions providing health-related services	Row Total (NHE)
HC.1.1.4 Malaria related inpatient curative care	6,107,000	13,881,792	19,746,513	2,953,159	2,698,743		6,453,135								2,254,275	289,258	18,987,436	**73,371,311**				
HC.1.3.1.4 Malaria-Basic medical and diagnostic services	4,071,333	11,535,790	69,330,986	40,162,735	2,144,560	211,042,069	355,570,345	1,866,653	2,682,336		2,073,204				12,489,964		107,747,343	**820,717,318**				
HC.5.1.4.1 Malaria Pharmaceticals dispensed to out-patients										6,049,003	2,068,842							**8,117,845**				
HC.6.3.2.1 ITN Program												2,042,374,241			581,801			**2,042,956,042**				
HC.6.3.2.2 IRS program												104,454			13,492		17,087,545	**17,205,490**				
HC.6.3.2.3 Community based vector management program												10,579,899						**10,579,899**				
HC.6.3.2.99 Other Prevention of Malaria							223,457					624,867,845			1,619,008		313,314	**627,023,625**				
HC.7.1.1.4 Malaria-General Government Administration of Health													112,047,013	63,183,636				**175,230,649**				
HC.R.1.4 Malaria-Capital formation of health care provider institutions	4,203,500	39,316,756					53,556,712										19,991	**97,096,959**				
Column total (THE)	**14,381,833**	**64,734,338**	**89,077,499**	**43,115,894**	**4,843,303**	**211,042,069**	**415,803,648**	**1,866,653**	**2,682,336**	**6,049,003**	**4,142,047**	**2,677,926,439**	**112,047,013**	**63,183,636**	**16,958,540**	**289,258**	**144,155,629**	**3,872,299,138**				
HC.R.2.4 Malaria-Education and Training																				15,556,702	1,494,636	**17,051,338**
HC.R.3.4 Malaria-Reasearch and Development																			2,535,285			**2,535,285**
Column Total (NHE)																			**2,535,285**	**15,556,702**	**1,494,636**	**3,891,885,761**

Annex B5.4: Malaria Financing Agent by Function (Services and Commodities) (HF x HC)

HFxHC	HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 EHNRI	HF.1.1.1.4 FMHACA/DACA	HF.1.1.1.5 Ministry of Education	HF.1.1.1.6 Ministry of Defense	HF.1.1.1.7 Ministry of Justice-Federal Police	HF.1.1.1.8 PFSA	HF.1.1.1.99 Other Central Government Ministries and Offices	HF.1.1.2.1 Regional Health Bureau	HF.1.1.2.3 Regional Bureau of Education	HF.1.1.2.4 Regional Police	HF.1.1.2.99 Other Regional and District Government	HF.1.1.3 Local/municipal government	HF.2.2 Other private insurance (non social)	HF.2.3 Private households' out-of-pocket payment	HF.2.4.1 Local NGOs	HF.2.4.2 International NGOs	HF.2.5.1 Parastatal companies	HF.2.5.2 Private for Profit companies	HF.3 Rest of the world	Row Total
HC.1.1.4 Malaria related inpatient curative care	18,005,820			5,781,906	1,443,873	646,980		277,329	11,291,996	226,513	132,259	2,463,920			27,491,295	19,746	30,495	5,154,725	404,454		73,371,311
HC.1.3.1.4 Malaria-Basic medical and diagnostic services	259,389,087			3,854,604	962,582	431,320		184,886	7,619,449	151,009	88,173	1,690,514		3,544,348	514,364,772	2,294,426	182,970	23,541,912	2,417,265		820,717,318
HC.5.1.4.1 Malaria Pharmaceticals dispensed to out-patients															8,117,845						8,117,845
HC.6.3.2.1 ITN Program	2,041,905,110															25,220	443,911	40,837	540,965		2,042,956,042
HC.6.3.2.2 IRS program																	104,454	17,087,545	13,492		17,205,490
HC.6.3.2.3 Community based vector management program																10,415,721	164,178				10,579,899
HC.6.3.2.99 Other Prevention of Malaria	585,951,641								2,699							8,608,267	30,528,695		1,932,323		627,023,625
HC.7.1.1.4 Malaria-General Government Administration of Health	55,306,783		3,413,529				5,013,613		45,653,893								4,961,386			60,881,445	175,230,649
HC.R.1.4 Malaria-Capital formation of health care provider institutions	53,457,042								31,787,032				11,641,085				211,799				97,096,959
Column total (THE)	**3,014,015,483**	**0**	**3,413,529**	**9,636,510**	**2,406,456**	**1,078,300**	**5,013,613**	**462,215**	**96,355,069**	**377,522**	**220,432**	**4,154,434**	**11,641,085**	**3,544,348**	**549,973,912**	**21,363,380**	**36,627,888**	**45,825,018**	**5,308,498**	**60,881,445**	**3,872,299,138**
HC.R.2.4 Malaria-Education and Training	39,234			15,209,039					143,085								1,659,980				17,051,338
HC.R.3.4 Malaria-Reasearch and Development		2,207,383							47,053								280,849				2,535,285
Column Total (NHE)	**3,014,054,717**	**2,207,383**	**3,413,529**	**24,845,549**	**2,406,456**	**1,078,300**	**5,013,613**	**462,215**	**96,545,207**	**377,522**	**220,432**	**4,154,434**	**11,641,085**	**3,544,348**	**549,973,912**	**21,363,380**	**38,568,717**	**45,825,018**	**5,308,498**	**60,881,445**	**3,891,885,761**

Annex B6: Tuberculosis (TB) Health Expenditure Tables

Annex B6.1: TB Financing Source by Financing Agent (FS x HF)

FSxHF	FS.1.1.1 Central government revenue	FS.1.1.2 Regional and District government revenue	FS.1.2.2 Other	FS.2.1.1 Parastatals	FS.2.1.2 Private employers	FS.2.2 Household funds	FS.2.4.2 Other	FS.3 Rest of the world funds	Row Total
HF.1.1.1.1 Ministry of Health	5,122,115							287,694,508	292,816,623
HF.1.1.1.3 EHNRI								14,089,091	14,089,091
HF.1.1.1.4 FMHACA/DACA	396,071							172,850	568,921
HF.1.1.1.5 Ministry of Education	5,781,906								5,781,906
HF.1.1.1.6 Ministry of Defense	1,443,873								1,443,873
HF.1.1.1.7 Ministry of Justice-Federal Police	646,980								646,980
HF.1.1.1.8 PFSA			835,602						835,602
HF.1.1.1.99 Other Central Government Ministries and Offices	277,329								277,329
HF.1.1.2.1 Regional Health Bureau		24,127,120						6,479,756	30,606,876
HF.1.1.2.3 Regional Bureau of Education		226,513							226,513
HF.1.1.2.4 Regional Police		132,259							132,259
HF.1.1.2.99 Other Regional and District Government		2,454,938							2,454,938
HF.1.1.3 Local/municipal government		1,940,181							1,940,181
HF.2.2 Other private insurance (non social)				1,339,932	3,622,155				4,962,088
HF.2.3 Private households' out-of-pocket payment						296,778,993			296,778,993
HF.2.4.1 Local NGOs		98,663					92,883	175,210	366,757
HF.2.4.2 International NGOs								17,095,848	17,095,848
HF.2.5.1 Parastatal companies				34,767,837					34,767,837
HF.2.5.2 Private for Profit companies					3,535,841				3,535,841
HF.3 Rest of the world								97,000,638	97,000,638
Column total (THE)	**13,668,275**	**28,979,676**	**835,602**	**36,107,769**	**7,157,997**	**296,778,993**	**92,883**	**422,707,901**	**806,329,097**
HF.HealthRelated	17,348,935							941,737	18,290,672
Column Total (NHE)	**31,017,210**	**28,979,676**	**835,602**	**36,107,769**	**7,157,997**	**296,778,993**	**92,883**	**423,649,638**	**824,619,769**

Annex B6.2: TB Financing Agent by Health Service Provider (HF x HP)

HFxHP	HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 EHNRI	HF.1.1.1.4 FMHACA/DACA	HF.1.1.1.5 Ministry of Education	HF.1.1.1.6 Ministry of Defense	HF.1.1.1.7 Ministry of Justice-Federal Police	HF.1.1.1.8 PFSA	Central Government Ministries and	HF.1.1.2.1 Regional Health Bureau	HF.1.1.2.3 Regional Bureau of Education	HF.1.1.2.4 Regional Police	HF.1.1.2.99 Other Regional and District Government	HF.1.1.3 Local/municipal government	HF.2.2 Other private insurance (non social)	HF.2.3 Private households' out-of-pocket payment	HF.2.4.1 Local NGOs	HF.2.4.2 International NGOs	HF.2.5.1 Parastatal companies	HF.2.5.2 Private for Profit companies	HF.3 Rest of the world	Row Total
HP.1.1.1.1 Federal Hospitals	3,713,794			2,816,461				277,329												40,000	6,847,583
HP.1.1.1.2 Regional/Zonal Hospitals	2,488,892								15,338,749		132,259	2,454,938									20,414,839
HP.1.1.1.99 Other Government General Hospitals				2,965,445	1,443,873	646,980									75,561,539					4,696,364	85,314,201
HP.1.1.2.1 Private for Profit Hospitals															97,567,774						97,567,774
HP.1.1.2.2 Private not-for-profit Hospitals															27,302,940						27,302,940
HP.1.3 Specialty (other than mental health and substance abuse) hospitals																	899,381				899,381
HP.3.1 Offices of physicians (Private Clinics)															24,058,643						24,058,643
HP.3.4.5.1 Public PHCU (Health Center and Health Posts)	110,051,611								1,230,607				1,940,181		46,095,564	243,051	5,543,015			81,130,600	246,234,629
HP.3.4.5.2 Not for profit (NGO) PHCU- Health Centers, clinics and posts															26,192,533	102,825					26,295,359

HP.5 Provision and administration of public health programs	146,919,310								6,374,927							20,880	10,329,776				163,644,893
HP.6.1. Government administration of health	29,559,713	13,306,364	568,921				835,602		7,659,262												51,929,863
HP.6.9 All other providers of health administration		782,727															323,675			11,133,675	12,240,078
HP.7.1 Establishments as providers of occupational health care services														77,758				17,428,664	746,068		18,252,490
HP.9 Rest of the world																		103,636	4,835		108,472
HP.nsk Provider not specified by kind	83,303								3,332	226,513				4,884,330				17,235,537	2,784,938		25,217,953
Column total (THE)	**292,816,623**	**14,089,091**	**568,921**	**5,781,906**	**1,443,873**	**646,980**	**835,602**	**277,329**	**30,606,876**	**226,513**	**132,259**	**2,454,938**	**1,940,181**	**4,962,088**	**296,778,993**	**366,757**	**17,095,848**	**34,767,837**	**3,535,841**	**97,000,638**	**806,329,097**
HP.8.1 Research institutions		2,141,624		134,080					47,053								194,818				2,517,575
HP.8.2 Education and training institutions	39,234			15,209,039					143,085								161,740				15,553,098
HP.8.3 Other institutions providing health-related services																	220,000				220,000
Column Total (NHE)	**292,855,857**	**16,230,715**	**568,921**	**21,125,025**	**1,443,873**	**646,980**	**835,602**	**277,329**	**30,797,014**	**226,513**	**132,259**	**2,454,938**	**1,940,181**	**4,962,088**	**296,778,993**	**366,757**	**17,672,405**	**34,767,837**	**3,535,841**	**97,000,638**	**824,619,769**

Annex B6.3: TB Health Service Provider by Function (Services and Commodities) (HP x HC)

HPxHC	HP.1.1.1.1 Federal Hospitals	HP.1.1.1.2 Regional/Zonal Hospitals	HP.1.1.1.99 Other Government General Hospitals	HP.1.1.2.1 Private for Profit Hospitals	HP.1.1.2.2 Private not-for-profit Hospitals	HP.1.3 Specialty (other than mental health and substance abuse) hospitals	HP.3.1 Offices of physicians (Private Clinics)	HP.3.4.5.1 Public PHCU (Health Center and Health Posts)	HP.3.4.5.2 Not for profit (NGO) PHCU-Health Centers, clinics and posts	HP.5 Provision and administration of public health programs	HP.6.1. Government administration of health	HP.6.9 All other providers of health administration	HP.7.1 Establishments as providers of occupational health care services	HP.9 Rest of the world	HP.nsk Provider not specified by kind	Row Total (THE)	HP.8.1 Research institutions	HP.8.2 Education and training institutions	HP.8.3 Other institutions providing health-related services	Row Total (NHE)
HC.1.1.3 TB related inpatient curative care	6,147,000	13,862,046	34,190,155	3,090,968	3,511,068	547,870	449,331	988,539					841,985	108,472	1,355,456	**65,092,890**				
HC.1.3.1.3 TB-Basic medical and diagnostic services			51,124,046	94,476,805	23,791,872	351,511	23,609,312	238,552,592	26,295,359				17,410,505		23,859,166	**499,471,167**				
HC.6.3.3 Prevention of TB								37,243		163,644,893						**163,682,136**				
HC.7.1.1.3 TB-General Government Administration of Health											51,929,863	12,240,078				**64,169,940**				
HC.R.1.3 TB-Capital formation of health care provider institutions	700,583	6,552,793						6,656,256							3,332	**13,912,963**				
Column total (THE)	**6,847,583**	**20,414,839**	**85,314,201**	**97,567,774**	**27,302,940**	**899,381**	**24,058,643**	**246,234,629**	**26,295,359**	**163,644,893**	**51,929,863**	**12,240,078**	**18,252,490**	**108,472**	**25,217,953**	**806,329,097**				
HC.R.2.3 TB-Education and Training																		15,553,098	220,000	**15,773,098**
HC.R.3.3 TB-Reasearch and Development																	2,517,575			**2,517,575**
Column Total (NHE)																	**2,517,575**	**15,553,098**	**220,000**	**824,619,769**

Annex B6.4: TB Financing Agent by Function (Services and Commodities) (HF x HC)

HFxHC	HF.1.1.1.1 Ministry of Health	HF.1.1.1.3 EHNRI	HF.1.1.1.4 FMHACA/DACA	HF.1.1.1.5 Ministry of Education	HF.1.1.1.6 Ministry of Defense	HF.1.1.1.7 Ministry of Justice-Federal Police	HF.1.1.1.8 PFSA	Other Central Government Ministries and	HF.1.1.2.1 Regional Health Bureau	HF.1.1.2.3 Regional Bureau of Education	HF.1.1.2.4 Regional Police	HF.1.1.2.99 Other Regional and District Government	HF.1.1.3 Local/municipal government	HF.2.2 Other private insurance (non social)	HF.2.3 Private households' out-of-pocket payment	HF.2.4.1 Local NGOs	HF.2.4.2 International NGOs	HF.2.5.1 Parastatal companies	HF.2.5.2 Private for Profit companies	HF.3 Rest of the world	Row Total
HC.1.1.3 TB related inpatient curative care	3,013,210			5,781,906	1,443,873	646,980		277,329	11,274,848	226,513	132,259	2,454,938			37,173,763		547,870	1,927,729	151,670	40,000	65,092,890
HC.1.3.1.3 TB-Basic medical and diagnostic services	106,647,503													4,962,088	259,605,230	345,877	5,859,226	32,840,108	3,384,171	85,826,964	499,471,167
HC.6.3.3 Prevention of TB	146,956,553								6,374,927							20,880	10,329,776				163,682,136
HC.7.1.1.3 TB-General Government Administration of Health	29,559,713	14,089,091	568,921				835,602		7,659,262								323,675			11,133,675	64,169,940
HC.R.1.3 TB-Capital formation of health care provider institutions	6,639,644								5,297,839				1,940,181				35,300				13,912,963
Column total (THE)	**292,816,623**	**14,089,091**	**568,921**	**5,781,906**	**1,443,873**	**646,980**	**835,602**	**277,329**	**30,606,876**	**226,513**	**132,259**	**2,454,938**	**1,940,181**	**4,962,088**	**296,778,993**	**366,757**	**17,095,848**	**34,767,837**	**3,535,841**	**97,000,638**	**806,329,097**
HC.R.2.3 TB-Education and Training	39,234			15,209,039					143,085								381,740				15,773,098
HC.R.3.3 TB-Reasearch and Development		2,141,624		134,080					47,053								194,818				2,517,575
Column Total (NHE)	**292,855,857**	**16,230,715**	**568,921**	**21,125,025**	**1,443,873**	**646,980**	**835,602**	**277,329**	**30,797,014**	**226,513**	**132,259**	**2,454,938**	**1,940,181**	**4,962,088**	**296,778,993**	**366,757**	**17,672,405**	**34,767,837**	**3,535,841**	**97,000,638**	**824,619,769**

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