



Ministry of Health
Government of Kenya

KENYA NATIONAL HEALTH ACCOUNTS 2005/06



Popular Version

Foreword

Some of the most complex policy issues facing developing countries relate to health care financing, including: how much is invested in the overall health sector and is this adequate to meet equity and efficiency goals? If not, are there possible additional sources of financing that could be mobilized? What health services should be prioritized for a basic package and what is the appropriate mix of mechanisms to finance this package? National Health Accounts (NHA) is a useful tool for understanding many of these key policy issues that relate to health care financing.

NHA tracks all expenditure flows across a health system, and describes the sources, flow, and uses of financial resources within the health system, a basic requirement for optimal resource mobilization and allocation. NHA is therefore an essential component of successful implementation of health reforms aimed at improving the provision of an optimal package of health care. The Government of Kenya has used the NHA framework to produce estimations for financial years 1994/95, 2001/02, and now for 2005/06. Taken together, such data provide valuable trend information to monitor whether funds are being spent as intended and if progress is being made towards national goals, particularly related to equity and efficiency.

Sources of health care funding in Kenya include: the Government of Kenya, donors, private firms, and households. Resources mobilized from these sources are channeled through intermediaries (called financing agents) to the providers of health care services and ultimately to the goods and services produced or paid for with those funds. For the 2005/06 estimation, a wide range of data and information were collected from various government documents. In addition, several surveys targeted to donors, nongovernmental organizations, insurance and other private companies, and households were conducted to complete the NHA process.

The data provided by this report are intended for all stakeholders involved in Kenya's health care system – public, private, and donors. It is hoped that the NHA estimates presented in this report will directly inform policy and go a long way to inform the development of the health care financing strategy for Kenya that shall feed into Vision 2030, Kenya's development blueprint, and other related policies. The NHA estimates should also encourage further research into Kenya's health care financing, leading to a better understanding of the problems facing the health sector while identifying areas in need of reform.

This NHA exercise was a collaborative effort between the Ministry of Health and Kenya National Bureau of Statistics. Financial support was provided by the United States Agency for International Development (USAID). USAID's Health Systems 20/20 project provided technical support.

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Acknowledgements

The production of the NHA report for FY 2005/06, together with the subaccounts for HIV/AIDS and reproductive health, is a result of efforts from many people and institutions. The estimates to inform the NHA report are based on data collected by the Ministry of Health's Department of Policy and Planning, Kenya National Bureau of Statistics (KNBS), Kenya Private Sector Alliance (KEPSA), Health NGOs Network (HENNET), and to some extent Ministry of Local Government and Inspectorate of State Cooperation.

The Ministry of Health would like to acknowledge the financial support provided by the United States Agency for International Development (USAID). USAID's Health System 20/20 project provided technical assistance through the efforts of Susna De, Lisa Fleisher, Ellie Brown, Darwin Young, Steve Musau, and Ken Carlson. The constant support provided by Melahi Pons and Bedan Gichanga, both of USAID/Kenya, is greatly appreciated.

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Mr. Stephen Muchiri, former head of the Department of Policy and Planning, oversaw the whole process while Mr. Thomas Maina coordinated the data collection and analyses, and the compilation of the NHA report. Other central NHA team members include: Mr Dhimn Nzoya, and Mr Geoffrey Kimani. All are thanked for their contributions. The head of the Department of Policy and Planning, Mr Elkana Ong'uti, supported this effort as well.

Finally, estimates of NHAs are a process that must constantly be improved. Users of the data and the analyses in this report are, therefore, invited to freely comment on its contents, presentation, and format, as this will reveal areas where improvements could be made.

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Abbreviations and Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral Treatment
BCC	Behavior Change Communication
CBS	Central Bureau of Statistics
CSPRO	Census and Survey Processing System
EZ	Enumeration Area
FA	Financing Agent
FBOs	Faith-Based Organizations
FY	Financial Year
GDP	Gross Domestic Product
HDI	Human Development Index
HENNET	Health NGOs Network
HIV	Human Immunodeficiency Virus
IEC	Information Education and Communication
IP	Inpatient
IUD	Intrauterine Device
KAIS	Kenya AIDS Indicator Survey
KDHS	Kenya Health Demographic Survey
KEPSA	Kenya Private Sector Alliance
KNBS	Kenya National Bureau of Statistics
Kshs	Kenya Shillings
MoH	Ministry of Health
NACC	National AIDS Control Council
NASSEP	National Sample Survey Evaluation Programme
NGO	Nongovernmental Organization
NHA	National Health Accounts
NHIF	National Hospital Insurance Fund
NSE	Nairobi Stock Exchange
Nsk	Not Specified by Any Kind
OOP	Out-of-Pocket
OP	Outpatient
PEPFAR	President's Emergency Program for AIDS Relief
PLHIV	People Living with HIV
RH	Reproductive Health
RoW	Rest of the World
RTI	Reproductive Tract Infection
SPSS	Statistical Package for Social Scientists
STI	Sexually Transmitted Infections
SWAp	Sector-wide Approach
TB	Tuberculosis
THE	Total Health Expenditure
THEHIV	Total Health Expenditure for HIV/AIDS
THERH	Total Health Expenditure for Reproductive Health
USAID	United States Agency for International Development
US\$	U.S. Dollar
WHO	World Health Organization

1 Background

National Health Accounts (NHA) is an internationally recognized method used to track expenditures in a health system for a specified period of time. Specifically, NHA details the flow of funding from financial sources (e.g. donors, Ministry of Finance), to financing agents (i.e. those who manage the funds, such as the Ministry of Health [MoH] or nongovernmental organisations [NGOs]), to providers (e.g. public and private facilities) and finally to end uses (e.g. inpatient and outpatient care, pharmaceuticals). Actual expenditures, rather than budget inputs, are used to fill a series of tables that show the flow of funding through the health sector. NHA also provides detailed breakdowns of disease-specific expenditures such as those for HIV/AIDS, child health, malaria and reproductive health (RH). NHA is designed to be used as a policy tool to facilitate the implementation of health system goals.

This report describes findings from the third round of National Health Accounts in Kenya. The first two estimations covered financial years (FYs) 1994/95 and 2001/02, respectively. This third round, undertaken in 2007 and covering 2005/06 was implemented by the MoH and Kenya National Bureau of Statistics (KNBS) with financial support from the United States Agency for International Development (USAID). USAID's Health Systems 20/20 Project, led by Abt Associates Inc. provided technical support. The 2005/06 report included the HIV/AIDS and Reproductive health sub-accounts. The findings will be used as a platform for informing policy decisions concerning resource allocation and in the development of the health care financing strategy initiated in 2007.

2 Methodology

The Kenya NHA estimation was conducted in accordance with the methodology described in the *Guide to Producing National Health Accounts; with special application for low-income and middle-income countries* (World Health Organization, World Bank, and USAID 2003) and was informed by both primary and secondary data. A wide range of data and information were compiled from government reports such as the Appropriation Accounts, 2005/06 National AIDS Control Council Annual Report and Accounts, Kenya National Bureau of Statistics data, the Public Expenditure Review 2007, and others as referenced throughout this report. In addition, surveys were conducted to further triangulate secondary and primary data sources. Primary data collected included information from the household health expenditure and utilization and Kenya AIDS indicator surveys both conducted in 2007, while institutional information were drawn from surveys administered to employers, government agencies, donors, NGOs, and insurance companies.

3 NHA FINDINGS

3.1 General NHA Findings

General Health Expenditures

Table ES.1 offers summary statistics from the 2001/02 and 2005/06 NHA estimates. In 2005/06, Kenya spent approximately Kshs 71 billion (US\$ 964.4 million). This represents an increase of 24 percent over 2001/02 when THE was Kshs 57 billion (US\$ 726.4 million).

Table ES.1: General NHA Statistics for 2001/02 and 2005/06

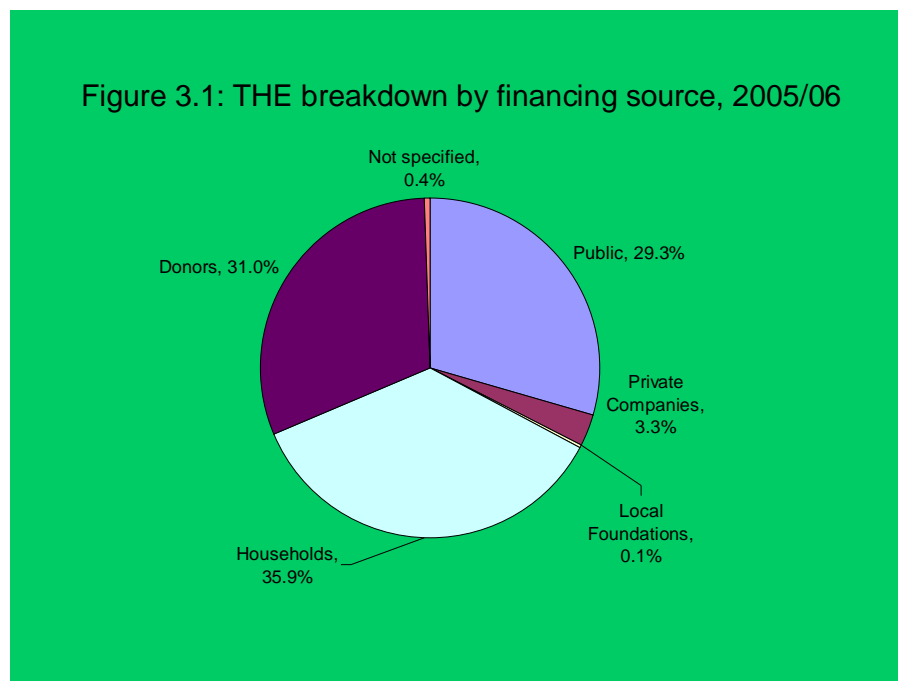
Indicators	2001/02	2005/06
Total population	31,190,843	35,638,694
Exchange rate	78.6	73.4
Total real GDP Ksh	1,118,781,868,506	1,519,400,000,000
Total real GDP US\$	\$ 14,233,866,012	\$ 20,693,224,379
Total Gov't expenditure Ksh	211,517,580,466	401,518,324,607
Total Gov't expenditure US\$	\$ 2,691,063,365	\$ 5,468,414,363
Total Health Expenditure (THE) Ksh	57,097,636,970	70,807,957,722
Total Health Expenditure (THE) US\$	\$ 726,433,040	\$ 964,357,613
THE per capita	1,831	1,987
THE per capita (US\$)	23	27
THE as a % of nominal GDP	5.1%	4.8%
Gov't health expenditure as a % of Gov't total expenditure	8.0%	5.2%
Financing sources as a % of THE		
Public	29.6%	29.3%
Private	54.0%	39.3%
Donor	16.4%	31.0%
Other	0.1%	0.4%
Household (HH) spending		
Total HH spending as % of THE	51.1%	35.9%
OOP spending as % of THE	44.8%	29.1%
HH spending per capita	770	713
OOP spending per capita	819	578
Financing agent distribution as a % of THE		
Public	42.8%	42.7%
Private	49.8%	36.5%
Donor	7.4%	20.8%
Provider distribution as a % of THE		
Public facilities	49.4%	44.3%
Private facilities	35.7%	29.2%
Other	14.9%	26.5%
Function distribution as a % of THE		
Inpatient care	32.1%	29.8%
Outpatient care	45.2%	39.6%
Pharmaceuticals	7.4%	2.6%
Prevention and public health programs	9.1%	11.8%
Health administration	5.0%	14.5%
Other	1.3%	1.7%

In 2005/06, THE in Kenya is equivalent to about 4.8 percent of GDP at current market prices; this translates to a per capita health spending of approximately Kshs 1,987 (US\$ 27). The percentage of health spending to GDP is a slight drop from what was reported by NHA 2001/02 (5.1 percent). However, there has been an increase in the per capita health spending of about 17 percent from US\$ 23 reported in 2001/02.

3.1.1 Financing Sources: Who pays for health care?

In the NHA framework, financing sources are those institutions or entities that ultimately contribute funds used in the health care system. The health sector in Kenya obtains varying levels of funding from the traditional sources: public (government), private firms, households and donors. The information to follow outlines the trends in contributions from each of these sources.

In 2005/06, contribution on health spending by all the major sources – public, private, and donors – is greater than in 2001/02 (after adjusting for inflation). Figure 3.1¹ shows the relative contribution of financial sources to THE in 2005/06. Households remain the largest contributors of health funds, followed by the government and donors. In 2001/02, households financed over half of all health expenditures and now their share accounts for just over one third. However, the gap between the relative contributions of the three major financiers has narrowed with increased investments, largely from donors.



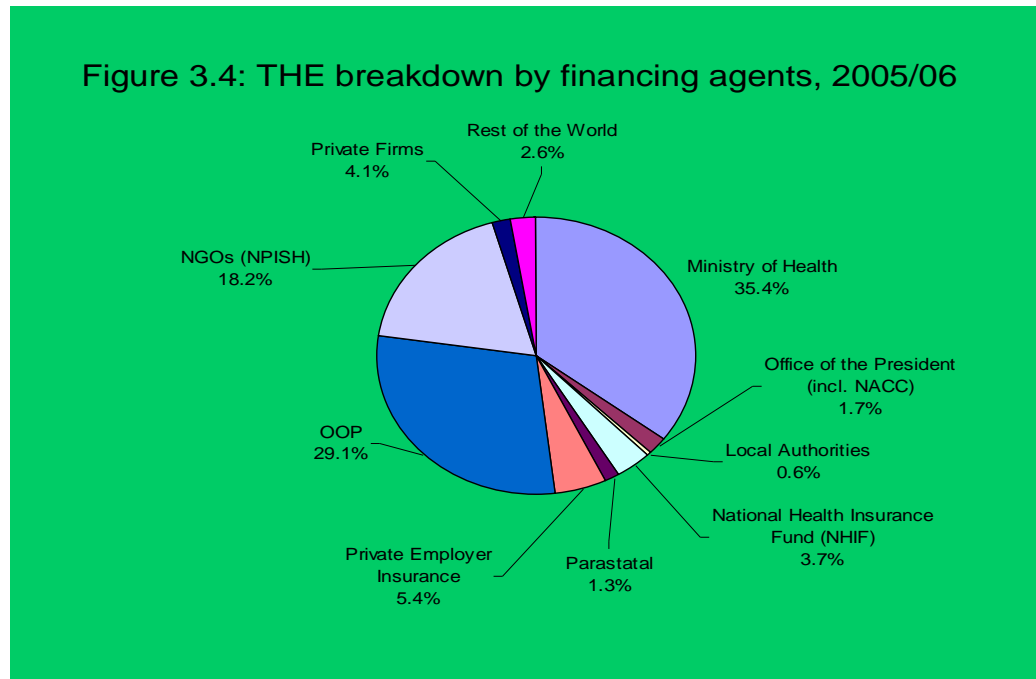
3.1.2 Financing Agents: Who manages health funds?

Financing agents are institutions that receive and manage funds from financing sources to pay for or purchase health goods and services. They determine by what proportions and which functions will consume the resources mobilized. Financing agents include such entities as the MoH and other ministries, Parastatals, public and private insurance entities, households (through out-of-pocket (OOP) spending), NGOs, private firms, and rest of the world, including donors.

As Figure 3.4 shows, about 57 percent of the resources mobilized by financing sources passed through the private sector and donors (including spending by household, private employer insurance, private firms, and NGOs) with household OOP spending accounting for

¹ The numbering of figures and tables are imported from the main NHA report and hence not in sequence

29 percent. This is comparable to the amount that passed through the private sector in 2001/02 (50 percent), when households also controlled the largest share. The public sector controls 43 percent of the total funds mobilized. The MoH controls 35 percent of publicly programmed resources.

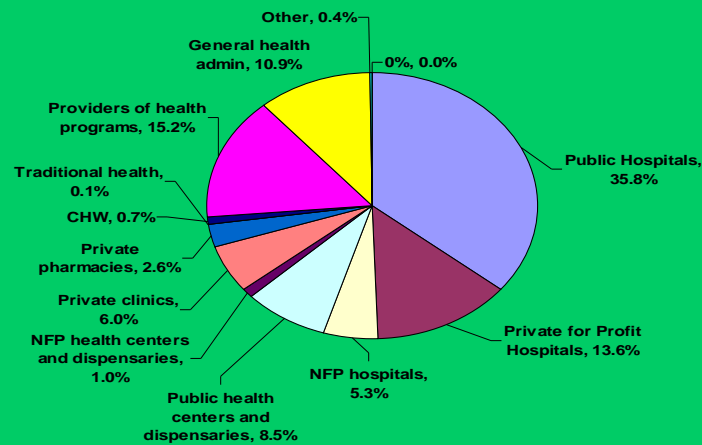


3.1.3 Providers of Health Care: Who uses health funds to deliver care?

For purposes of NHA, “providers of health care” refers to entities that receive money in exchange for or in anticipation of producing the activities inside the health accounts boundary: these include public and private health facilities, pharmacies and shops, traditional healers and community health workers as well as public health programs and general health administration and others as described in this section. Public health programs refer to the provision and implementation of programs such as health promotion and protection. General health administration refers to costs associated with the overall regulation of activities of agencies that provide health care.

As indicated in Figure 3.8, in 2005/06, public health facilities account for the largest share of THE (44 percent), private health facilities for 29 percent.

Figure 3.8: THE breakdown by Provider, 2005/06

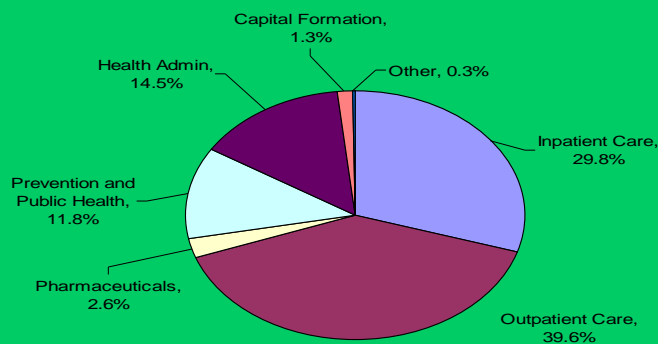


3.1.4 Health Care Functions: What services and/or products are purchased with health funds?

Health care functions refer to the types of goods and services provided and activities performed within the health accounts boundary. General health functions include curative care (inpatient and outpatient), provision of pharmaceuticals from independent pharmacies (i.e., pharmaceuticals not procured from a health facility as part of inpatient or outpatient treatment), prevention and public health programs, health care administration, and capital formation.

Curative care consumes the largest share of THE, 69 percent, with 40 percent going to outpatient care and 30 percent to inpatient care (Figure 3.10). Prevention and public health programs at 11.8% and health administration at 14.5% account for most of the remaining THE by function.

Figure 3.10: Breakdown of THE by Function 2005/06

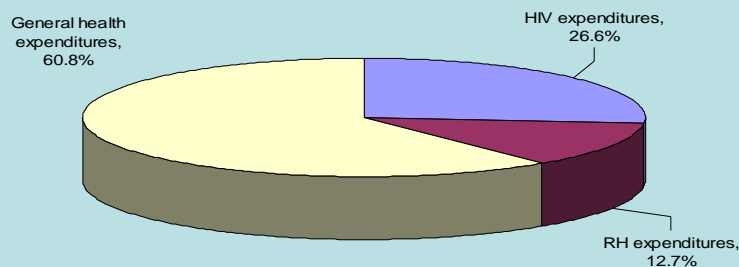


THE going to inpatient and outpatient care has decreased from 45 percent and 32 percent, respectively, in 2001/02, to 40 and 30 percent, respectively, in 2005/06 (Figure 3.11). Prevention and public health programs and health administration have increased, from 9 percent and 5 percent in 2001/02 to 12 percent and 15 percent respectively in 2005/06.

3.2 Priority Areas of Health

HIV/AIDS and RH are considered priority areas of health for the government of Kenya. These two areas consume 38 percent of total health resources (Figure 3.13).

Figure 3.13: Spending on HIV/AIDS and RH



Public and private sources spend almost equal amounts of funding on RH and HIV/AIDS, while donors account for the largest share of funding for HIV/AIDS health care. Of donors' total contribution to health, 60 percent is spent on HIV/AIDS.

4 HIV/AIDS Subaccount

Summary Statistics for HIV/AIDS Findings

In 2005/06, Kshs 19 billion (US\$ 256 million) was spent on HIV/AIDS services in Kenya, nearly double what was spent in 2002/02 (Kshs 10 billion/US\$ 126 million), reflecting the influx of external funds for HIV/AIDS from programs such as the Global Fund and PEPFAR. Table 4.1 summarizes HIV/AIDS health expenditures in 2001/02 and 2005/06.

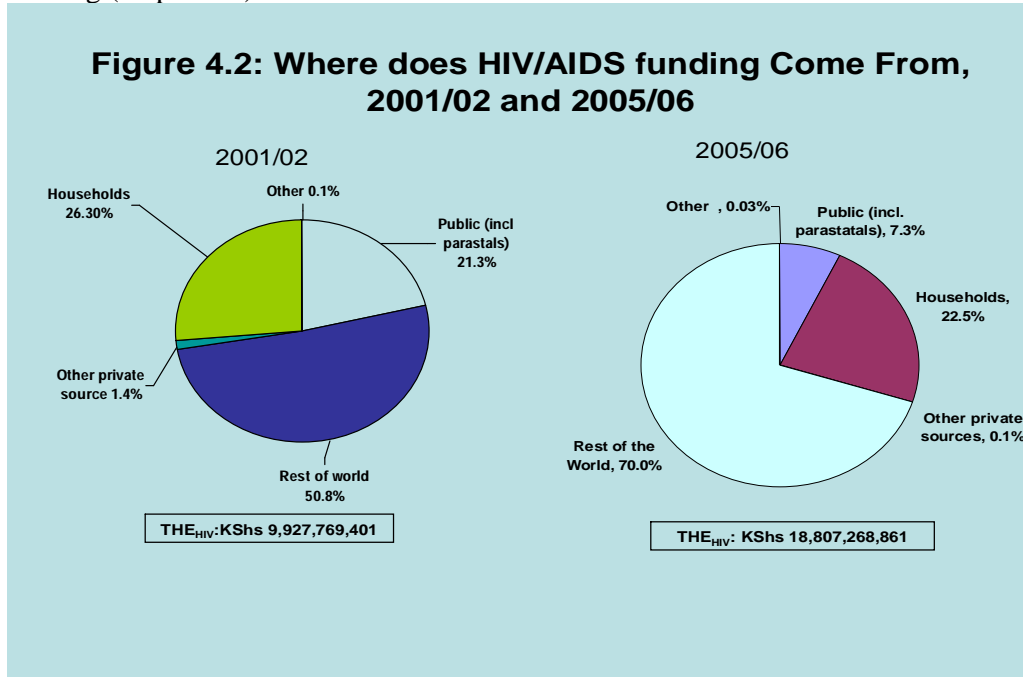
Table 4.1: HIV/AIDS Subaccount Summary Statistics, 2001/02 and 2005/06

Indicators	2001/02	2005/06
Prevalence rate (adults)	6.7%	5.1%
Number of PLHIV	982,685	1,091,000
Total HIV/AIDS health expenditure (THE _{HIV}) Ksh	9,927,769,404	18,807,268,861
Total HIV/AIDS health expenditure (THE _{HIV}) US\$	\$ 126,307,499	\$ 256,142,579
Total HIV/AIDS expenditure (THAE) Ksh	12,162,246,078	20,501,452,153
Total HIV/AIDS expenditure (THAE) US\$	\$ 154,735,955	\$ 279,216,236
HIV/AIDS health spending per PLHIV Ksh	10,103	19,016
HIV/AIDS health spending per PLHIV US\$	\$ 129	\$ 259
HIV/AIDS spending as a % of general THE	17.4%	26.6%
HIV/AIDS spending as a % of GDP	0.9%	1.2%
THE _{HIV} as a % of total HIV/AIDS spending (health and non-health)	-	91.7%
THE _{HIV} % targeted for HIV/AIDS	-	85.1%
Financing sources as a % of THE_{HIV}		
Public	21.3%	7.3%
Private	27.8%	22.7%
Donor	50.8%	70.0%
Other	0.1%	0.03%
Household (HH) spending		
Total HIV HH spending as % of general THE	4.6%	6.0%
OOP spending as % of THE _{HIV}	21.3%	22.0%
Financing agent distribution as a % of THE_{HIV}		
Public	60.0%	22.0%
Private	24.8%	22.4%
Donor and NGO	15.2%	55.5%
Provider distribution as a % of THE_{HIV}		
Public facilities	41.4%	35.0%
Private facilities	14.4%	21.4%
Other	44.2%	43.6%
Function distribution as a % of THE		
Curative Care	44.2%	56.0%
Prevention and public health programs	47.1%	26.6%
Pharmaceuticals	4.9%	1.7%
Other	3.7%	15.7%

HIV/AIDS health expenditures account for 27 percent of THE. This translates to US\$ 259 per PLHIV in 2005/06; in 2001/02 this figure was US\$ 129. It is important to note that much of the funding goes to prevention programs, benefiting the general population, not just those who are HIV positive.

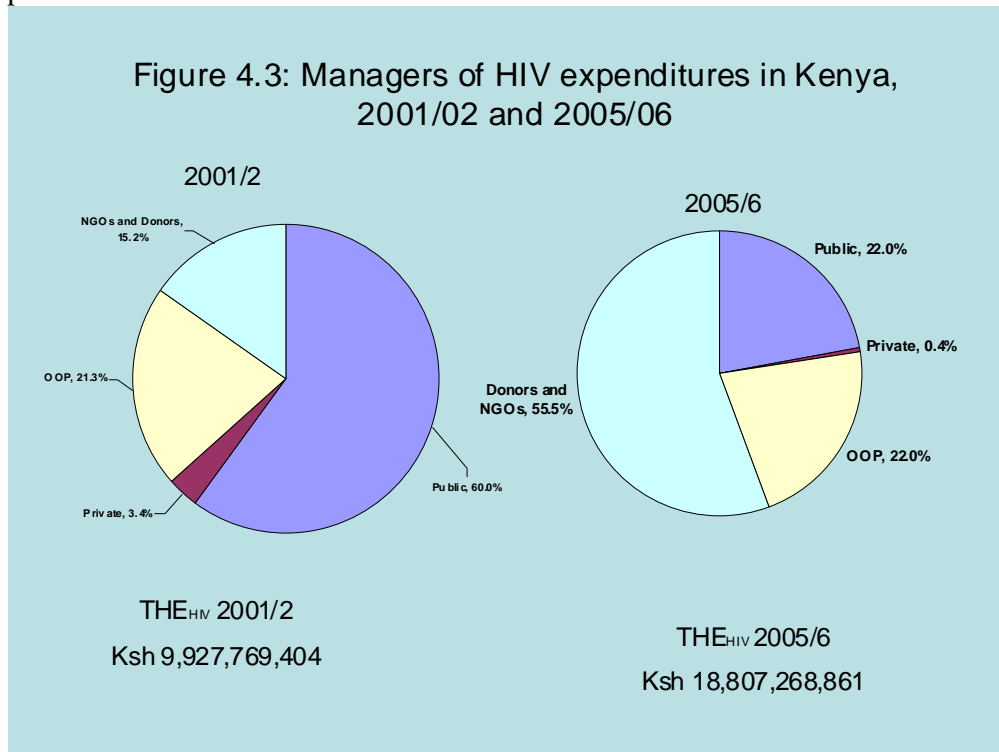
4.1 Financing Sources of HIV/AIDS Health Care: Who pays for HIV/AIDS services?

As Figure 4.2 shows, donors continue to be the major source of HIV/AIDS financing, accounting for 70 percent in 2005/06, up from 51 percent in 2001/02. The HIV/AIDS program expansion is due mainly to Global Fund and PEPFAR funding. Financing by households has decreased slightly as a percentage of THE_{HIV} , but remains a major source of funding (23 percent).



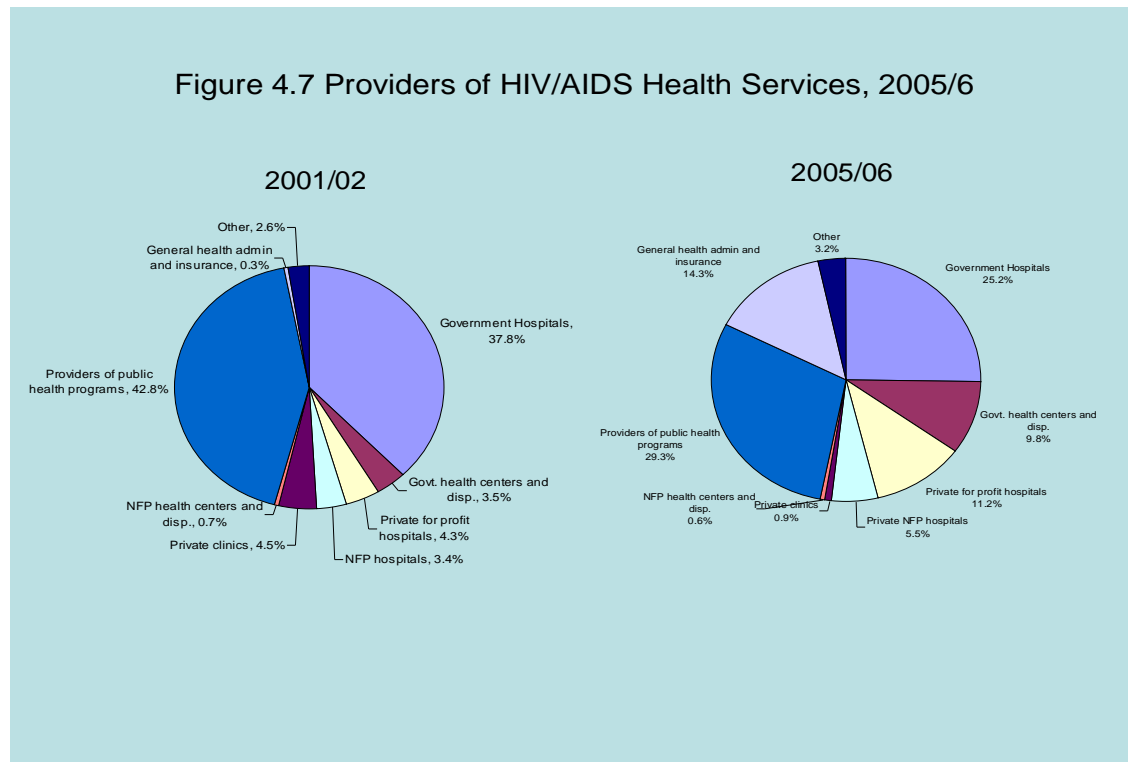
4.2 Financing Agents of HIV/AIDS Health Care: Who manages HIV/AIDS funds?

NGOs and donors manage the greatest proportion (56 percent) of THE_{HIV} in 2005/06. Public sector financing agents, who managed 60 percent of the funds in 2001/02, managed 22 percent in 2005/06.



4.3 Providers of HIV/AIDS Health Care: Who uses HIV/AIDS health funds to deliver care?

In absolute values, providers of public health programs are utilizing Kshs 5.5 billion (US\$ 75.7 million) in 2005/06, up from Kshs 4.2 billion (US\$ 53.8 million) an increase of 30 percent (Figure 4.7). Providers of public health programs, although utilizing a decreased percentage of THE_{HIV}, retain the largest share at 29 percent. Government hospitals utilize a decreased share of THE in 2005/06, while utilization at government health centers and dispensaries has increased from 4 percent in 2001/02 to 9 percent in 2005/06.



4.4 Functions of HIV/AIDS Health Care: What services and products are purchased with HIV/AIDS health funds?

In 2005/06 outpatient care consumed the greatest share of THE_{HIV} (40 percent), followed by prevention and public health programs (27 percent). In 2001/02, prevention and public health accounted for the largest share (47 percent) followed by inpatient care (24 percent).

5 Reproductive Health Subaccount Findings

Summary Statistics for Reproductive Health Findings

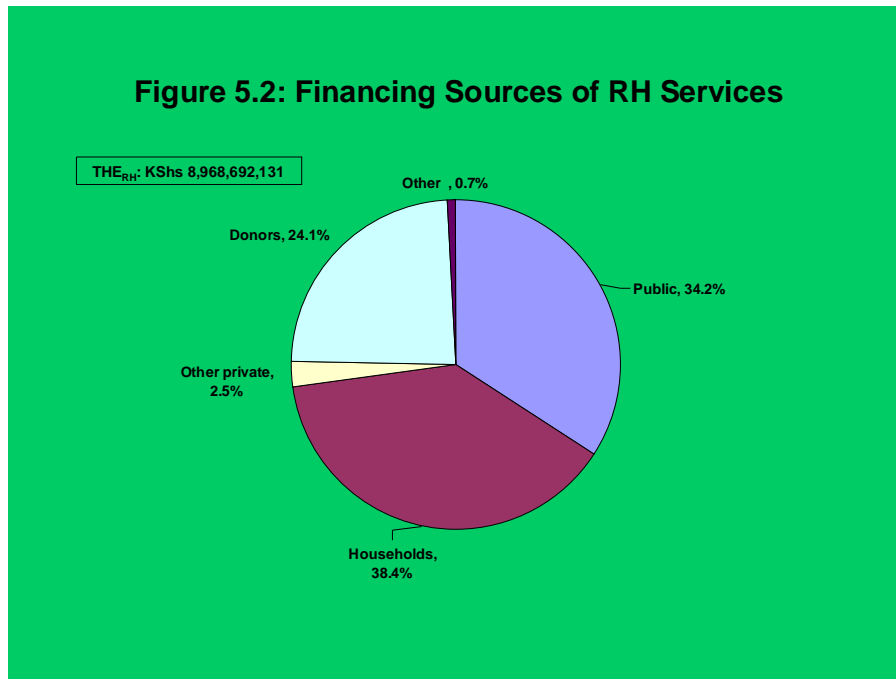
In 2005/06, total RH expenditure was Kshs 9 billion (US\$ 122 million), 0.6 percent of GDP (Table 5.1). Per woman of reproductive age, RH expenditure was approximately Kshs 1,009 (US\$ 14). The private and public sectors were the primary sources of financing for RH, contributing 41 percent and 34 percent, respectively, while donor's contributed 24 percent. RH accounted for 13 percent of THE_{RH}

TABLE 5.1: Summary of RH Subaccount Findings, 2005/06

Indicators	2005/06
Total RH (THE _{RH}) health expenditure Ksh	8,968,692,131
Total RH (THE _{RH}) health expenditure US\$	\$ 122,147,663
Total RH expenditure (TRE) Ksh	9,045,417,231
Total RH non-health expenditure (TRE) US\$	\$ 123,192,608
RH expenditure per woman of reproductive age Ksh	1,009
RH expenditure per woman of reproductive age US\$	\$ 14
RH expenditure as a % of GDP	0.6%
RH expenditure as a % of general THE	12.7%
THE _{RH} % targeted for RH	54.0%
THE _{RH} as a % of total RH spending (health and non-health)	99.4%
Financing sources as a % of THE_{RH}	
Public	34.2%
Private	41.0%
Donor	24.1%
Other	0.7%
Household (HH) spending	
Total RH HH spending as % of THE _{RH}	38.4%
OOP spending as % of total RH HH spending	68.5%
OOP spending as % of THE _{RH}	26.3%
OOP spending per woman of reproductive age	266
Financing agent distribution as a % of THE_{RH}	
Public	54.0%
Private	44.3%
Donor	1.6%
Provider distribution as a % of THE_{RH}	
Public providers	61.0%
Private providers	29.8%
Provision of public health programs	3.9%
Other	5.3%
Function distribution as a % of THE_{RH}	
Inpatient care	62.1%
Outpatient care	25.4%
Pharmaceuticals	0.1%
Prevention and public health programs	3.4%
Health administration	5.8%
Other	3.3%

5.1 Financing Sources of RH: Who pays for RH services?

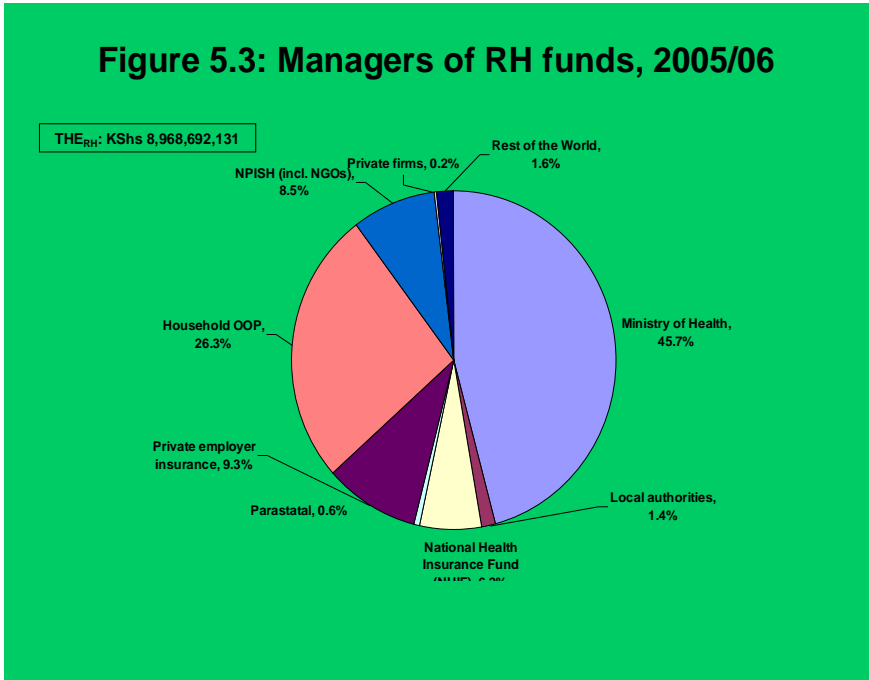
Private sector and government sources are the primary sources of expenditures for RH, accounting for 41 percent and 34 percent of total RH expenditures, respectively (Figure 5.2). The private sector here is mostly households, which account for 38 percent of total RH expenditures. Donors account for approximately 24 percent of total health expenditures on RH care.



5.2 Financing Agents: Who manages RH funds?

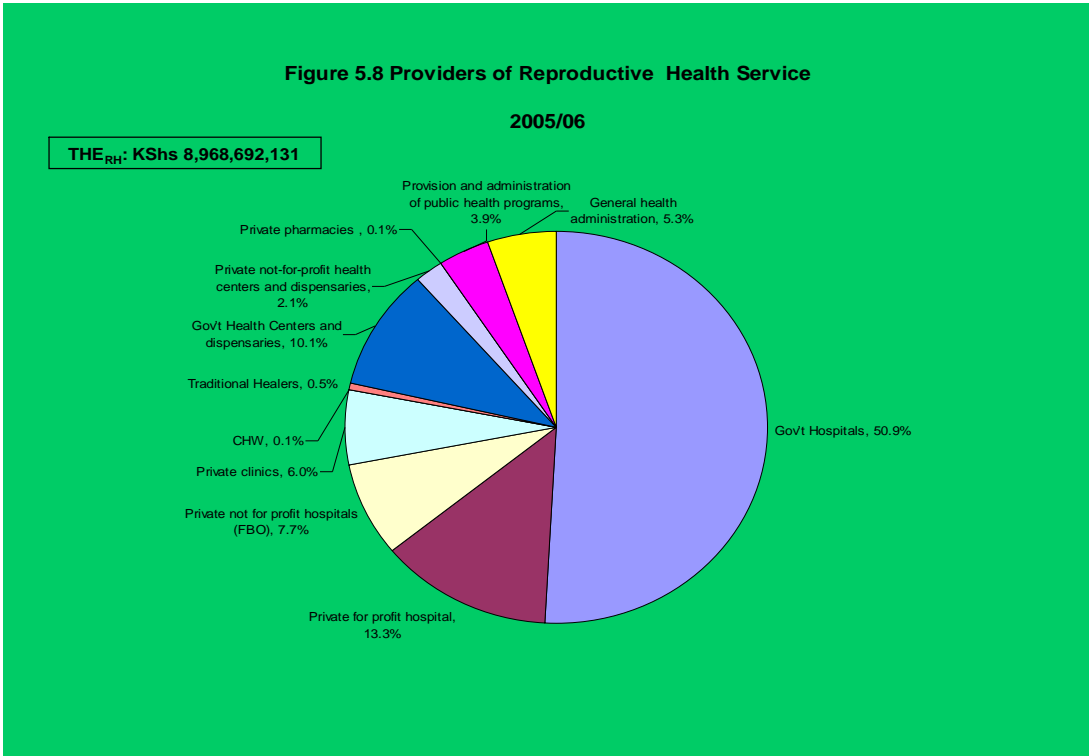
Figure 5.3 shows the financing agents, or managers, of RH funds. Overall, nearly 54 percent of total expenditures on RH care flowed through public entities (MoH, local authorities, parastatals, and NHIF). Within public entities, however, the MoH is the primary financing agent, managing about 46 percent of RH funds. Among private entities, households are the most significant manager of RH expenditure, at about 26 percent. Just over 10 percent of funds for RH care are channeled through NGOs and donors.

Figure 5.3: Managers of RH funds, 2005/06



5.3 Providers of RH Services: Who uses funds to provide RH care?

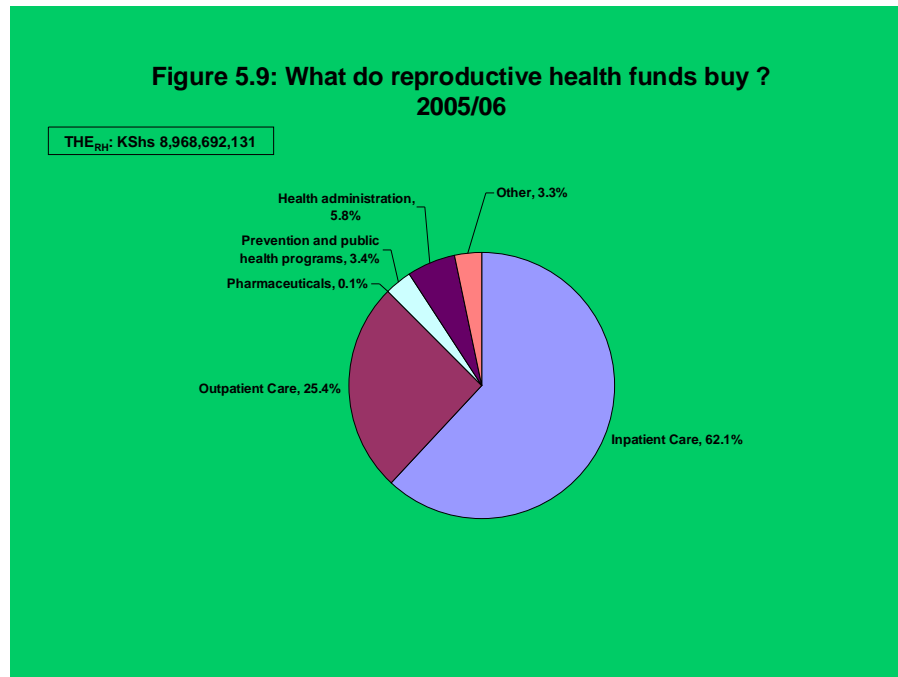
Figure 5.8 shows the breakdown of spending on providers of RH care.



Public providers consume the largest share (61 percent) of RH expenditures; 51 percent is spent on care in government hospitals, 10 percent in public health centers and dispensaries. Among private providers, for-profit hospitals consume the largest share, 13 percent.

5.4 RH Care Functions: What RH services are consumed?

Curative care consumes the largest share of THE_{RH} , 87 percent, with 62 percent for inpatient care and 25 percent for outpatient care (Figure 5.9). Inpatient care includes deliveries and sterilizations, as well as other services that could not be disaggregated.



6 Policy recommendations

- Although household expenditure on health has decreased, it is important to continue to alleviate the burden of health financing on households, especially the poor.
- NHIF should be reengineered to play a larger role in financing health care given that its contribution to total insurance expenditure has increased only marginally over the three years since the last NHA.
- OOP expenditure on pharmaceuticals at private pharmacies and shops has drastically decreased as a result of better supply of public health facilities especially health centers and dispensaries. This needs to be sustained by improving the performance of the Kenya Medical Supplies Agency (KEMSA). It is important that the public does not lose faith again in the ability of the public sector to provide needed drugs and other medical supplies.
- Donor investments in RH are low in comparison to their contributions to HIV/AIDS care, and, although the government is spending more on RH, the overall low resource allocation may be contributing factor to poor RH indicators such as maternal mortality. As such, it will be important to address RH resource allocations in future.

- Donor expenditures on HIV/AIDS have increased significantly without corresponding increases from the public sector. This raises issues of sustainability and government commitment to address HIV/AIDS.
- Between 2001/02 and 2005/06, donor funding increased by 135 percent, with NGOs managing the majority of these funds. NGO activities should be monitored to ensure that they are aligned to health sector priorities. NGOs, as signatories to the health sector Code of Conduct,² should be made to account for funds they manage.
- Private providers of HIV/AIDS care should be monitored to ensure compliance with national policies and treatment guidelines for HIV/AIDS, considering the large OOP expenditure in the private sector.

² The Code of Conduct is a set of rules and regulation created by all stakeholders in the health sector (e.g., NGOs, government, donors) to govern the sector.