REPUBLIC OF KENYA

KENYA NATIONAL HEALTH ACCOUNTS 2012/13

Ministry of Health

KENYA NATIONAL HEALTH ACCOUNTS 2012/13

Collaborating Institutions

Ministry of Health:
- Policy and Planning Division
- Other departments and divisions

Ministry of Devolution and Planning:
- Kenya National Bureau of Statistics

U.S. Agency for International Development, Kenya
Health Policy Project
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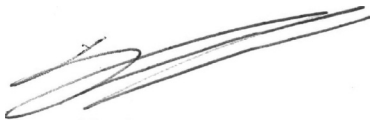
FOREWORD

This report describes the Kenya healthcare system from an expenditure perspective. The report utilises the new classification system, System of Health Accounts (SHA) 2011, developed by the Organisation for Economic Co-operation and Development (OECD), Eurostat, and the World Health Organization (WHO). The new classifications provide a refined conceptual framework for health accounting and an extended set of classifications to describe the flow of funds within the health system. With these new classifications, Kenya's policymakers and stakeholders will have a more precise description of the flow of resources within the health sector.

The need for data on expenditures for the health system has grown with the increasing use of National Health Accounts (NHA) to track the flows and contributions of funds to the healthcare system by different stakeholders. Evidence and information on NHA is critical in supporting policymakers, decisionmakers, programme managers, and stakeholders in making decisions that shape how the health sector promotes service delivery. These decisions, in turn, influence the overall health and well-being of the Kenyan population. Further, NHA findings can be utilised to evaluate health spending over time and examine the impact of health policies and initiatives.

Although there are limitations to expenditure tracking, the limitations themselves provide the Ministry of Health (MOH) with opportunities and direction to explore areas of improvement in information systems, reporting mechanisms, and data collection, which are vital instruments for providing evidence. The true value of NHA, however, lies in its regular production and use. The institutionalisation of NHA as a standard practice will allow the government and stakeholders to access relevant and timely health expenditure data for decision-making purposes.

It is hoped that this report, produced through the collaboration of so many players, will provide useful information to promote better and targeted investments for the improvement of health outcomes of all Kenyans. Last, in an effort to institutionalise NHA in Kenya, my ministry will link up with other arms of government to make the data required for NHA production available through the routine health information system.



James Macharia
Cabinet Secretary

ACKNOWLEDGEMENT

This report provides a comprehensive analysis of health expenditure and financing flows in the health sector. Data on health expenditure was collected from different sources, collated, analyzed and validated to produce the 2012/2013 Kenya National Health Accounts Report. The report was prepared by the Ministry of Health in close collaboration with other partners.

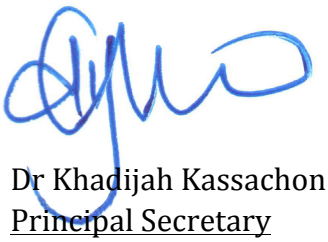
The NHA team that coordinated the planning, implementation and report writing was led by Elkana Ong'uti (Chief Economist and Head of Policy and Planning) assisted by David Njuguna (Senior Economist, MOH). The report benefited greatly from the valuable contributions of Geoffrey Kimani, Stephen Kaboro, Terry Watiri and Tom Mirasi, all officers in the Ministry of Health.

Technical assistance was provided by the USAID-funded Health Policy Project (HPP), through Stephen Muchiri, the Programme Director and Thomas Maina, Senior Health Finance Advisor. Angela Akumu and Daniel Mwai both of HPP supported the NHA data analysis and report writing. Special thanks also goes to Dr H. Karamagi (Health Systems Specialist, WHO), and Dr Djesika Amendah (APHRC) for their critical input during the entire process of producing the NHA report.

The Ministry of Health would like to acknowledge the financial support provided by USAID through the Health Policy Project which made it possible to undertake and complete the NHA report.

We would like to acknowledge the collaboration of various organizations and private firms in supporting data collection by providing the required data for the Kenya NHA. These organizations and institution include the Private firms, Parastatals, Non-governmental Organizations (NGOs), Insurance firms and other Government Ministries.

Finally, I must congratulate the NHA Technical Working Group for making Kenya be among the first African countries to present an NHA report using the System of Health Accounts (SHA) 2011, which provides a more elaborate way of tracking expenditures on health.



Dr Khadijah Kassachon
Principal Secretary

ABBREVIATIONS

CHE	current health expenditure
$CHE_{DIARRHOEAL}$	current health expenditure on diarrhoeal disease
CHE_{HIV}	current health expenditure on HIV/AIDS
$CHE_{MALARIA}$	current health expenditure on malaria
CHE_{NCD}	current health expenditure on noncommunicable diseases
$CHE_{NUTRITIONAL}$	current health expenditure on nutritional diseases
CHE_{RESP}	current health expenditure on respiratory infections
CHE_{RH}	current health expenditure on reproductive health
CHE_{TB}	current health expenditure on tuberculosis
CHE_{VPD}	current health expenditure on vaccine-preventable diseases
CHW	community health worker
GDP	gross domestic product
GOK	Government of Kenya
HIV/AIDS	human immunodeficiency virus/acquired immune deficiency syndrome
HK	capital formation
HPP	Health Policy Project
KHHUES	Kenya Health Household Utilisation and Expenditure Survey
KNBS	Kenya National Bureau of Statistics
KSh	Kenya shilling
MOH	Ministry of Health
MOPHS	Ministry of Public Health and Sanitation
NACC	National AIDS Control Council
NASCOP	National AIDS and STI Control Programme
NCD	noncommunicable disease
n.e.c.	not elsewhere classified
NGO	nongovernmental organisation
NHA	National Health Accounts
NHAPT	National Health Accounts Production Tool
NHIF	National Health Insurance Fund
NPISH	nonprofit institutions serving households
OECD	Organisation for Economic Co-operation and Development
OOP	out-of-pocket
RH	reproductive health
SHA	System of Health Accounts
TB	tuberculosis

THE	total health expenditure
$THE_{DIARRHOEAL}$	total health expenditure on diarrhoeal disease
THE_{Dis}	total disease health expenditure
THE_{HIV}	total health expenditure on HIV/AIDS
$THE_{MALARIA}$	total health expenditure on malaria
THE_{NCD}	total health expenditure on noncommunicable diseases
$THE_{NUTRITIONAL}$	total health expenditure on nutritional deficiencies
THE_{RH}	total health expenditure on reproductive health
THE_{RESP}	total health expenditure on respiratory infections
THE_{TB}	total health expenditure on tuberculosis
THE_{VPD}	total health expenditure on vaccine-preventable diseases
US$	United States dollar
USAID	United States Agency for International Development
VPD	vaccine-preventable disease
WHO	World Health Organization

EXECUTIVE SUMMARY

The Kenya National Health Accounts (NHA) survey was undertaken to track the flow of funds in the health sector for the year 2012/13. The NHA is an important tool for understanding the financing of a country's health sector and provides a framework for measuring the total public and private health expenditures. This report presents the key findings of the survey. It also includes annexes showing detailed NHA tables used to compute the health expenditure statistics presented herein. All references to Kenya shilling (Ksh) or US dollar (US$) amounts are in current values, and the previous NHA estimates have been adjusted for inflation to 2012/13 equivalents to facilitate comparison with previous NHA estimates.

GENERAL NHA FINDINGS

The total health expenditure (THE) in Kenya was KSh 234 billion (US$2,743 million) in 2012/13, up from KSh 163 billion (US$2,155 million) in 2009/10.[1] Total health spending in 2012/13 accounted for 6.8 percent of gross domestic product (GDP), up from 5.4 percent in 2009/10. The government expenditure on health as a percentage of total government expenditure increased from 4.6 percent in 2009/10 to 6.1 percent in 2012/13. Of the total health expenditure in 2012/13, current health expenditure (CHE) accounted for 93 percent, compared with 96 percent in 2009/10. Capital expenditure increased from 4 percent of the THE in 2009/10 to 7 percent in 2012/13. The per capita expenditure has increased from KSh 4,232 (US$56) in 2009/10 to KSh 5,680 (US$67) in 2012/13.

Revenues to support financing schemes come from three major sources: the government, households, and development partners (i.e., the rest of the world). The private sector continues to be the major financier of health, contributing 40 percent of THE in 2012/13, up from 37 percent in 2009/10. The public contribution to THE was 34 percent in 2012/13, an increase of 17 percent over the 2009/10 estimates. The donor contribution was 26 percent of THE in 2012/13, down from 35 percent in 2009/10. These are the first estimates showing declining donor funding for the health sector.

In 2012/13, 41 percent of THE was mobilised through central government schemes, up from 32 percent in 2009/10. Households' out-of-pocket (OOP) (excluding cost sharing) and nonprofit institutions serving households (NPISH) financing schemes mobilised 27 percent and 21 percent of THE in 2012/13, respectively. Notably, THE funds mobilised through NPISH financing schemes declined by 45 percent in 2012/13 compared with 2009/10 estimates. About 12 percent of THE was mobilised through the voluntary healthcare payment schemes.

The role of the public sector as a financing agent, which had declined to 37 percent of THE in 2009/10, increased to 42 percent in 2012/13. Private and NPISH financing agents controlled 38 percent and 21 percent of THE, respectively, in 2012/13.

[1] All references to Kenya shilling (KSh) or US dollar (US$) amounts were converted using the fiscal year 2012/13 exchange rate (US$1 = KSh 85.3). Previous NHA estimates have been adjusted for inflation to 2012/13 equivalents to facilitate comparison with previous NHA estimates.

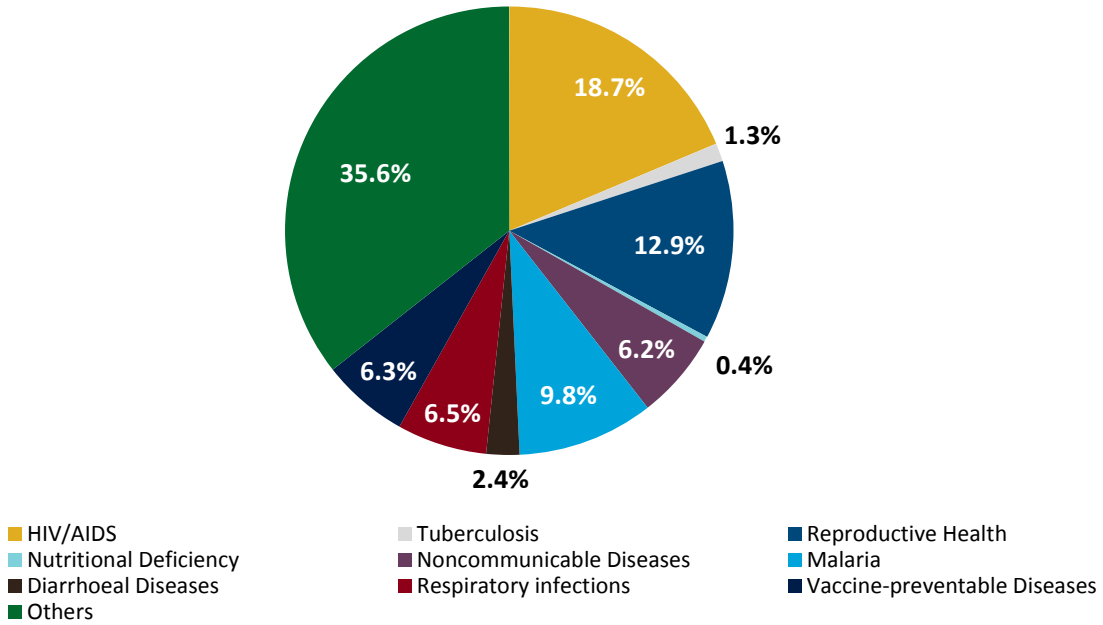
Public facilities utilised 39 percent of THE in 2012/13, down from 47 percent in 2009/10. The role of the provider of public health programmes and health administration increased from 14 percent and 8 percent of THE in 2009/10 to 16 percent and 19 percent in 2012/13, respectively. Private providers utilised the same percentage of THE (22%) in the two years of estimates.

The amount of THE spent on inpatient curative care decreased from 22 percent in 2009/10 to 19 percent in 2012/13. The amount of THE spent on outpatient curative care remained constant at about 40 percent during the two periods. Prevention and public health programmes utilised less of THE in 2012/13 (16%), compared with 2009/10 (23%). The amount of THE spent on governance, and health system and financing administration more than doubled to 19 percent in 2012/13, compared with 9 percent in 2009/10.

HEALTH EXPENDITURE BY DISEASE CONDITIONS

HIV/AIDS took the largest share of resources for health at 18.7 percent, followed by reproductive health at 12.9 percent. Malaria, respiratory infections, vaccine-preventable diseases, and noncommunicable diseases consumed 9.8 percent, 6.5 percent, 6.3 percent, and 6.2 percent of THE, respectively, in 2012/13.

Figure 1—1: Distribution of THE, by Major Diseases/Conditions, 2012/13



HIV/AIDS

The total health expenditure on HIV/AIDS (THE_{HIV}) was KSh 43.7 billion (US$532.1 million) in 2012/13, up from KSh 40.3 billion (US$511.9 million) in 2009/10. The THE_{HIV} as a percentage of GDP remained the same at 1.3 percent in 2009/10 and 2012/13. Further, the THE_{HIV} accounted for 19 percent of THE in 2012/13.

In 2012/13, revenues of financing schemes for the current health expenditure for HIV/AIDS were mostly from donors—72 percent, up from 51 percent in 2009/10. There was a significant decline for private financing for THE_{HIV}—7.4 percent in 2012/13, down from 28 percent in 2009/10. Public sources accounted for 21 percent of THE_{HIV} in 2009/10 and 20 percent in 2012/13.

About 73 percent of THE_{HIV} was pooled through NPISH financing schemes, up from 47 percent in 2009/10**.** OOP (excluding cost sharing) and government schemes and compulsory contributory financing schemes both fell to 5 percent and 20 percent of THE_{HIV} in 2012/13, compared with 19 percent and 27 percent in 2009/10.

NPISH managed the largest proportion of THE_{HIV} at 72 percent in 2012/13, up from 47 percent in 2009/10. Public and private financing agents managed 20 percent and 8 percent, respectively, in 2012/13, down from 27 percent and 26 percent reported in 2009/10.

Providers of preventive care and public facilities utilised 43 percent and 32 percent of THE_{HIV} in 2012/13, respectively, compared with 13 percent and 37 percent in 2009/10. There was a reduction in the amount of THE_{HIV} utilised by private facilities—23 percent in 2009/10, down to 7 percent in 2012/13.

The proportion of THE_{HIV} spent on preventive care increased to 41 percent in 2012/13 from 36 percent in 2009/10. Outpatient curative care expenditure for THE_{HIV} remained at 33 percent in the two periods, whereas the proportion of inpatient curative care for THE_{HIV} fell from 19 percent recorded in 2009/10 to 3 percent in 2012/13.

TUBERCULOSIS

The total health expenditure on TB (THE_{TB}) almost doubled, from a total of KSh 1.8 billion (US$23.7 million) in 2009/10 to KSh 3.1 billion (US$36.1 million) in 2012/13. The spending on TB accounted for 1.3 percent of THE in 2012/13, up from 1.1 percent in 2009/10.

About 50 percent of THE_{TB} in 2012/13 came from the public sector, up from 21 percent in 2009/10. This was followed by private financing sources at 27 percent, down from 30 percent in 2009/10. Donors financed 23 percent of THE_{TB} in 2012/13, compared with 42 percent in 2009/10.

The government and NPISH financing schemes mobilised 49 percent and 23 percent of THE_{TB} in 2012/13, respectively, compared with 39 percent and 34 percent in 2009/10. OOP (excluding cost sharing) schemes mobilised a far lower percentage of THE_{TB} in 2012/13 (8%) than in 2009/10 (21%).

The public financing agents managed the largest share of THE_{TB} in 2012/13 at 49 percent, up from 39 percent in 2009/10. This was followed by the private sector at 28 percent. The share of NPISH as a financing agent for THE_{TB} fell from 34 percent in 2009/10 to 23 percent in 2012/13.

The major recipients of THE_{TB} resources in 2012/13 were providers of preventive care (36%), as was true in the previous estimation period. Public health facilities controlled 22 percent of THE_{TB} resources in 2012/13, down from 37 percent in 2009/10.

The bulk of THE_{TB} was spent on prevention care at 36 percent, down from 39 percent in 2009/10. About 21 percent of THE_{TB} went to finance outpatient curative care in 2012/13, compared with 27 percent in 2009/10. Inpatient curative care accounted for 19 percent of THE_{TB} in 2012/13, up from 18 percent in 2009/10.

REPRODUCTIVE HEALTH

The total health expenditure on reproductive health (THE_{RH}) increased from KSh 22.8 billion (US$300.7 million) in 2009/10 to KSh 30.1 billion (US$352.9 million) in 2012/13. THE_{RH}, as a percentage of THE, dropped slightly, from 14 percent in 2009/10 to 13 percent in 2012/13. As a percentage of GDP, expenditure on reproductive health, although increasing, has remained constant at about 1 percent.

Private and public sectors contributed 42 percent and 40 percent of $THE_{RH,,}$ respectively, in 2012/13, compared with 38 percent and 41 percent in 2009/10. Donor contributions to THE_{RH} fell to 18 percent in 2012/13 from 22 percent in 2009/10.

In 2012/13, 38 percent of THE_{RH} funds were mobilised through government schemes, down from 57 percent in 2009/10. OOP (excluding cost sharing) schemes mobilised 32 percent of THE_{RH} in 2012/13, compared with 19 percent in 2009/10. There was an increase of THE_{RH} channelled through NPISH, from 11 percent in 2009/10 to 18 percent in 2012/13.

The private (including households) and public sectors continue to be the major financing agents of THE_{RH}, managing 42 percent and 40 percent of $THE_{RH,,}$ respectively, in 2012/13, compared with 32 percent (private) and 57 percent (public) in 2009/10.

Public facilities utilised 37 percent of THE_{RH} in 2012/13, a decline from 54 percent in 2009/10. Providers of healthcare system administration and financing spent 21 percent of THE_{RH} in 2012/13, up from 8 percent in 2009/10. Private facilities utilised the same percentage of THE_{RH} (at 25%) in 2012/13 and 2009/10. The proportion of THE_{RH} used by providers of preventive care increased from 11 percent in 2009/10 to 15 percent in 2012/13.

The amount of THE_{RH} spent on outpatient and inpatient curative care decreased from 41 percent and 31 percent in 2009/ 10 to 35 percent and 21 percent, respectively, in 2012/ 13. There was a notable increase in the proportion of THE_{RH} spent on governance, and health system and financing administration, from 10 percent in 2009/10 to 21 percent in 2012/13.

MALARIA

In 2012/13, the total health expenditure on malaria ($THE_{MALARIA}$) was KSh 23 billion (US$269 million), a decrease from the KSh 41 billion (US$541) reported in 2009/10. Malaria health spending as a percentage of GDP also showed a significant drop, from 1.4

percent in 2009/10 to 0.7 percent in 2012/13. $THE_{MALARIA}$ accounted for 10 percent of THE in 2012/13.

The revenues used to finance $THE_{MALARIA}$ in 2012/13 largely came from the private sector (including households) at 48 percent, down from 52 percent in 2009/10. Public sector contributions increased from 31 percent in 2009/10 to 43 percent in 2012/13. Donor contributions to $THE_{MALARIA}$ declined from 17 percent in 2009/10 to 9 percent in 2012/13.

The two dominant health financing schemes for $THE_{MALARIA}$, namely the government and OOP (excluding cost sharing) schemes, mobilised 41 percent and 37 percent of funds spent on $THE_{MALARIA}$, respectively, in 2012/13, compared with 42 percent and 37 percent in 2009/10. In 2012/13, 14 percent of $THE_{MALARIA}$ was channelled through voluntary healthcare payment schemes, up from 11 percent in 2009/10.

Private financing agents managed about 50 percent of the $THE_{MALARIA}$ in 2012/13 and 47 percent in 2009/10. Public financing agents managed the same proportion (42%) of $THE_{MALARIA}$ in 2012/13 and 2009/10.

Public health facilities utilised 44 percent of $THE_{MALARIA}$ in 2012/13, down from 58 percent in 2009/10. This was followed by private health facilities at 29 percent in 2012/13, up from 25 percent in 2009/10.

In 2012/13, most $THE_{MALARIA}$ funds were used to purchase outpatient and inpatient curative care. Outpatient curative care accounted for almost 43 percent of $THE_{MALARIA}$ in 2012/13 and 2009/10. The proportion of $THE_{MALARIA}$ spent on inpatient curative care declined from 31 percent in 2009/10 to 24 percent in 2012/13.

NONCOMMUNICABLE DISEASES

Total health expenditure for noncommunicable diseases (THE_{NCD}) was KSh 14.6 billion (US$170 million) in 2012/13. The THE_{NCD} accounted for 6.2 percent of THE, equal to 0.4 percent of the GDP.

Most funding for THE_{NCD} in 2012/13 came from the public sector (63%), followed by private sources, including households (28%). Government schemes mobilised 59 percent of THE_{NCD} in 2012/13. Voluntary health insurance and households OOP (excluding cost sharing) schemes mobilised 19 percent and 12 percent of THE_{NCD}, respectively, in 2012/13.

Public sector financing managed the largest amount of THE_{NCD}—61 percent in 2012/13, followed by private sector financing at 30 percent. Public health facilities, providers of healthcare system administration and financing, and private health facilities utilised 42 percent, 22 percent, and 25 percent of THE_{NCD}, respectively, in 2012/13.

Of the 2012/13 THE_{NCD}, 32 percent was spent on outpatient curative care, whereas inpatient curative care accounted for 30 percent.

NUTRITIONAL DEFICIENCIES

The total health expenditure on nutritional deficiencies ($THE_{NUTRITIONAL}$) was KSh 896 million (US$10.5 million) in 2012/13, accounting for 0.4 percent of overall THE and 0.09 percent of the GDP.

The main sources of financing for $THE_{NUTRITIONAL}$ in 2012/13 were from the rest of the world (donors; 52%), followed by the public sector (48%). In 2012/13, the revenues of $THE_{NUTRITIONAL}$ were channelled through NPISH financing schemes at 52 percent, followed by the central government schemes at 48 percent.

The NPISH managed 52 percent of $THE_{NUTRITIONAL}$ revenues in 2012/13, whereas the remaining 48 percent were managed by the public sector. In 2012/13, providers of preventive care utilised 74 percent of the funds of $THE_{NUTRITIONAL}$.

In 2012/13, 78 percent of $THE_{NUTRITIONAL}$ were spent on preventive care and 22 percent on governance, and health system and financing administration.

VACCINE-PREVENTABLE DISEASES

The total health expenditure on vaccine-preventable diseases (THE_{VPD}) was KSh 14.6 billion (US$171.7 million) in 2012/13. This accounted for 6.3 percent of overall THE and 0.43 percent of GDP.

The public sector contributed 39 percent of THE_{VPD} in 2012/13, followed by the rest of the world and private sources (including households) at 38 percent and 23 percent, respectively. About two-thirds of THE_{VPD} was channelled through the central government schemes in 2012/13, compared with 16 percent and 8 percent mobilised through the voluntary healthcare payment schemes and NPISH financing schemes, respectively.

The public sector controlled the largest share of THE_{VPD} at 73 percent, followed by private sector players, who managed 19 percent in 2012/13. In 2012/13, providers of healthcare system administration and financing utilised 48 percent of THE_{VPD}, whereas 22 percent was spent at public health facilities.

Governance, and health system and financing administration consumed the largest share of THE_{VPD} in 2012/13 at 48 percent. This was followed by outpatient curative care at 26 percent.

DIARRHOEAL DISEASE

The total health expenditure on diarrhoeal disease ($THE_{DIARRHOEAL}$) was KSh 5.6 billion (US$65.8 million) in 2012/13. This represented 2.4 percent of overall THE and 0.2 percent of GDP in 2012/13.

Most funding for diarrhoeal disease in 2012/13 came from private sources (including households) at 58 percent, followed by public sources at 34 percent. The majority of funding for $THE_{DIARRHOEAL}$ in 2012/13 was channelled through OOP (excluding cost sharing) and government schemes at 43 percent and 32 percent, respectively.

Private sector financing agents controlled the majority of $THE_{DIARRHOEAL}$ in 2012/13 at 60 percent, followed by public sector financing agents at 33 percent. In 2012/13, public health facilities utilised 45 percent of $THE_{DIARRHOEAL}$, compared with 33 percent utilised at private health facilities.

Of the total $THE_{DIARRHOEAL}$ in 2012/13, 49 percent was spent on outpatient curative care, whereas inpatient curative care expenditures accounted for 23 percent.

RESPIRATORY INFECTIONS

Total health expenditure on respiratory infections (THE_{RESP}) was KSh 15.18 billion (US$177 million). THE_{RESP} was 6.5 percent of THE and 0.45 percent of GDP in 2012/13.

Revenues of financing schemes for respiratory infections in 2012/2013 were mainly from the private sector (49 percent), followed by the public sector (41%). During 2012/13, government schemes mobilised 44 percent of all THE_{RESP}, followed by households' OOP payments at 31 percent.

Private sector actors managed almost half of all resources for THE_{RESP} in 2012/13 at 47 percent, followed by public sector agents at 45 percent. In 2012/13, public health facilities utilised a large proportion of THE_{RESP} at 44 percent. Private health facilities utilised 29 percent, and governance, and health system finance and administration utilised 17 percent of THE_{RESP}.

The majority of the resources for THE_{RESP} in 2012/13 were spent on outpatient curative care at 45 percent. Inpatient curative care utilised 23 percent of THE_{RESP} during the same period.

1. INTRODUCTION AND BACKGROUND

National Health Accounts (NHA) is a process of monitoring the flow of resources in a country's health sector. The NHA describes the sources, uses, and channels for all funds used in the production and consumption of healthcare goods and service. Expenditures towards the production of healthcare are explored, along with the main funders in a health system. These are primarily the public sector (government), development partners, and the private sector (employers and households). By providing a matrix on the sources and uses of funds for health, the NHA facilitates the tracing of how resources are mobilised and managed, who pays, and how much is paid for healthcare. The NHA also tracks who provides goods and services, and how resources are distributed across the services, intermediaries, and activities that the health system produces.

The NHA is an important input in the planning processes of a country. It provides policymakers with information, such as the overall resource envelope in the sector (both public and private) and the resource overlay among the various actors in health system financing. These data can be used to inform policy processes in a country (e.g., reallocation of resources) and form the basis for policy dialogue in health financing. NHA also provides a framework to improve transparency (e.g., to give a clear comparison in resource allocation between capital and current expenditures) and improve a country's level of donor dependency. NHA can also be used for triangulation (i.e., confirming or supporting data from other sources in the country).

NHA also enables a country to track the outcomes of health sector reforms and general changes in health financing, enabling better and more informed planning and policies. On a global scale, NHA can be used to compare expenditure trends across different countries at the same economic level and to benchmark preferred standards.

HISTORY OF NHA IN KENYA

The health sector goals in Kenya are to ensure equity, efficiency, and effectiveness in service delivery. Resource allocation and tracking of expenditures across different actors is a key component of health policy formulation, planning, and implementation. Kenya has adopted the NHA to track resources in the health sector and has undertaken NHAs every three to five years since the mid-1990s. Specifically, the Ministry of Health (MOH) released NHA estimates for fiscal years 1994/95, 2001/02, 2005/06, and 2009/10. These were conducted using the System of Health Accounts (SHA) 1.0 methodology and coding.

SHA is an internationally standardised framework that systematically tracks the flow of expenditures in the health system and is critical for improving governance and accountability at the national and international levels.

Shift from SHA 1.0 to SHA 2011

Health financing systems around the globe have undergone considerable change since the production of SHA 1.0 in 2000. Better mobilisation and allocation of the resources necessary to meet current and future health needs of the population have led countries to introduce new mechanisms for raising, pooling, and purchasing functions, as well as more innovative institutional arrangements. The costs of healthcare have also become

an increasingly pressing subject of interest to policymakers, analysts, and the general public. There is an increased expectation of more sophisticated information that can be gained through the greater volume of health expenditure data now available.

With this increased interest, the Organisation for Economic Co-operation and Development (OECD), the European Union, and the World Health Organization (WHO) produced an updated version of SHA in 2011, referred to as SHA 2011. This version addresses the following issues in more detail:

- Updates the healthcare financing interface to allow for a systematic assessment of how finances are mobilised, managed, and used. This includes the financing arrangements (financing schemes), the institutional units (financing agents), and the revenue-raising mechanisms (revenues of financing schemes).
- Delves into the cost structures of healthcare provision (factors of provision) and provides a separate treatment of capital formation to avoid some of the past ambiguity regarding the links between current health spending and capital expenditure in healthcare systems. It improves the study and further analysis of the functional dimension.
- Improves the breakdown of healthcare expenditure according to beneficiary characteristics, such as disease, age, and gender.

SHA 2011 rectifies some of the shortcomings apparent in SHA 1.0 and provides an opportunity to account for some of the new developments in healthcare systems. Some of the key improvements in SHA 2011 include the following:

- Provides greater distinction between current health spending versus capital formation
- Improves consistency in financing classifications by separating various roles and flows (e.g., revenue, scheme, agent)
- Updates provider classifications for improved clarity
- Updates functional classifications for more complete and consistent coverage
- Tracks provision of service inputs (factors of provision)
- Reports characteristics of beneficiaries of health services

Kenya adopted SHA 2011 for the development of the NHA 2012/13. The MOH also revised the NHA results for 2009/10 to make them conform to the SHA 2011 accounting framework and ensure comparability of health spending measurements across time.

POLICY OBJECTIVES OF NHA

The NHA is designed to assist policymakers in implementing the nation's health system goals. It provides an accurate and comprehensive analysis of health spending from all sources (public, private, and development partners), while tracing resources spent from their source to their ultimate use in the health sector.

The main goal of Kenya's NHA 2012/13 was to estimate the amount and characteristics of health spending and total health expenditure (THE) in 2012/13. The study had six specific objectives:

- Estimate THE

- Document the distribution of THE by financing sources and financing agents
- Determine the contribution of each stakeholder in financing healthcare
- Articulate the distribution of healthcare expenditures by use
- Develop a better understanding of the financial flows by disease areas
- Analyse efficiency, equity, and sustainability issues associated with current healthcare financing and expenditure patterns

SOCIAL, ECONOMIC, AND POLITICAL BACKGROUND

Kenya's real gross domestic product (GDP) is estimated to have grown by 4.6 percent in 2012, compared with 4.4 percent in 2011. All sectors of the economy recorded positive growth and, on the macroeconomic level, a surge in inflation recorded in 2011 was corrected through tightening monetary policy in 2012. The economy is expected to grow by around 7 percent in the medium term. This growth will be driven partly by declining oil prices and heavy investment in infrastructure (roads and energy sectors). In 2014, Kenya rebased its GDP, joining the league of middle-income countries. As a result, there will be pressure for the country to finance health and other social sectors from domestic resources.

The 2010 Kenya Constitution devolved the responsibility of delivering health services to the counties, while the national MOH provides policy support and technical guidance to priority national programmes. These changes in roles and responsibilities are expected to enhance equity in resource allocation, thereby improving service delivery for the majority of Kenyans, particularly those residing in rural areas.

In 2012, Kenya had 8,496 health facilities, including 3,929 dispensaries and 935 health centres. As to ownership, 49 percent of all of the health facilities are in the public sector; 33 percent are private, for-profit; and 16 percent are private, not-for-profit. In 2012/13, the doctor-to-population ratio was less than one (<1) to 10,000 population. In the same period, the nurse-to-population ratio was three per 10,000, and the registered clinical officer-to-population ratio was one to 10,000 population.

HIV/AIDS and perinatal conditions remain the leading causes of death and disability in Kenya. The country is also facing the emergence of noncommunicable diseases (NCD), which have put a big strain on the healthcare system.

DEMOGRAPHIC TRENDS

In 2009, the *Kenya Population and Housing Census* estimated the nation's population to be 38,610,097. Given an annual growth rate of 2.92 percent, the Kenya National Bureau of Statistics (KNBS) estimated that the population in 2012, 2013, and 2014 would be 41,193,836, 43,726,652, and 45,261,550, respectively. Between 1992 and 2004, life expectancy dropped from 56.8 years to 51 years but rose to 58.9 years in 2010. In 2013, life expectancy was 60 years and is projected to rise to 62 years in 2016 and 65 years in 2018. The male-to-female population ratio is 1:1.04. The economically productive population is estimated to be 51.5 percent of the total population.

ORGANISATION OF THE REPORT

This report is organised into 13 chapters, followed by a series of annexes. Chapter 2 describes the approach used in the 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. Chapter 2 also discusses computation of the national expenditure figures based on the samples. Limitations of the survey are also noted in this chapter.

Chapter 3 presents the general NHA findings. It identifies financing schemes, financing agents, and functions. It also provides an overview of health spending share by major health sector priority area.

Chapters 4 to 13 present the health expenditure findings for major disease conditions.

Chapter 14 lists the references.

Finally, detailed output tables are annexed to the report to serve as additional references and for international comparison with other similar countries.

2. METHODOLOGY

The NHA estimation for 2012/13 was carried out in accordance with the SHA 2011 guidelines, which provide guidance and methodological support in compiling health accounts. The SHA 2011 constitutes a system of comprehensive, internally consistent, and internationally comparable accounts, which as far as possible should be compatible with other aggregate economic and social statistics.

The SHA 2011 provides a standard for classifying health expenditures according to consumption, provision, and financing. Further, it provides the basis for collecting, cataloguing, and estimating all monetary flows related to healthcare expenditure. More specifically, the SHA 2011 can be used for the following:

- Provide a framework of the main aggregates relevant to international comparisons of health expenditure and health systems analysis
- Define internationally harmonised boundaries of healthcare for tracking expenditure on consumption
- Supply a tool, expandable by individual countries, which can produce useful data in the monitoring and analysis of the health system

Using the SHA 2011 methodology, this study collected a wide range of data and information from various secondary sources, including government reports. The following section describes the institutions from which data were collected and how the data were used to inform the NHA.

2.1 HOUSEHOLD HEALTH EXPENDITURE ESTIMATION

The household expenditures on health were obtained from the *2013 Kenya Health Household Utilisation and Expenditure Survey* (*2013 KHHUES*) conducted by the KNBS and the MOH, Division of Policy and Planning (MOH, 2014a). The *2013 KHHUES* provided information on the health-seeking behaviour of households, out-of-pocket (OOP) spending by households, and health insurance coverage in Kenya as part of the NHA assessment.

The *2013 KHHUES* also sought to identify variations in health services use, OOP expenditure, and health insurance coverage across the country. Household OOP expenditure includes direct expenditure on outpatient care, both for curative and preventive purposes, and routine health expenditure. In addition, households may incur indirect expenditures on activities related to healthcare seeking, such as transportation, which are not included in the estimation of the OOP health spending by household.

2.2 GOVERNMENT SURVEYS

2.2.1. Ministries of Health

The main sources of the ministries of health expenditure data were appropriation accounts for 2012/13.

2.2.2 Local Governments

Prior to the 2010 Kenya Constitution, local governments managed health facilities, and data were collected from the five local municipalities (i.e., Nairobi, Mombasa, Nakuru, Kisumu, and Eldoret).

2.3 INSTITUTIONAL SURVEYS

Data were collected through surveys of the following institutions to complete the NHA process:

- Enterprise (employers/private firms)
- Public sector organisations providing health services/incurring expenditures on employees' health, including the Ministry of Medical Services and Ministry of Public Health and Sanitation, local authorities, and parastatals
- Development partners (both bilateral and multilateral)
- Insurance (public, via the National Health Insurance Fund, and private)
- Nongovernmental organisations (NGOs) involved in health

2.3.1 Enterprises

Private Employer Survey

Data collected from private employers included the actual healthcare expenditure for workers and the total number of employees and their dependents covered by private health insurance. A sample of 120 private employers, cutting across different economic sectors (e.g., agriculture, manufacturing, transport, logistics, hospitality, industry, education, telecommunication, and financial institutions), was covered. The firms ranged from small employers, with fewer than 50 employees, to big agencies with staff in the thousands. This also included all of the firms listed under the Nairobi Stock Exchange. A total of 108 agencies responded to the survey; these data were extrapolated using the master employer list maintained by the KNBS.

2.3.2 State Corporations (Parastatals)

State corporations, or parastatals, also incur health expenditures. Some operate their own healthcare facilities, primarily offering outpatient care to employees and their families.

Out of the 261 state corporations operating in 2014, a representative sample of 105 was selected, taking into account the various functions under which state corporations fall and the number of employees. Data were extrapolated from the 103 parastatals that participated in the study to obtain the total expenditures.

2.3.3 Health Insurance Firms

The study also covered the 21 insurance firms and 11 medical insurance providers operating in Kenya in 2014. Information was collected on the number of subscribers, total health insurance premiums received, funds received for health-related insurance, and funds disbursement to benefiting entities. In addition, data were collected on the nature of health services rendered (e.g., inpatient, outpatient, pharmaceuticals).

2.3.4 Donor Contribution Survey

The development contribution survey captured the total amount of development assistance for health in 2012/2013. This is usually financed through the central government (on-budget development partner support) or directly managed by the development partners or their agencies (off-budget development partner support). These data were collected through the partners' forum, the Development Partners for Health in Kenya, and from the National Treasury for on-budget support. The donor data were used to validate expenditure information obtained from NGOs.

2.3.5 Nongovernmental Organisations Survey

Nongovernmental organisations receive support from development partners (both international and local). From the list of all NGOs (maintained by the NGO Council and the Health NGOs Network (HENNET), a local NGO network), another list was drawn of those organisations that work in the health sector. A total of 100 NGOs were sampled; 78 responded to the survey. Call backs were made to ensure that the major NGOs responded. The expenditure reported was weighted and triangulated with the donor reports.

2.4 Preparing for SHA 2011 Implementation

In August 2013, the WHO and the Health Policy Project (HPP), which is supported by the United States Agency for International Development (USAID), jointly organised a two-week workshop for the Kenya NHA team. The first week focused on training the team on SHA 2011. During the second week, the NHA Production Tool (NHAPT) was introduced. The team was composed of health economists from the Department of Planning and Policy at the MOH, and technical officers from ministry departments handling health programmes. The SHA 2011 training component of the workshop used the training modules designed by WHO.

2.5 Data Collection, Validation, and Analysis

The development of study instruments, data entry, validation, and analysis was done through the NHAPT, a tool developed by the USAID-funded Health Systems 20/20 Project, with input from WHO and the World Bank (WB). The NHAPT was developed to streamline and simplify the estimation process, thereby ensuring a standard production of NHA to monitor and improve health system performance. This tool helps to guide NHA teams in data mapping and analysis, thereby reducing the NHA production time.

Survey Questionnaires

The first step was to customise the study in the NHAPT to fit the Kenya context. This was done for the three dimensions guided by SHA 2011. Once this step was completed, the production tool generated four questionnaires, which were imported into Excel and readied for data collection. The four questionnaires covered insurance organisations, enterprises, development partners, and NGOs. Government and household data sets were collected and organised in Excel forms, and entered into the NHAPT.

2.6 DATA COLLECTION

The study kicked off with the training of a group of research assistants on the basics of NHA and data collection techniques. The group was then divided according to the NHA thematic areas: private employers, insurance firms, state corporations, NGOs, ministries, and local governments.

Data collection began on August 4, 2014 and ended on October 17, 2014. The following were the terms of reference for the research assistants:

- Locating and visiting sampled state corporations
- Identifying appropriate respondents and making necessary appointments
- Administering the research instrument and making necessary call backs/follow-ups
- Filing periodic progress reports
- Editing and handing in completed survey instruments

During the first week of the exercise, the team was required to identify the physical location of the firms, establish contacts, and, when possible, engage with the appropriate respondents. Thereafter, the researcher would visit the firm to administer the questionnaire.

2.7 DATA ENTRY AND ANALYSIS

Data entry and validation were conducted in preparation for analysis. Data entry staff were trained for three days and then conducted the exercise using provided screens. The data entry process took 10 days (October 27 to November 7, 2014).

The data captured in the NHAPT were cleaned and validated for quality and completion checks. The data sets were then presented to the NHA Technical Working Group at a workshop held to check for completeness and production of NHA tables.

2.7.1 Estimation of Non-targeted Health Expenditure for Each Disease

Most institutions were able to disaggregate actual expenditure data by disease. However, there were cases in which funds were given to providers, but reporting institutions could not indicate how much was spent, either by disease on outpatient or inpatient curative care. To fill in gaps in needed data, the team used utilisation data from the health management information system provided at the MOH, the costing studies (OneHealth and Dynamic costing model), and the KHHUES to calculate the "split" ratios used to estimate the non-targeted expenditures.

This was a two-step process. First, the workload for inpatient (IP) was multiplied by average cost for an inpatient episode and added to the outpatient (OP) workload multiplied by average cost of outpatient visit to equal the total facility cost. Using these costing numbers, the relative key for IP and OP was calculated for each level of provider, including faith-based organisations and public and private facilities. The second step entailed using the same approach to calculate the key for disease by facility level and ownership.

2.8 STUDY LIMITATIONS

The NHA has some level of limitation in health system expenditure tracking and analysis. For instance, it is generally not possible to measure the level of efficiency or effectiveness of a health system because the framework is limited to tracking what entities pay for healthcare, not the production costs. The NHA therefore cannot be used as a tool for validation of existing policies, but rather as a tool for raising issues related to the way the health system is organised. Due to the limitations of the NHAPT, the estimation on expenditures by factors of provision was not done.

3. GENERAL NHA 2012/13 FINDINGS

3.1 INTRODUCTION

The NHA estimation for 2012/13 was carried out in line with SHA 2011 guidelines. SHA 2011 is intended to produce health expenditure statistics which are internally consistent and internationally comparable accounts. This section will provide health expenditure analysis for 2009/10 and 2012/13.

3.2 FINANCING DIMENSIONS

The accounting framework articulated by SHA 2011 includes three dimensions of health financing:

- Revenues of financing schemes
- Health financing schemes
- Financing agents

In addition, the SHA 2011 intends to address the following policy questions:

- How does a particular financing scheme collect its revenues?
- From which institutional units of the economy are the revenues of each financing scheme mobilised?
- What is the role of the main financing schemes in a country's health financing system?
- How is healthcare financing managed in a country? What kind of institutional arrangements govern the funds of financing schemes? What changes have occurred in the institutional arrangement of healthcare financing in a given period?

This section provides an overall assessment of the health financing system of the country, based on the three dimensions prescribed by SHA 2011 framework. Table 3-1 provides a summary of health-related indicators for 2001/02, 2005/06, 2009/10, and 2012/13.

Table 3-1: Selected Health Expenditure Indicators

Indicators	2001/02	2005/06	2009/10	2012/13
Total population (2009 population census)	31,190,843	35,638,694	38,610,097	41,193,418
Foreign exchange rate, KNBS (KSh to US$1)	78.6	73.4	75.82	85.3
Total GDP at current prices (KSh)	2,142,988,630,539	2,910,359,040,400	3,023,090,000,000	3,440,115,000,000
Total government expenditure (KSh)	405,154,733,785	769,094,699,162	1,013,194,000,000	1,282,088,300,000
Total government expenditure (US$)	5,154,640,379	10,478,129,416	13,363,149,565	15,030,343,494
THE (KSh)	109,368,582,296	135,630,235,546	163,395,234,538	233,959,873,923

Indicators	2001/02	2005/06	2009/10	2012/13
Current health expenditure (CHE) (KSh)	n/a	n/a	157,497,127,096	217,119,014,045
Capital formation (HK) (KSh)	n/a	n/a	5,898,107,442	16,840,859,878
THE (US$)	1,391,457,790	1,847,823,373	2,155,041,342	2,742,788,674
THE per capita (KSh)	3,506.4	3,805.7	4,231.9	5,679.5
THE per capita (US$)	44.6	51.8	55.8	66.6
THE as a % of nominal GDP	5.1%	4.7%	5.4%	6.8%
Government health expenditure as a % of total government expenditure	8.0%	5.2%	4.6%	6.1%
Financing sources as a % of THE				
Public	29.6%	29.3%	28.8%	33.5%
Private	54.0%	39.3%	36.7%	39.8%
Rest of the world (donors)	16.4%	31.0%	34.5%	25.6%
Other	0.1%	0.4%	0.0%	1.1%
Financing scheme as a % of THE				
Government schemes and compulsory contributory healthcare financing schemes	n/a	n/a	32.0%	40.6%
OOP (excluding cost sharing) schemes	n/a	n/a	25.1%	26.6%
NPISH schemes	n/a	n/a	30.4%	20.9%
Voluntary healthcare payment schemes	n/a	n/a	12.5%	12.0%
Financing agent distribution as a % of THE				
Public	42.8%	42.7%	36.6%	42.0%
Private	49.8%	36.5%	33.9%	37.6%
NPISH	7.4%	20.8%	29.5%	20.5%
Provider distribution as a % of THE				
Public facilities	49.4%	44.3%	46.7%	39.1%
Private facilities	35.7%	29.2%	22.2%	22.3%
Providers of preventive care	n/a	n/a	13.8%	16.3%
Providers of healthcare system administration and financing	n/a	n/a	8.4%	19.0%
Rest of economy	n/a	n/a	n/a	2.2%
Others	14.9%	26.5%	8.9%	1.1%
Function distribution as a % of THE				
Curative inpatient care	32.1%	29.8%	21.9%	19.3%
Curative outpatient care	45.1%	39.6%	39.1%	39.9%
Medical goods (nonspecified by function)	7.4%	2.6%	2.8%	2.8%
Preventive care	9.1%	11.8%	22.8%	16.4%
Governance, and health system and financing administration	5.0%	14.5%	9.0%	19.0%
Fixed capital formation*	n/a	n/a	3.6%	2.2%
Others	1.3%	1.7%	0.8%	0.4%

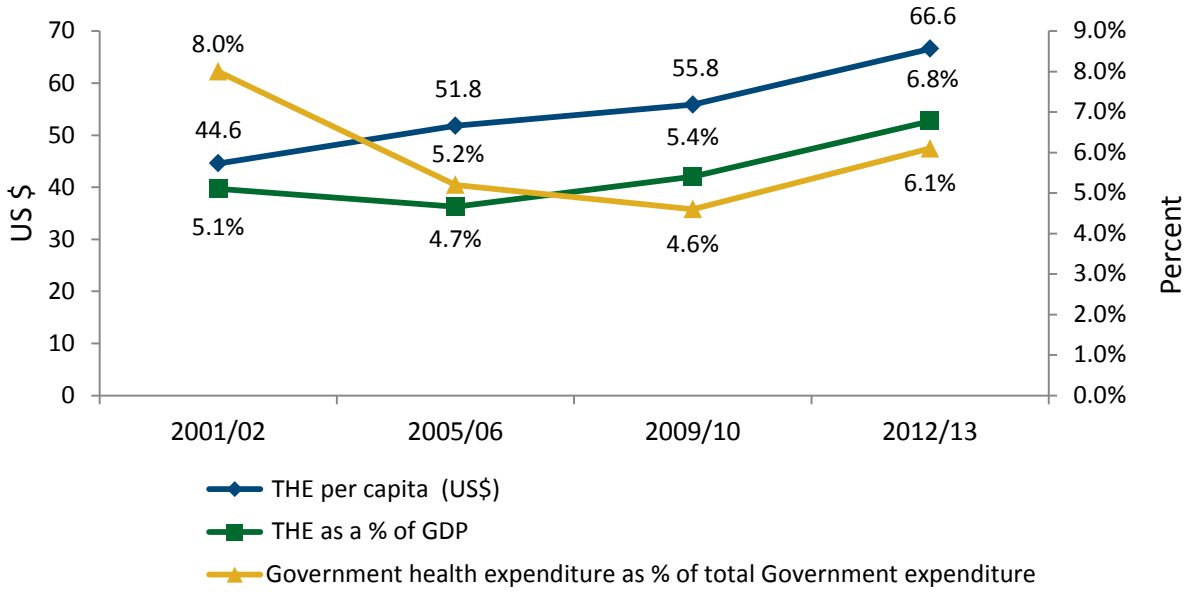
*Capital formation which could not be allocated to any functions due to data limitations.

3.2.1 Total Health Expenditure, Current Health Expenditure, and Capital Formation

THE in Kenya was KSh 234 billion (US$2,743 million) in 2012/13, up from KSh 163 billion (US$2,155 million) in 2009/10. In 2012/13, the total spending on health accounted for 6.8 percent of GDP, up from 5.4 percent in 2009/10.[2] The government expenditure on health as a percentage of total government expenditure increased from 4.6 percent in 2009/10 to 6.1 percent in 2012/13.

Of the total health expenditure in 2012/13, current health expenditure (CHE) accounted for 93 percent of THE, compared with 96 percent in 2009/10. Capital expenditures increased from 4 percent of THE in 2009/10 to 7 percent in 2012/13. THE per capita increased from KSh 4,232 (US$56) in 2009/10 to KSh 5,680 (US$67) in 2012/13. THE per capita and the proportion of GDP spent on health has steadily increased since 2001/2002 estimates (see Figure 3-1).

Figure 3-1: Selected Health Expenditure Statistics



3.2.2 Institutional Units Providing Revenues for Financing Schemes

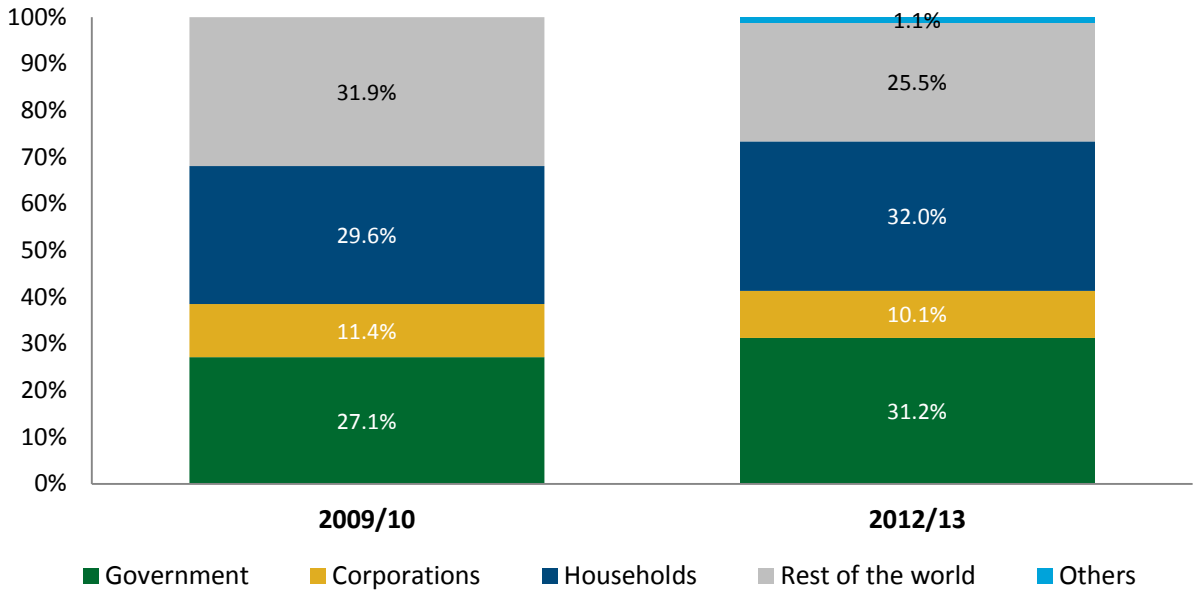
Institutional units are the entities providing funds for the various schemes. They are the sources of funds used to finance a country's healthcare system.

Revenues to finance healthcare in Kenya come from three major sources: the government, households, and donors (i.e., the rest of the world). As shown in Table 3.1, the private sector is the major financier of healthcare in Kenya, contributing 40 percent of THE in 2012/13, up from 37 percent in 2009/10. The public contribution to THE was 34 percent in 2012/13, an increase of 17 percent over the 2009/10 estimates. Donors contributed approximately 26 percent of THE in 2012/13, down from nearly 35 percent in 2009/10.

[2] All references to Kenya shilling (KSh) or US dollar (US$) amounts were converted using the fiscal year 2012/13 exchange rate (US$1 = KSh 85.3). Previous NHA estimates have been adjusted for inflation to 2012/13 equivalents to facilitate comparison with previous NHA estimates.

Thirty-two percent of funds to finance CHE revenues for financing schemes came from households in 2012/13, up from 30 percent in 2009/10. Donors (i.e., the rest of the world) contributed 26 percent in 2012/13, compared with 32 percent in 2009/10. Figure 3-2 shows the distribution of CHE by institutional units.

Figure 3-2: Distribution of CHE, by Institutions Providing Revenues for Financing Schemes



The overall sum of CHE in absolute values increased by 38 percent between 2009/10 and 2012/13. In 2012/13, funds mobilised through government, households (including OOP payments plus household premiums to insurance), and corporations (including parastatals and private firms) increased by 53 percent, 44 percent, and 17 percent, respectively, over the 2009/10 estimates. Table 3-2 provides the breakdown of absolute values of CHE by institutional units providing revenues for financing schemes.

Table 3-2: Absolute Values of CHE, by Institutional Units Providing Revenues for Financing Schemes

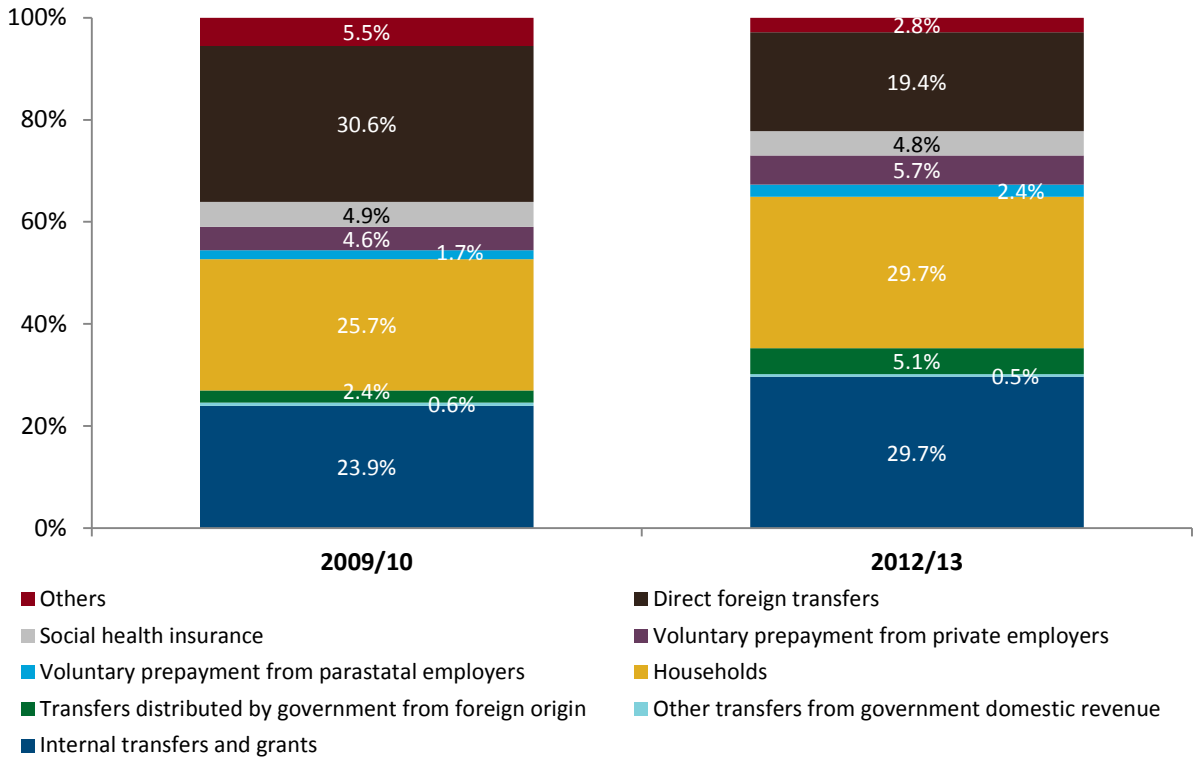
Institutional Units Providing Revenues for Financing Schemes	2009/10	2012/13	Percentage Change
Government	44,316,876,616	67,840,888,078	53%
Corporations	18,638,057,436	21,885,699,773	17%
Households	48,253,692,996	69,410,277,837	44%
Rest of the world	52,076,083,793	55,365,348,581	6%
Others		2,433,789,522	n/a
Total	**157,497,127,096**	**217,119,014,045**	**38%**

3.2.3 Revenues of financing schemes for Current Health Expenditures

Revenues of financing schemes are the types of revenues received or collected by financing schemes. These help in understanding how much and in what ways revenues were collected.

Internal transfers and grants constituted 30 percent of CHE revenues for financing schemes in 2012/13, up from 24 percent in 2009/10. Revenues for CHE from direct foreign transfers declined from 31 percent in 2009/10 to 19 percent in 2012/13. Households' contributions increased to 30 percent in 2012/13, up from 26 percent in 2009/10. Contributions to CHE by prepayments through health insurance entities (compulsory and voluntary) increased from 11 percent in 2009/10 to 13 percent in 2012/13. Figure 3-3 shows the distribution of CHE by revenues of financing schemes.

Figure 3-3: Distribution of CHE, by Revenues of Financing Schemes



In absolute values, internal transfers and grants increased by 71 percent, and voluntary prepayments increased by 80 percent in 2012/13 over the 2009/10 estimates. Revenues mobilised through social health insurance—the National Health Insurance Fund (NHIF)—increased by 34 percent between 2009/10 and 2012/13. Table 3-3 shows the distribution of CHE in absolute values by revenues of financing schemes.

Table 3-3: Distribution of CHE in Absolute Values, by Revenues of Financing Schemes

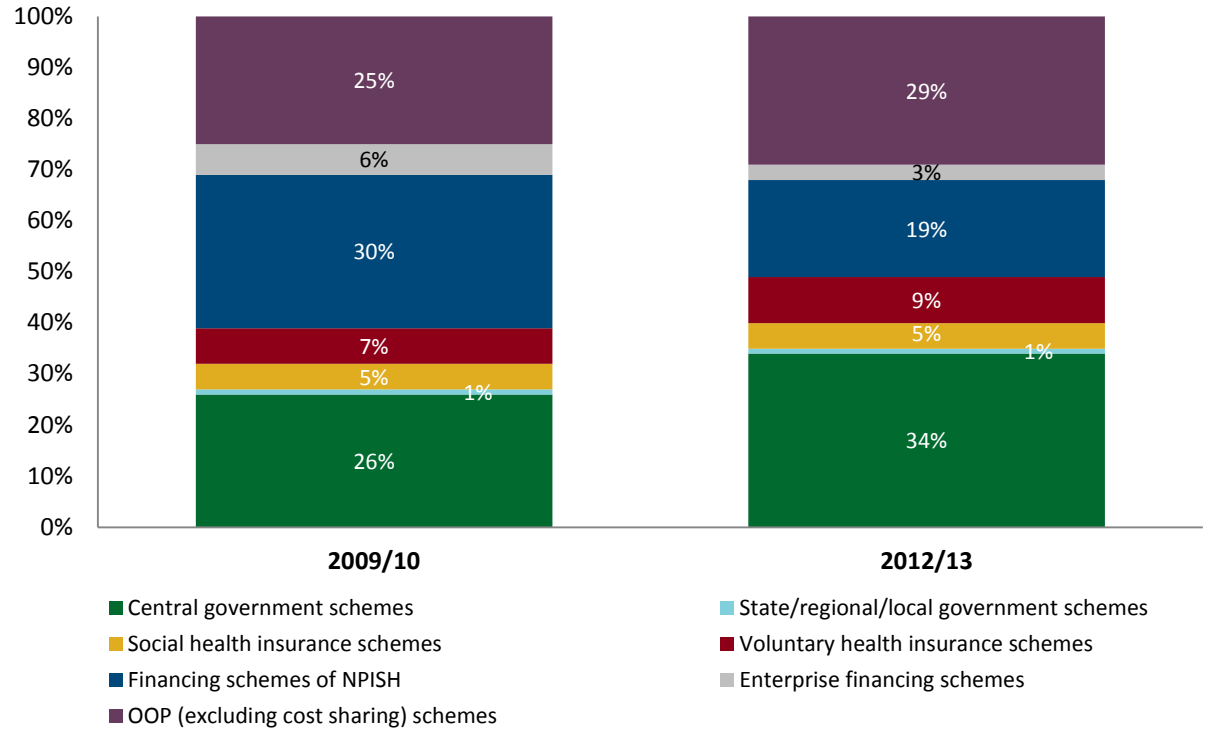
Revenues of Healthcare Financing Schemes	2009/10	2012/13	Percentage Change
Internal transfers and grants	37,701,146,379	64,404,069,684	70.8%
Other transfers from government domestic revenue	987,510,714	1,012,883,746	2.6%
Transfers distributed by government from foreign origin	3,768,362,627	11,040,354,181	193.0%
Social insurance contributions	7,719,105,173	10,332,830,818	33.9%
Voluntary prepayment	11,002,274,005	19,835,704,477	80.3%
Other domestic revenues not elsewhere classified (n.e.c.)	48,170,371,253	68,349,616,299	41.9%
Direct foreign transfers	48,148,356,945	42,143,554,841	-12.5%
Total	**157,497,127,096**	**217,119,014,045**	**38%**

3.2.4 Healthcare Financing Schemes for Revenues of CHE

Financing schemes are the main types of financing arrangements through which people receive healthcare. These schemes help in defining how health care resources are managed and organised, and to what extent resources are pooled.

In 2012/13, 34 percent of CHE was mobilised through central government schemes, up from 26 percent in 2009/10. Household OOP payment (excluding cost sharing) and nonprofit institutions serving households (NPISH) financing schemes mobilised 29 percent and 19 percent of CHE funds, respectively, in 2012/13. Notably, CHE funds mobilised through NPISH financing schemes declined by 37 percent in 2012/13, compared with 2009/10 estimates. Figure 3-4 shows the trends in CHE by financing schemes.

Figure 3-4: Trends in CHE, by Financing Schemes



Overall, the absolute values for the financing schemes of CHE increased by 38 percent between 2009/10 and 2012/13. In absolute values, the funds to finance CHE that were mobilised through the central government and voluntary health insurance schemes increased by about 81 percent and 80 percent, respectively, between 2009/10 and 2012/13. The absolute value of CHE funds mobilised through enterprise financing schemes declined by 35 percent during the same period. Table 3-4 provides the comparison of absolute values for financing schemes for 2009/10 and 2012/13.

Table 3-4: Absolute Values for CHE, by Financing Scheme

Financing Schemes	2009/10	2012/13	Percentage Change
Central government schemes	41,446,891,524	74,840,429,664	81%
State/regional/local government schemes	1,300,396,004	2,075,581,446	60%
Social health insurance schemes	7,719,105,173	10,332,830,818	34%

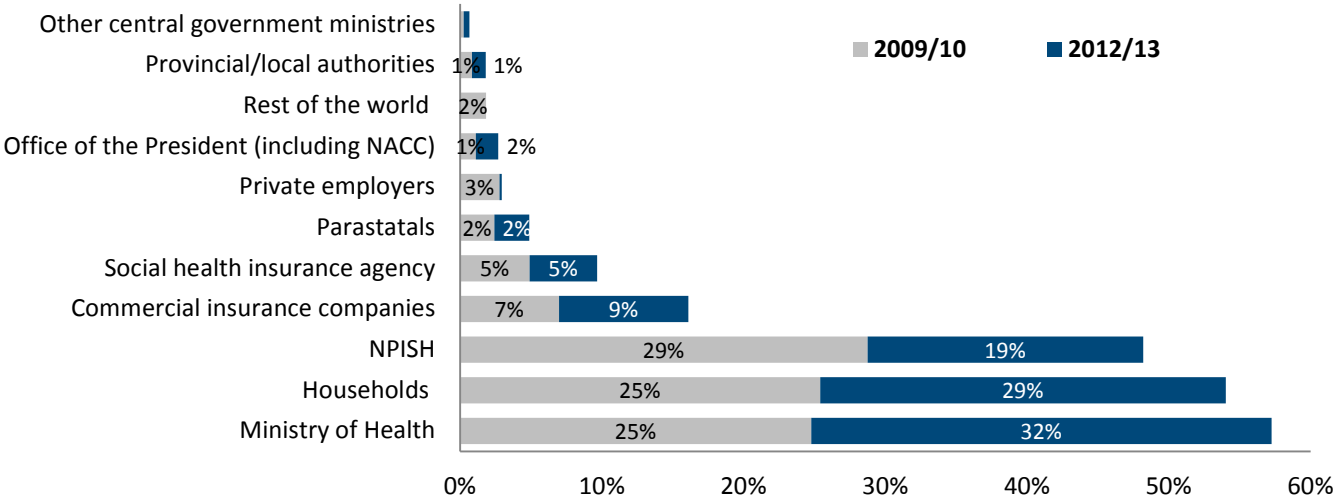
Financing Schemes	2009/10	2012/13	Percentage Change
Voluntary health insurance schemes	11,002,274,005	19,835,704,477	80%
Financing schemes of NPISH	47,858,089,137	42,217,899,709	-12%
Enterprise financing schemes	8,689,133,358	5,675,660,394	-35%
OOP, excluding cost sharing	39,481,237,895	62,140,907,538	57%
Total	**157,497,127,096**	**217,119,014,046**	**38%**

3.2.5 Financing Agents for Current Health Expenditures

Financing agents are institutional units that manage healthcare financing schemes. They assist in responding to questions on who manages the financing arrangements for raising revenue, pooling/managing resources, and purchasing services.

Figure 3-5 shows the 2012/13 CHE trend by financing agent. The MOH controlled the largest proportion at 32 percent, an increase of about 28 percent compared with 2009/10. Households managed 29 percent of the CHE, 80 percent of which was spent through OOP payments. Non-profit institutions serving households, which implement donor programmes not executed by the government (off-budget support), managed 19 percent of CHE in 2012/13, down from 29 percent in 2009/10. The social health insurance agency (i.e., NHIF) managed almost the same amount in the two years of estimates.

Figure 3-5: Financing Agents for CHE



The MOH, plus other government entities, control a large percentage of CHE. The proportion of CHE under MOH, the National AIDS Control Council (NACC), commercial insurance firms, and other government ministries each increased by more than 80 percent between 2009/10 and 2012/13, as illustrated in Table 3-5.

Table 3-5: Financing Agents of CHE, in Absolute Values

Financing Agents	2009/10	2012/13	Percentage Change
MOH	39,031,167,415	70,508,497,837	81%
NACC	1,731,298,349	3,458,656,425	100%

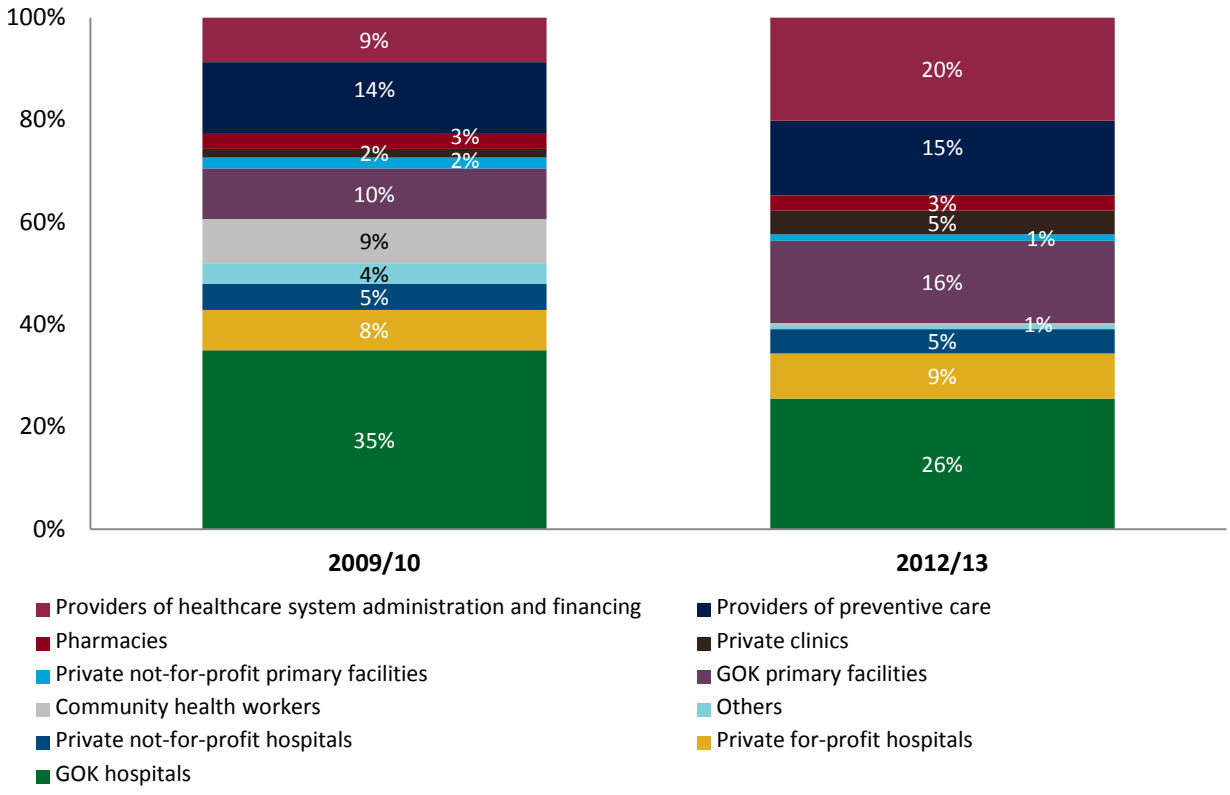
Financing Agents	2009/10	2012/13	Percentage Change
Other central government ministries	394,017,273	873,275,402	122%
Local authorities	1,327,346,657	2,075,581,446	56%
Social health insurance agency (NHIF)	7,719,105,173	10,332,830,818	34%
Commercial insurance companies	10,975,464,031	19,835,704,477	81%
Parastatals	3,815,015,895	5,316,929,626	39%
Private employers	4,356,070,388	358,730,768	-92%
NPISH	45,267,516,344	42,217,899,708	-7%
Households	39,999,284,971	62,140,907,538	55%
Rest of the world	2,880,840,602	-	n/a
Total	**157,497,127,096**	**217,119,014,045**	**38%**

3.2.6 Utilisation of Current Health Expenditures by Provider

Providers are organisations and actors that primarily, or as part of multiple activities in which they are engaged, deliver healthcare. They assist in understanding the organisational structure characteristic of the provision of healthcare within a country and who provides the goods and services consumed.

Government hospitals utilised 26 percent of CHE in 2012/13, down from 35 percent in 2009/10. Providers of healthcare system administration and financing utilised 20 percent of CHE, which was more than double the amount they utilised in 2009/10. Providers of preventive care utilised almost the same amount (15 percent) of CHE in 2009/10 and 2012/13. Figure 3–6 shows the utilisation of CHE by provider for the years 2009/10 and 2012/13.

Figure 3-6: Providers of CHE



In absolute values, providers of healthcare system administration and financing and private clinics utilised more than double the amount of CHE in 2012/13 compared with 2009/10. Government health centres and dispensaries utilised 125 percent more of CHE in 2012/13 than 2009/10 estimates. Utilisation of CHE by community health workers (CHWs) saw a notable decline, with CHWs utilising 95 percent less of CHE in 2012/13 compared with 2009/10. Table 3-6 shows the providers of CHE for 2009/10 and 2012/13.

Table 3-6: Providers of CHE

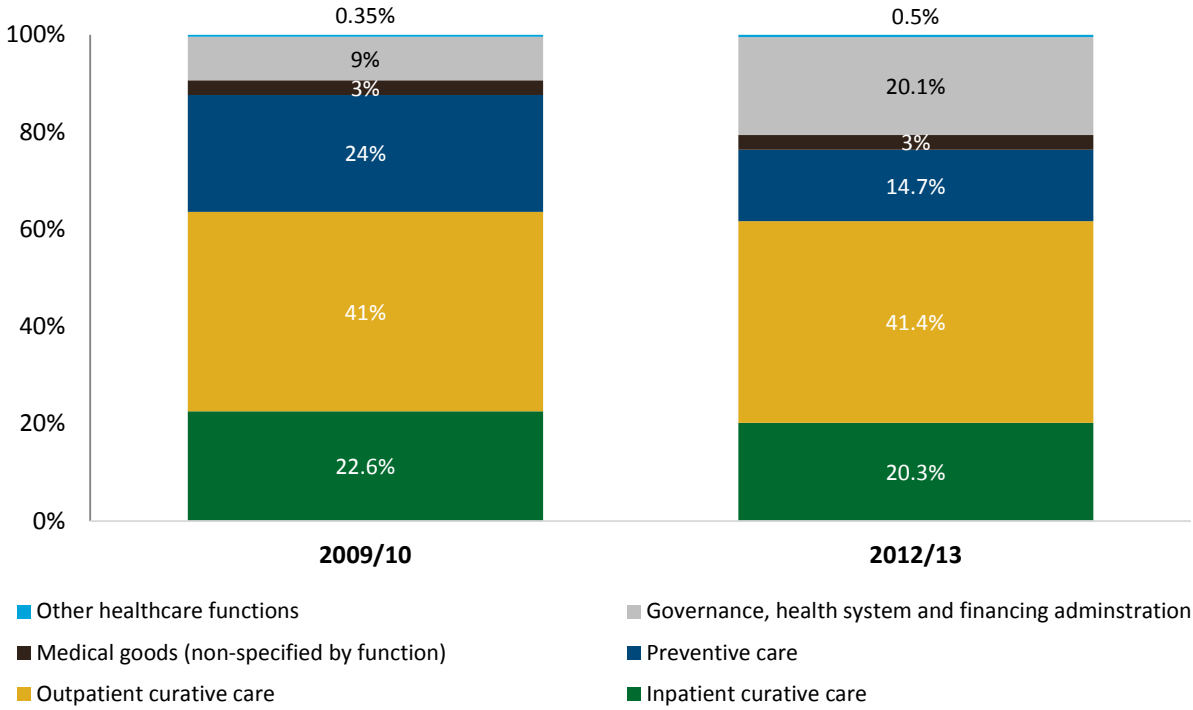
Providers	2009/10	2012/13	Percentage Change
General hospitals – Government	55,214,104,320	55,520,043,635	1%
General hospitals – Private for-profit	12,451,544,373	19,032,902,890	53%
General hospitals – Private not-for-profit	8,008,699,322	10,425,230,120	30%
Others	6,396,616,800	1,771,054,763	-72%
Community health workers	13,715,039,501	737,428,153	-95%
Government health centres and dispensaries	15,525,284,365	34,965,624,838	125%
Private not-for-profit health centres and dispensaries	3,428,224,657	2,709,576,106	-21%
Private clinics	2,630,596,518	9,987,177,778	280%
Pharmacies	4,612,261,213	6,602,314,901	43%
Providers of preventive care	22,143,103,175	31,643,601,957	43%
Providers of healthcare system administration and financing	13,732,427,305	43,724,058,905	218%
Total	**157,857,901,549**	**217,119,014,045**	**38%**

3.2.7 Healthcare Functions for Current Health Expenditures

Healthcare functions are the types of health goods and services consumed and activities performed.

The amount of CHE spent on inpatient care decreased from 23 percent in 2009/10 to 20 percent in 2012/13. The amount of CHE spent on outpatient care remained constant at 41 percent during the two periods. Prevention and public health programmes utilised less CHE; 15 percent in 2012/13, compared with 24 percent in 2009/10. A notable increase was the amount of CHE spent on governance, and health system and financing administration, which more than doubled to 20 percent in 2012/13, compared with 9 percent for the 2009/10 levels. Figure 3–7 shows the distribution of CHE by functions.

Figure 3-7: Distribution of CHE, by Functions



The amount of CHE in absolute values used for inpatient curative care, outpatient curative care, and medical goods increased by 23 percent, 41 percent, and 43 percent, respectively, in 2012/13 over the 2009/10 levels. Absolute values of CHE spent on governance, and health system and financing administration increased by 198 percent between 2009/10 and 2012/13. The increase was partly due to better disaggregated data by reporting entities. Table 3-7 shows distribution of CHE by functions for the years 2009/10 and 2012/13.

Table 3-7: Distribution of CHE, by Functions

Healthcare Function	2009/10	2012/2013	Percentage Change
Inpatient curative care	35,785,430,032	44,013,863,062	23%
Outpatient curative care	63,823,879,350	89,979,052,236	41%
Rehabilitative care	93,460,151	40,902,091	-56%
Medical goods	4,612,261,213	6,602,314,901	43%
Preventive care	37,205,147,418	31,834,248,846	-14%
Governance, and health system and financing administration	14,679,724,972	43,724,058,905	198%
Other healthcare services	1,297,223,961	924,574,003	-29%
Total	**157,497,127,096**	**217,119,014,045**	**38%**

3.3 CAPITAL FORMATION FOR THE

Capital formation is defined as the types of investment that healthcare providers have made during the accounting period that are used for more than one year in the production of health services. Table 3-8 shows sources of revenues to finance capital formation in 2009/10 and 2012/13. In 2012/13, the majority of revenues for capital formation came from government (58%) and the rest of the world (39%).

Table 3-8: Institutional Units Providing Revenues of Financing Schemes for Capital Formation

Institutional Units	2009/10	2012/13	Percentage Change
Government	5,628,219,524	9,686,020,493	72%
Corporations	147,322,962	345,647,319	135%
Households	-	29,868,944	n/a
NPISH	122,564,956	170,004,522	39%
Rest of the world	-	6,503,064,292	n/a
Others	-	106,258,830	n/a
Total	**5,898,107,442**	**16,840,859,878**	**186%**

4. DISEASE CONDITIONS

4.1 INTRODUCTION

Health accounts contribute useful input for the planning of resource allocation. Information on expenditure by disease area can serve several purposes, such as monitoring and providing information about resource allocation by disease/priority area.[3] Linked with health accounts, the information gained can help address the following questions:

- What diseases/conditions are consuming healthcare resources, and by how much?
- Which schemes pay for the services that address these diseases or conditions, and how much do they pay?
- How is spending on certain diseases broken down according to types of care?

The choice of priority diseases for analysis in the NHA 2012/13 was informed by the burden of disease in the country. The top causes of death and disabilities, as classified in the WHO International Classification of Diseases, were selected for this study. As derived from the survey, there were two forms of expenditures for these diseases:

1) Targeted expenditures, where expenditures had already been earmarked
2) Untargeted expenditures, where split keys were developed by using the unit costs for treating a case and utilisation (caseloads)

Data for the splits were obtained from the OneHealth model, the Dynamic Costing Model, the District Health Information System, and the KHHEUS. Figure 4–1 presents data on spending by disease (THE_{DIS}). HIV/AIDS used the largest share of resources for health at 18.7 percent, followed by reproductive health at 12.9 percent. Malaria, respiratory infections, vaccine-preventable diseases, and noncommunicable diseases consumed 9.8 percent, 6.5 percent, 6.3 percent, and 6.2 percent, respectively.

[3] SHA 2011 Manual.

Figure 4-1: Distribution of THE, by Major Diseases/Conditions, 2012/13

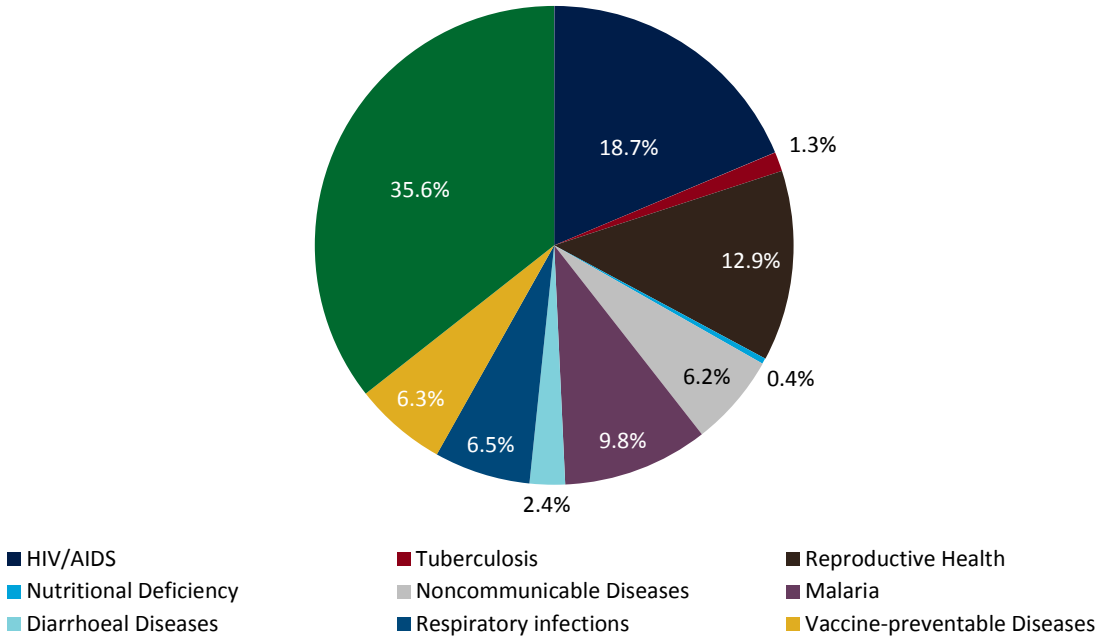


Table 4-1: Summary Statistics for Distribution of THE, by Disease(s)/Condition(s) (%)

INDICATOR DESCRIPTION	2009/10					2012/13										
	HIV/AIDS	Tuberculosis	Reproductive health	Malaria	Other diseases / conditions	HIV/AIDS	Tuberculosis	Reproductive health	Malaria	Noncommunicable diseases	Nutritional deficiencies	Vaccine-preventable diseases	Diarrhoeal diseases	Respiratory infections	Injuries	Other diseases / conditions
Financing sources as a % of Total Disease Health Expenditure (THE_{Dis})																
Public	21.1	28.2	40.5	30.9	28.6	20.2	50.1	39.5	43.0	62.9	48.0	39.1	34.2	40.8	62.0	54.9
Private	28.2	30.1	37.7	51.9	39.5	7.4	26.6	42.3	47.9	27.5	0.0	23.3	57.9	48.6	31.0	39.1
Donors	50.7	41.6	21.8	17.2	31.9	72.4	23.3	18.1	9.1	9.7	52.0	37.7	7.9	10.6	7.0	6.0
Financing scheme as a % of THE_{Dis}																
Government schemes and compulsory contributory financing schemes	27.0	38.6	57.1	42.1	40.2	19.7	48.6	37.9	40.5	59.2	48.0	68.6	32.1	44.0	58.3	52.1
Voluntary healthcare payment schemes	6.5	6.1	12.6	10.5	6.1	3.4	20.1	12.1	13.9	19.0	0.0	15.9	17.6	17.0	20.7	14.3
OOP (excluding cost sharing) schemes	19.2	21.3	19.3	36.8	24.2	4.5	8.0	31.7	36.5	12.1	0.0	7.3	42.5	31.1	14.1	28.4
NPISH financing schemes	47.4	34.0	11.0	10.7	29.5	72.5	23.3	18.2	9.1	9.7	52.0	8.2	7.9	7.9	7.0	5.3
Financing agent distribution as a % of THE_{Dis}																
Public	27.0	38.8	57.1	42.1	34.0	19.9	49	40	42	61	48	73	33	45	60	53.6
Private	25.6	27.4	31.9	47.2	36.4	7.7	28	42	50	30	0	19	60	47	34	41.1
NPISH	47.4	33.8	11.0	10.7	29.6	72.4	23	18	9	9	52	8	7	7	6	5.3
Provider distribution as a % of THE_{Dis}																
Public facilities	37.1	37.0	54.0	57.7	46.2	31.7	22.2	37.2	43.6	42.1	0.2	21.5	45.0	43.9	41.4	42.2
Private facilities	22.7	16.3	24.7	24.9	22.2	6.6	21.9	24.5	29.1	24.9	0.0	14.5	33.3	28.8	27.7	26.0
Providers of preventive care	12.5	36.4	10.7	1.3	13.9	43.4	36.2	14.9	8.2	7.3	73.5	13.2	6.2	6.4	5.8	10.4
Providers of healthcare system administration and financing	6.5	5.6	8.3	5.7	8.4	17.2	18.0	20.9	16.1	21.9	21.6	48.4	12.8	16.8	21.2	17.8
Rest of economy	0.0	0.0	0.0	0.0	0.1	0.5	1.6	1.9	2.5	3.6	0.0	1.8	2.1	2.8	3.7	3.3
Others	21.2	4.7	2.3	10.3	9.2	0.6	0.1	0.7	0.5	0.2	4.7	0.5	0.5	1.3	0.2	0.4
Function distribution as a % of THE_{Dis}																
Inpatient curative care	18.8	17.9	30.8	30.6	22.0	2.7	19.3	20.8	23.6	29.8	0.0	7.6	23.3	22.9	32.3	25.4
Outpatient curative care	33.4	27.1	41.0	43.8	39.2	32.6	21.0	35.2	43.1	32.0	0.2	26.2	49.2	45.3	32.1	37.4

INDICATOR DESCRIPTION	2009/10					2012/13										
	HIV/AIDS	Tuberculosis	Reproductive health	Malaria	Other diseases / conditions	HIV/AIDS	Tuberculosis	Reproductive health	Malaria	Noncommunicable diseases	Nutritional deficiencies	Vaccine-preventable diseases	Diarrhoeal diseases	Respiratory infections	Injuries	Other diseases / conditions
Medical goods (non-specified by function)	0.9	2.3	1.1	4.0	2.8	0.4	0.9	3.6	4.1	1.7	0.0	1.1	4.3	3.4	1.9	3.0
Preventive care	35.8	39.0	10.6	10.2	22.8	40.9	35.7	6.1	7.5	5.3	78.1	8.1	5.6	5.6	4.6	8.4
Governance, and health system and financing administration	8.2	8.1	9.6	6.1	9.0	17.1	17.8	20.6	15.8	21.3	21.6	48.2	12.5	16.3	20.7	17.4
Fixed capital formation	2.2	5.0	5.8	4.2	3.3	4.6	5.2	13.5	5.7	9.8	0.1	8.8	4.8	6.4	8.4	7.6
Others	0.7	0.6	1.2	1.0	0.8	1.6	0.0	0.2	0.2	0.1	0.0	0.0	0.2	0.0	0.1	0.7

5. HIV/AIDS

5.1 INTRODUCTION

HIV prevalence declined from 7.2 percent in 2007 to 5.6 percent in 2012. The prevalence is higher among women ages 15 to 64 years (6.9%), compared with men in the same age group (4.4%) (NASCOP, 2014). The number of people living with HIV (PLWHIV) who are on antiretroviral therapy (ART) rose from 250,000 in 2007 to almost 700,000 in 2014, a significant increase despite the reduction in the HIV prevalence rate (KNBS, 2010; NASCOP, 2014). The increase in the number of people on treatment shifted the dynamics of HIV care away from primarily inpatient to outpatient care.

In the last three decades, the Government of Kenya (GOK), with the support of development partners, has increased funding for HIV prevention, care, and treatment. Despite these efforts, the rates of new infections are still high—130,000 new infections in 2014 (NACC, 2014). Most new infections occur in heterosexual couples in a union/regular partnership and among key populations (sex workers, clients of sex workers, the prison population, and men who have sex with men). To curb new infections, Kenya needs to scale up prevention and treatment services for these populations.

However, the global economic downturn has resulted in declining international support for HIV and AIDS services in low- and middle-income countries (UNAIDS, 2013). It is anticipated that recipient countries will consider mobilising local resources to finance their HIV/AIDS programmes. However, the evidence suggests that the majority of these countries still rely heavily on international assistance.

5.2 SUMMARY STATISTICS

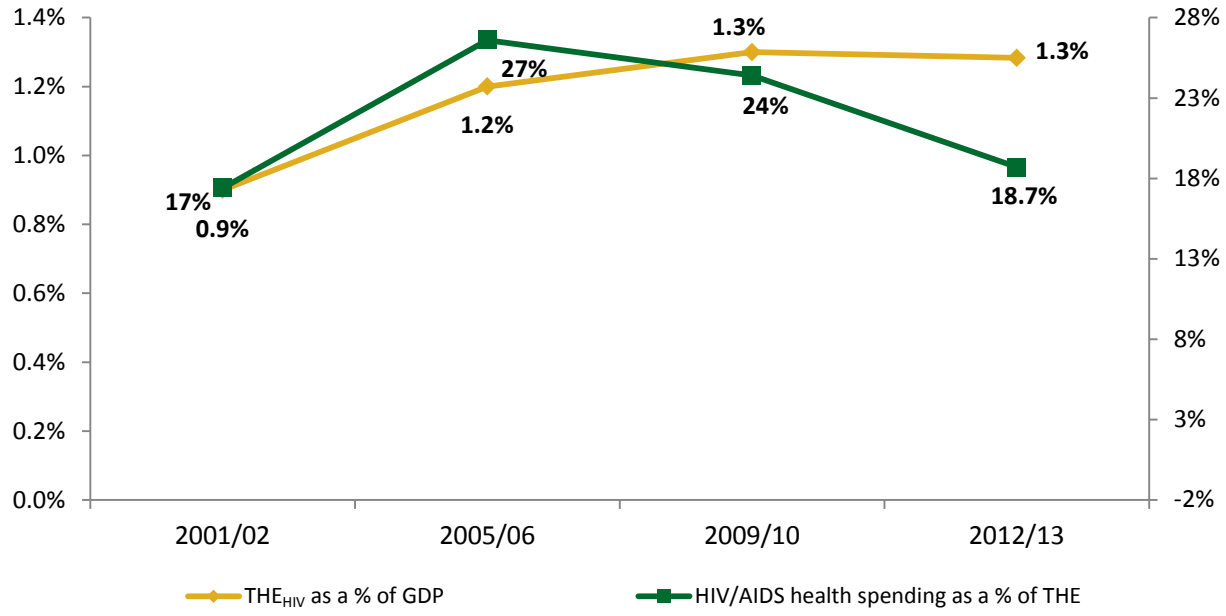
The total national HIV/AIDS expenditure (THE_{HIV}) was KSh 43.7 billion (US$511.9 million) in 2012/13, up from KSh 40.3 billion (US$532.1 million) in 2009/10. The THE_{HIV} as a percentage of GDP remained the same at 1.3 percent in both periods. Further, THE_{HIV} accounted for 19 percent of total health expenditure in 2012/13. Current health expenditure for HIV/ AIDS (CHE_{HIV}) accounted for 95 percent of the THE_{HIV}, compared with 98 percent in 2009/10. Table 5-1 provides a summary of health-related indicators on HIV/AIDS for 2001/02 through 2012/13.

Table 5-1: Summary of HIV/AIDS Health-related Indicators

Indicators	2001/02	2005/06	2009/10	2012/13
Prevalence rate (adults) (NACC, 2014)	6.7%	5.1%	6.3%	5.6%
Number of people living with HIV/AIDS	982,685	1,091,000	1,450,000	1,569,841
THE_{HIV} (KSh)	13,270,449,362	36,206,161,788	40,335,205,601	43,664,954,284
THE_{HIV} (US$)	168,835,234	342,385,785	532,126,723	511,898,643
CHE_{HIV} (KSh)			39,466,839,613	41,654,442,137
Capital formation for HIV (KSh)			868,365,988	2,010,512,146
HIV/AIDS health spending as a % of THE	17.4%	26.6%	24.4%	18.7%
HIV/AIDS health spending as a % of GDP	0.90%	1.20%	1.30%	1.30%

Total HIV/AIDS expenditure as a percentage of total health expenditure decrease from 24% to 19 percent in 2009/10 and 2012/13 respectively. Figure 5-1 shows the trend of THE_{HIV} as a proportion of GDP and as a proportion of government expenditure between 2001/02 and 2012/13. Total HIV/AIDS expenditure as a percentage of total health expenditure decreased from 24 percent to 19 percent in 2009/10 and 2012/13 respectively.

Figure 5-1: Selected Statistics on HIV Health Expenditure

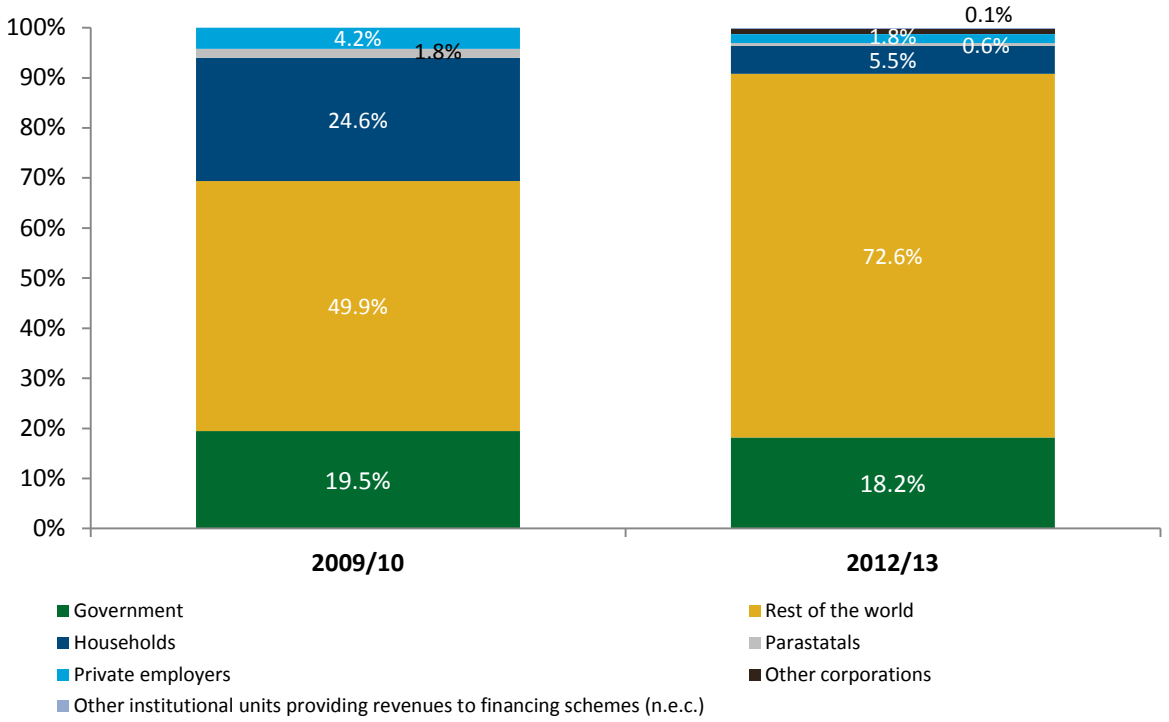


5.3 Financing Dimension

5.3.1 Institutional Units Providing Revenues for Financing Schemes

A significant proportion of HIV/AIDS financing revenues in Kenya was provided by donors (i.e., the rest of the world) at 73 percent in 2012/13, up from 50 percent in 2009/10. The government's contribution reduced marginally to 18 percent in 2012/13, down from 20 percent in 2009/10. Households' contributions declined from 25 percent in 2009/10 to 6 percent in 2012/13. Figure 5—2 shows the institutional units providing revenues for financing schemes.

Figure 5-2: Institutional Units Providing Revenues for Financing Schemes, CHE_{HIV}



As shown in Table 5-2, the overall revenues in absolute values provided to financing schemes increased by 5.5 percent between 2009/10 and 2012/13. Funds for CHE_{HIV} provided through households (including OOPs and premiums to insurance) in absolute values declined by 76 percent in 2012/13, as compared with 2009/10 estimates. The absolute values of CHE_{HIV} provided by donors (i.e., the rest of the world) increased by 54 percent in 2012/13 over the 2009/10 estimates. Table 5-2 shows in absolute values the institutional units providing revenues for financing schemes for CHE_{HIV}.

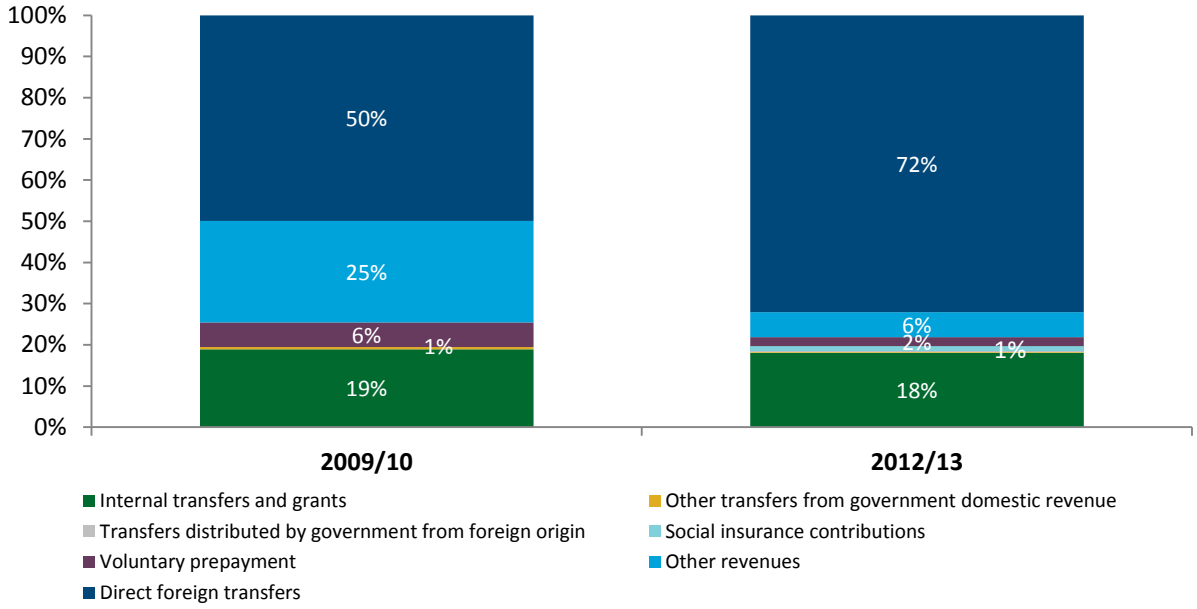
Table 5-2: Institutional Units Providing Revenues for Financing Schemes for CHE_{HIV}

Institutional Units Providing Revenues for Financing Schemes	2009/10 (KSh)	2012/13 (KSh)	Percentage Change
Government	7,680,682,589	7,580,177,261	-1.3%
Rest of the world	19,707,710,744	30,248,844,263	53.5%
Households	9,708,630,902	2,305,027,279	-76.3%
Parastatals	708,525,273	237,637,542	-66.5%
Private employers	1,661,290,106	762,902,271	-54.1%
Other corporations		480,004,251	n/a
Other institutional units providing revenues to financing schemes (n.e.c.)		39,849,269	n/a
Total	**39,466,839,613**	**41,654,442,137**	**5.5%**

5.3.2 Revenues of Financing Schemes for CHE_{HIV}

In 2012/13, revenues of financing schemes for the CHE_{HIV} came mostly from direct foreign transfers; 72 percent, up from 50 percent in 2009/10. The revenues of financing schemes for CHE_{HIV} from internal transfers and grants accounted for 19 percent and 18 percent in 2009/10 and 2012/13, respectively. Figure 5-3 shows the revenue sources of financing schemes for CHE_{HIV}.

Figure 5-3: Revenues of Financing Schemes for CHE_{HIV}



As shown in Table 5-3, revenues in absolute values of financing schemes for CHE_{HIV} from internal transfers and grants remained constant, whereas those from direct foreign transfers increased by 52 percent between 2009/10 and 2012/13.

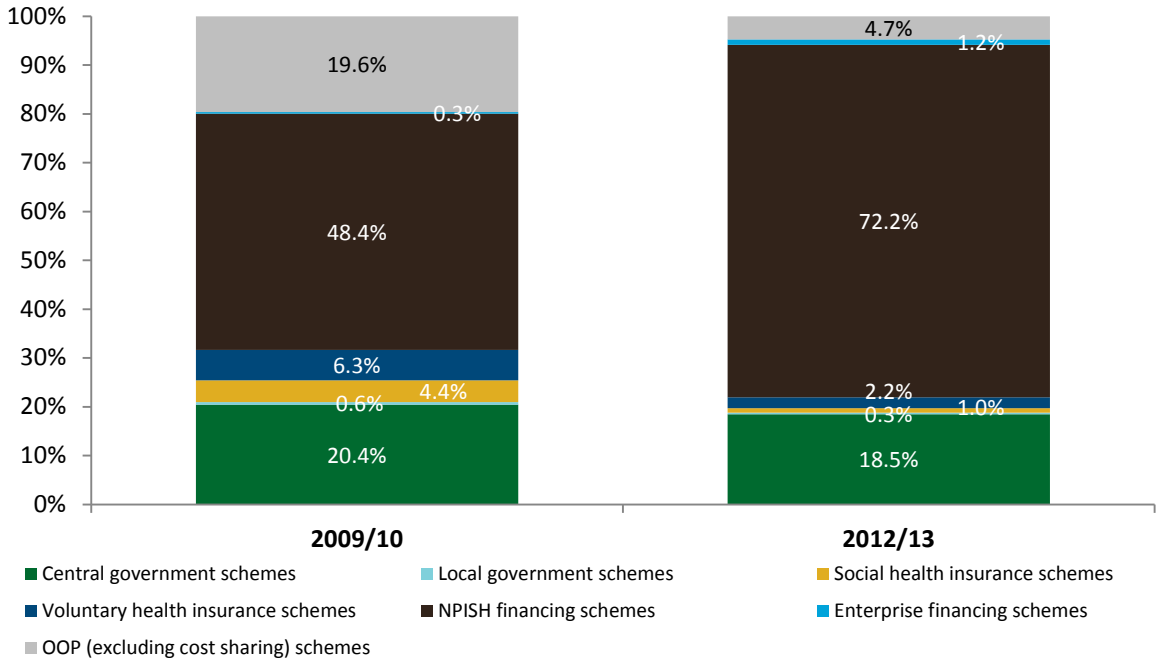
Table 5-3: Revenues of Financing Scheme for CHE_{HIV} in Absolute Values

Revenues of Financing Schemes	2009/10 (KSh)	2012/13 (KSh)	Percentage Change
Internal transfers and grants	7,458,806,581	7,517,799,426	0.8%
Other transfers from government domestic revenue	221,876,008	62,377,835	-71.9%
Transfers distributed by government from foreign origin		209,426,156	n/a
Social insurance contributions		405,876,765	n/a
Voluntary prepayment	2,369,815,379	919,146,521	-61.2%
Other revenues	9,708,630,902	2,500,397,327	-74.2%
Direct foreign transfers	19,707,710,744	30,039,418,107	52.4%
Total	**39,466,839,613**	**41,654,442,137**	**5.5%**

5.3.3 Healthcare Financing Schemes for CHE_{HIV}

As shown in Figure 5-3, in 2012/13, about 72 percent of CHE_{HIV} was pooled through the NPISH financing schemes, up from 48 percent in 2009/10. Households' OOP payments and government schemes pooled reduced to 5 percent and 19 percent, respectively, in 2012/13, compared with 20 percent for each in 2009/10.

Figure 5-4: Healthcare Financing Schemes for CHE_{HIV}



In absolute values, enterprise and NPISH financing schemes mobilised significantly more CHE_{HIV} at 268 percent and 57 percent, respectively, in 2012/13, compared with the 2009/10 estimates. The amount pooled through social health insurance schemes, OOP (excluding cost sharing), and voluntary health insurance schemes declined by 77 percent, 75 percent, and 63 percent, respectively, between 2009/10 and 2012/13. Table 5-4 shows the financing scheme for CHE_{HIV} in absolute values for 2009/10 and 2012/13.

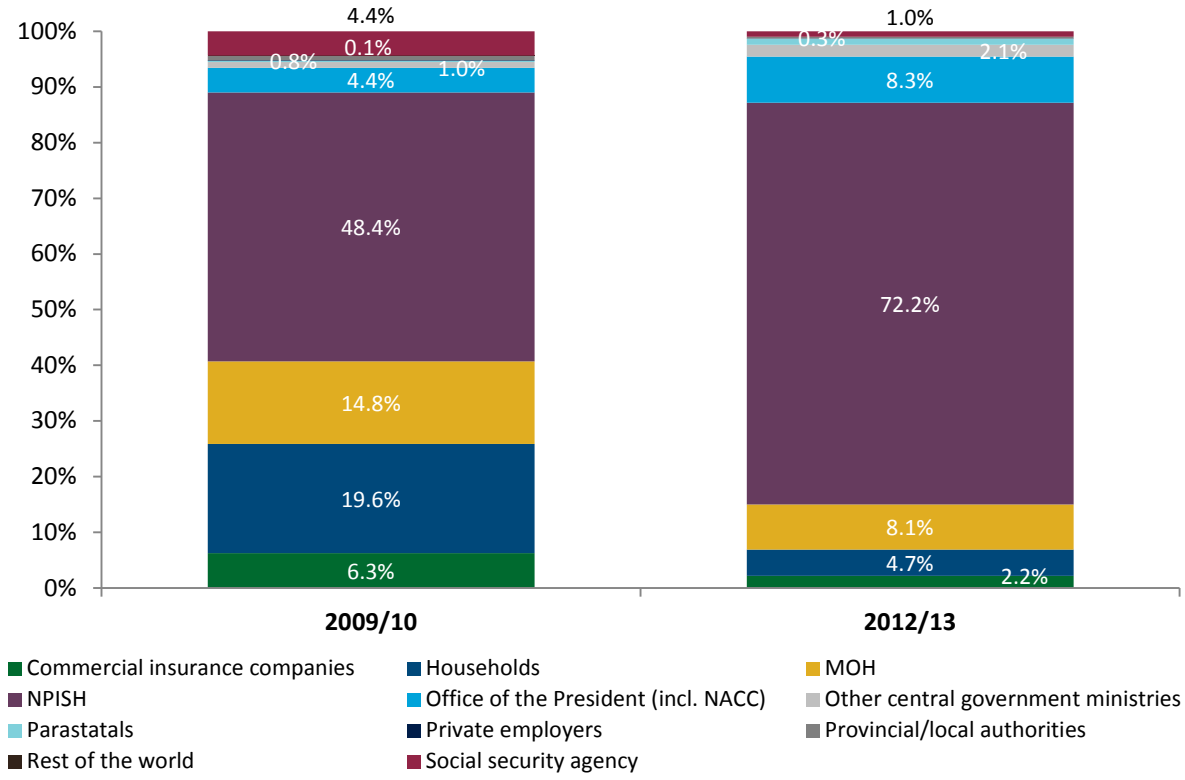
Table 5-4: Financing Schemes for CHE_{HIV} in Absolute Values

Healthcare Financing Schemes	2009/10 (KSh)	2012/13 (KSh)	Percentage Change
Central government schemes	8,063,795,187	7,690,028,963	-4.6%
Local government schemes	221,876,008	127,823,433	-42.4%
Social health insurance schemes	1,737,447,169	405,876,765	-76.6%
Voluntary health insurance schemes	2,476,435,985	919,146,521	-62.9%
NPISH financing schemes	19,102,722,137	30,066,354,823	57.39%
Enterprise financing schemes	130,471,623	480,004,25	267.9%
OOP (excluding cost sharing) schemes	7,734,091,505	1,965,207,381	-74.6%
Total	**39,466,839,613**	**41,654,442,137**	**5.5%**

5.3.4 Healthcare Financing Agents for CHE_{HIV}

The NPISH managed the largest proportion of CHE_{HIV} at 72 percent in 2012/13, up from 48 percent in 2009/10. Households and the MOH accounted for 4.7 percent and 8.1 percent in 2012/13, down from the 19.6 percent and 14.8 percent levels reported in 2009/10. Figure 5-4 shows the financing agents of CHE_{HIV}.

Figure 5-5: Financing Agents of CHE_{HIV}



In absolute values, the share of CHE_{HIV} managed by parastatals and other central government ministries increased significantly in 2012/13, by 366 percent and 120 percent respectively, compared with 2009/10. In addition, the NPISH share as a financing agent increased by 58 percent in the two years. On the other hand, there was a notable decline of 43 percent and 75 percent, respectively, in the amount of CHE_{HIV} managed by the MOH and households in 2012/13 over 2009/10 estimates. Table 5-5 shows the financing agents for CHE_{HIV} in absolute values for 2009/10 and 2012/13.

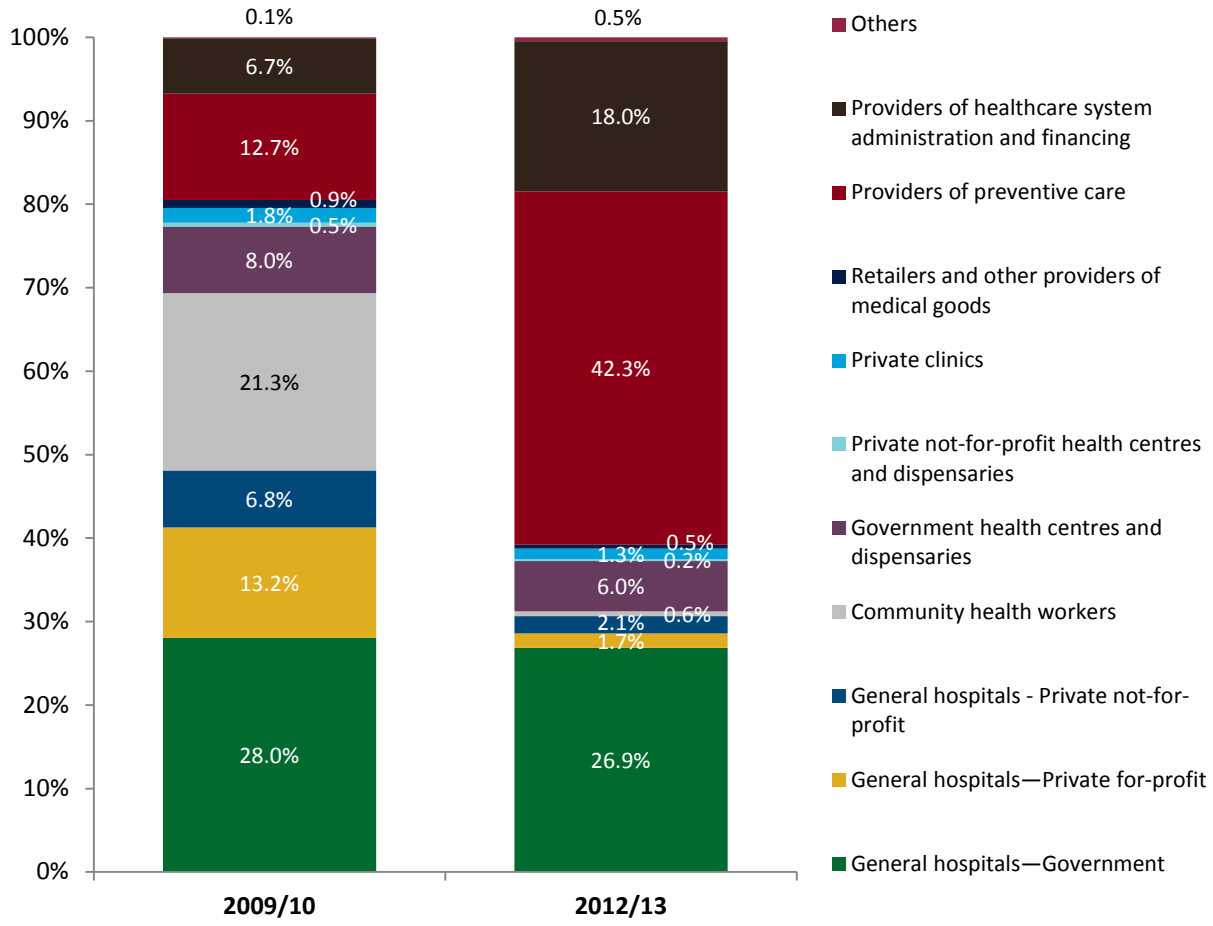
Table 5-5: Healthcare Financing Agents for CHE_{HIV} in Absolute Values

Financing Agents	2009/10 (KSh)	2012/13 (KSh)	Percentage Change
Commercial insurance companies	2,470,401,488	919,146,521	-62.8%
Households	7,734,091,505	1,965,207,381	-74.6%
MOH	5,852,837,863	3,358,097,135	-42.6%
NPISH	19,082,517,045	30,066,354,823	57.6%
Office of the President (including NACC)	1,743,568,591	3,458,656,425	98.4%
Other central government ministries	396,809,795	873,275,402	120.1%
Parastatals	99,467,530	463,856,386	366.3%
Private employers	31,004,093	16,147,865	-47.9%
Provincial/local authorities	298,489,444	127,823,433	-57.2%
Rest of the world	20,205,092		-100.0%
Social security agency	1,737,447,169	405,876,765	-76.6%
Total	**39,466,839,613**	**41,654,442,137**	**5.5%**

5.3.5 Utilisation of CHE_{HIV} by Healthcare Providers

In 2012/13, providers of preventive care utilised 42 percent of CHE_{HIV}, whereas providers of healthcare system administration and financing utilised 18 percent—an increase over 2009/10 amounts, from 13 percent and 7 percent, respectively. On the other hand, there was little difference between the two years in the amount utilised by general hospitals owned by the government. There was a reduction of the amounts utilised by general hospitals in the private sector and CHWs, from 13 percent and 21 percent, respectively, in 2009/10 to 2 percent and 1 percent, respectively, in 2012/13. Figure 5–6 shows the providers of CHE_{HIV} in 2009/10 and 2012/13.

Figure 5-6: Healthcare Providers of CHE_{HIV}



In absolute values, providers of preventive care spent more than two times as much and providers of healthcare system administration and financing utilised almost two times the amount of CHE_{HIV} in 2012/13, compared with 2009/10. A notable decline is that of CHWs, who utilised 97 percent less CHE_{HIV} in 2012/13, compared with 2009/10. Table 5-6 shows the healthcare providers for CHE_{HIV} in absolute values in 2009/10 and 2012/13.

Table 5-6: Healthcare Providers for CHE_{HIV} in Absolute Values

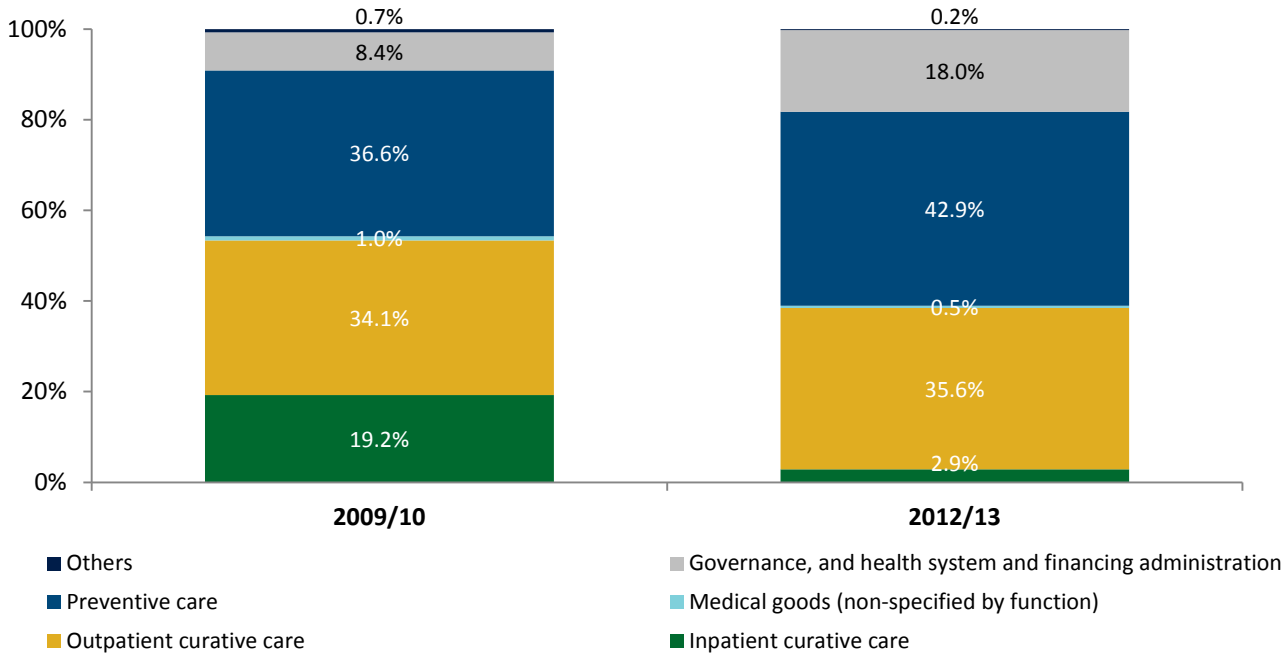
Providers of CHE_{HIV}	2009/10 (KSh)	2012/13 (KSh)	Percentage Change
General hospitals – Government	11,068,058,601	11,188,297,226	1.1%
General hospitals – Private for-profit	5,221,260,773	716,688,585	-86.3%

Providers of CHE_{HIV}	2009/10 (KSh)	2012/13 (KSh)	Percentage Change
General hospitals – Private not-for-profit	2,691,920,231	857,936,035	-68.1%
Community health workers	8,397,428,694	248,601,448	-97.0%
Government health centres and dispensaries	3,144,340,771	2,508,435,458	-20.2%
Private not-for-profit health centres and dispensaries	178,611,825	94,205,660	-47.3%
Private clinics	703,108,565	526,765,926	-25.1%
Retailers and other providers of medical goods	369,291,926	195,987,432	-46.9%
Providers of preventive care	5,022,261,649	17,634,002,607	251.1%
Providers of healthcare system administration and financing	2,628,904,316	7,484,837,266	184.7%
Others	41,652,263	198,684,494	377.0%
Total	**39,466,839,613**	**41,654,442,137**	**5.5%**

5.3.6 Healthcare Functions for CHE_{HIV}

As shown in Figure 5-7, the proportion of CHE_{HIV} spent on preventive care and outpatient services increased considerably, from 37 percent and 34 percent, respectively, in 2009/10 to 43 percent and 36 percent in 2012/13. The proportion of CHE_{HIV} spent on governance, and health system and financing administration increased from 8.4 percent in 2009/10 to 18 percent in 2012/13. During the same period, the proportion of CHE_{HIV} spent on inpatient care greatly reduced to 3 percent in 2012/13 from 19 percent in 2009/10.

Figure 5-7: Healthcare Functions for CHE_{HIV}



The amount of CHE_{HIV} used for governance, and health system and financing administration, preventive care, and outpatient curative care increased by 125 percent, 24 percent, and 10 percent, respectively, in 2012/13 over the 2009/10 levels. Absolute values of CHE_{HIV} spent on inpatient curative care were reduced by 84 percent in 2012/13, compared with the amounts utilised in 2009/10. Table 5-7 shows the healthcare functions for CHE_{HIV} in absolute values in 2009/10 and 2012/13.

Table 5-7: Healthcare Functions for CHE_{HIV} in Absolute Values

Healthcare Function	2009/10 (KSh)	2012/13 (KSh)	Percentage Change
Inpatient curative care	7,596,071,477	1,200,607,957	-84.2%
Outpatient curative care	13,462,174,956	14,822,403,512	10.1%
Medical goods (non-specified by function)	377,546,169	195,987,432	-48.1%
Preventive care	14,433,924,132	17,858,735,274	23.7%
Governance, and health system and financing administration	3,323,945,572	7,484,837,266	125.2%
Others	273,177,308	91,870,695	-66.4%
Total	**39,466,839,613**	**41,654,442,137**	**5.5%**

5.4 CAPITAL FORMATION FOR HIV/AIDS

Table 5-8 shows that in 2012/13, the government and the rest of the world contributed most of the funds used for capital formation for HIV/AIDS at 18 percent and 78 percent, respectively.

Table 5-8: Institutional Units Providing Revenues to Financing Schemes for Capital Formation for HIV/AIDS

Institutional Units	2012/13 (KSh)	Percentage (%)
Government	367,008,651	18%
Corporations	12,916,941	1%
Households	900,000	0%
NPISH	3,695,807	0%
Rest of the world	1,575,159,616	78%
Others	50,831,133	3%
Total	**2,010,512,147**	**100%**

6. TUBERCULOSIS

6.1 INTRODUCTION

Among infectious diseases, tuberculosis (TB) is the second leading cause of adult deaths after HIV/AIDS in Kenya and is a top public health problem almost everywhere (MOH, 2009). The United Nations Millennium Development Goals include targets for TB control, now adopted and extended by the international Stop TB Partnership. The targets include reversing TB incidence by 2015, halving TB prevalence and mortality by 2015 (compared with 1990), diagnosing 70 percent of new smear-positive cases, and curing 85 percent of these cases by 2015 (MOH, 2015).

TB remains a major cause of morbidity and mortality in Kenya. It affects all age groups but takes its greatest toll on the country's most productive age group, people ages 15–44. The major factor responsible for the large TB disease burden in Kenya is the concurrent HIV epidemic. Other factors that have contributed to the large disease burden of TB include poverty and social deprivation, which have led to a mushrooming of peri-urban slums, congestion in prisons, and limited access to general healthcare services. In the last decade, TB case notification has increased to an average of 16 percent annually (Baltussen et al., 2005).

6.2 SUMMARY STATISTICS

Total health expenditure on TB (THE_{TB}) has almost doubled, from KSh. 1.8 billion (US$23.7 million) in 2009/10 to KSh 3.1 billion (US$36.1 million) in 2012/13. This doubling accounted for 1.3 percent of THE in 2012/13, up from 1.1 percent in 2009/10. In 2012/13, current health expenditure on tuberculosis (CHE_{TB}) comprised 95 percent of $THE_{TB,}$ while capital formation for TB was 5 percent. Table 6-1gives summary statistics on TB health expenditures for 2009/10 and 2012/13.

Table 6-1: Summary Statistics for Health Expenditure for TB

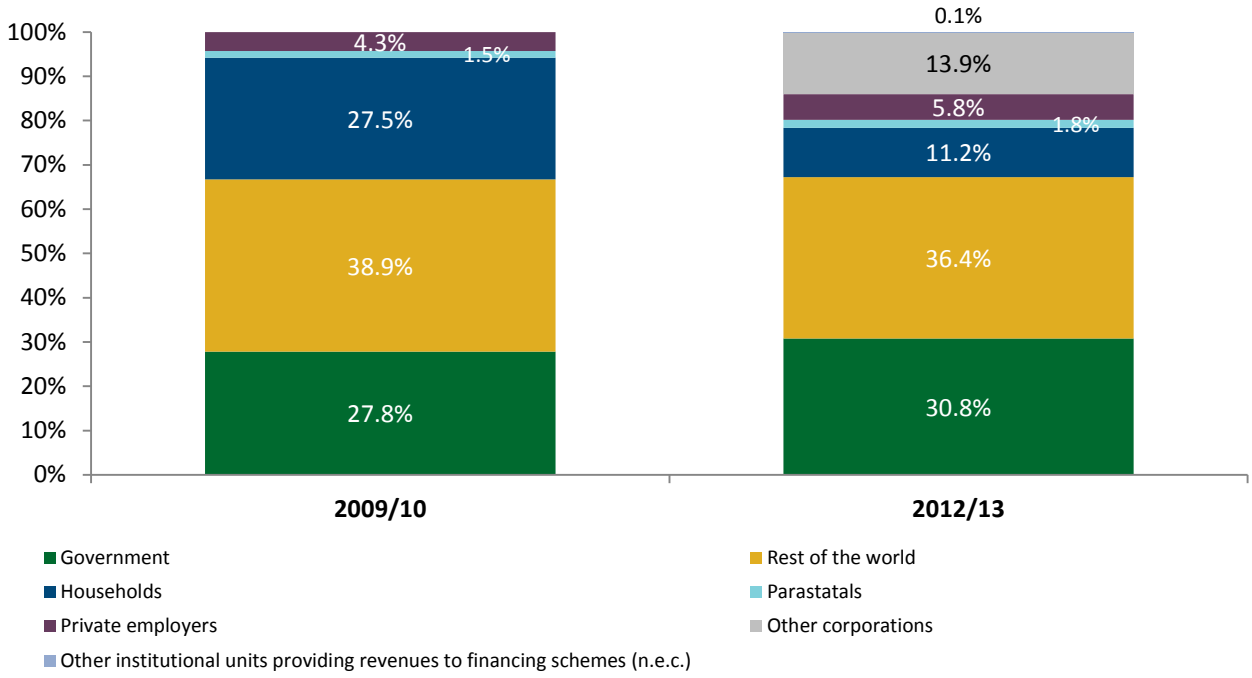
Indicators	2009/10	2012/13
Prevalence rate (per 100,000 adults)	289	223
Number of notified TB cases, nationally	109, 903	98,492
THE_{TB} (KSh)	1,798,059,270	3,081,011,876
THE_{TB} (US$)	23,714,841	36,119,717
CHE_{TB} (KSh)	1,716,820,361	2,920,341,814
Capital formation for TB (KSh)	81,238,909	160,670,063
THE_{TB} spending as a % of THE	1.13%	1.3%
THE_{TB} spending as a % of GDP	0.06%	0.09%

6.3 FINANCING DIMENSION

6.3.1 Institutional Units Providing Revenues for Financing Schemes for CHE_{TB}

In 2012/13, the rest of the world was the major source of financing for CHE_{TB} at 36 percent, a decrease from 39 percent in 2009/10. This was followed by the government at 31 percent. Household OOP contribution to CHE_{TB} dropped from 28 percent to 11 percent between 2009/10 and 2012/13. Figure 6-1 provides a breakdown of the sources of revenue for CHE_{TB} in 2009/10 and 2012/13.

Figure 6-1: Institutional Units Providing Revenues for Financing Schemes for CHE_{TB}



In absolute values, government and parastatal contributions to CHE_{TB}, and those from the rest of the world, increased by 88 percent, 95 percent, and 59 percent, respectively, in 2012/13, compared with 2009/10. Private employers provided 131 percent more resources in 2012/13 than in 2009/10. Table 6-2 shows the institutional units providing revenue for financing schemes for CHE_{TB} in absolute values.

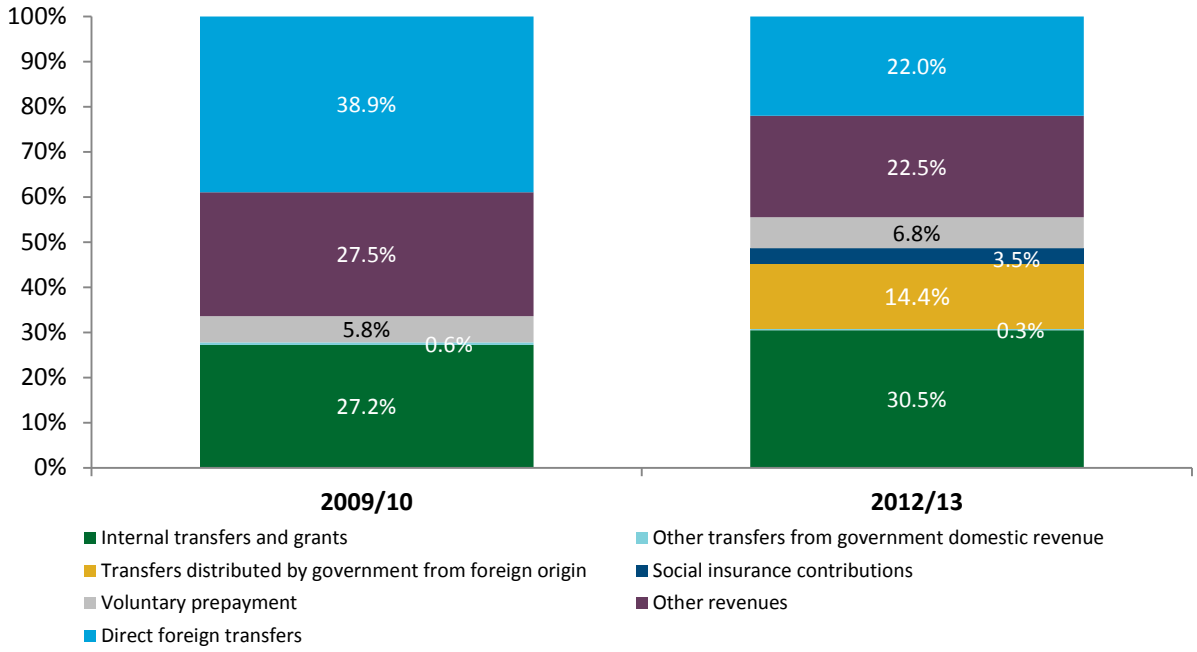
Table 6-2: Institutional Units Providing Revenues for Financing Schemes for CHE_{TB} in Absolute Values

Institutional Units	**2009/10** (KSh)	**2012/13** (KSh)	Percentage Change
Government	477,317,714	899,337,471	88.4%
Rest of the world	668,098,527	1,063,494,478	59.2%
Households	471,378,112	325,938,817	-30.9%
Parastatals	26,607,082	51,921,789	95.1%
Private employers	73,418,926	169,799,715	131.3%
Other corporations	-	405,768,022	n/a
Other institutional units providing revenues to financing schemes (n.e.c.)		4,081,523	n/a
Total	**1,716,820,361**	**2,920,341,814**	**70.1%**

6.3.2 Flow of Revenues of Financing Schemes for CHE_{TB}

As shown in Figure 6-2, 31 percent of the revenue of financing schemes for CHE_{TB} in 2012/13 came from internal transfers and grants, up from 27 percent in 2009/10. Revenue from direct foreign transfers was 22 percent of CHE_{TB} in 2012/13, compared with 39 percent in 2009/10.

Figure 6-2: Revenues of Financing Schemes for CHE_{TB}



In absolute values, voluntary prepayment and internal transfers and grants for CHE_{TB} increased by 100 percent and 90 percent between 2009/10 and 2012/13, respectively. There was a 4 percent decline of direct foreign transfers for CHE_{TB} in 2012/13 relative to 2009/10 levels. Table 6-3 shows a breakdown in absolute values of revenues of financing schemes for CHE_{TB} in 2009/10 and 2012/13.

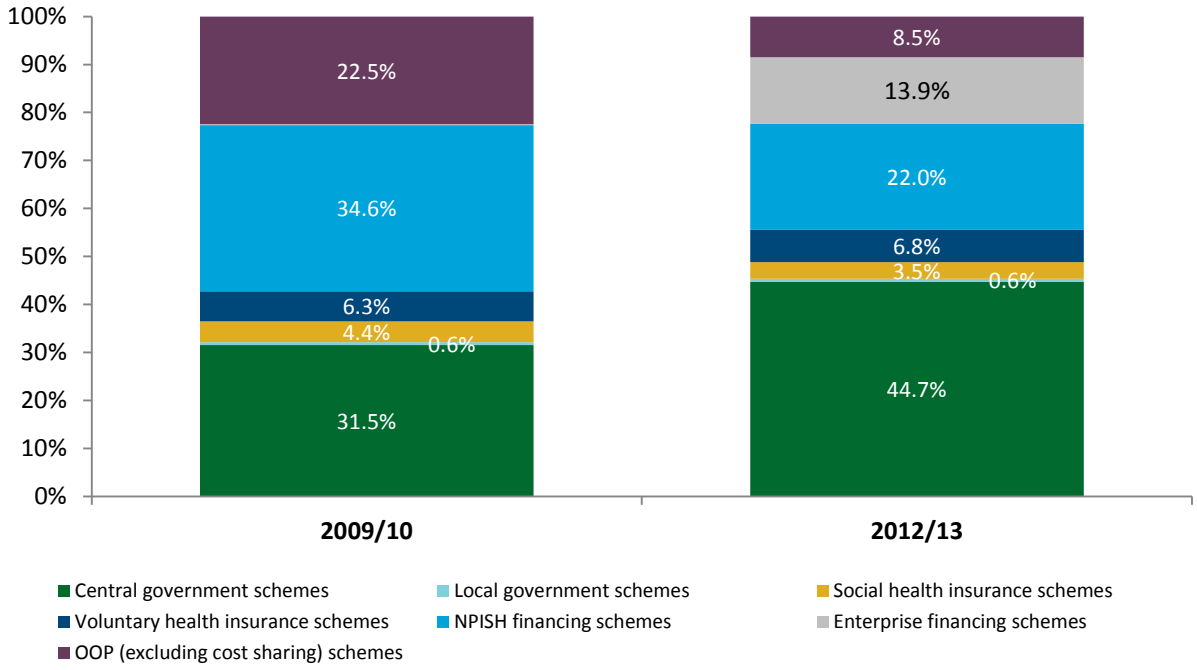
Table 6-3: Revenues of Financing Schemes for CHE_{TB} in Absolute Values

Revenues of Financing Schemes	2009/10 (KSh)	2012/13 (KSh)	Percentage Change
Internal transfers and grants	467,688,196	890,615,596	90.4%
Other transfers from government domestic revenue	9,629,518	8,721,874	-9.4%
Transfers distributed by government from foreign origin		420,829,456	n/a
Social insurance contributions		100,825,020	n/a
Voluntary prepayment	100,026,008	199,693,568	99.6%
Other revenues	471,378,112	656,991,277	39.4%
Direct foreign transfers	668,098,527	642,665,023	-3.8%
Total	**1,716,820,361**	**2,920,341,814**	**70.1%**

6.3.3 Healthcare Financing Schemes for CHE_{TB}

The central government and NPISH financing schemes mobilised 45 percent and 22 percent of CHE_{TB} in 2012/13, respectively, compared with 32 percent and 35 percent in 2009/10. The OOP financing scheme mobilised far lower CHE_{TB} in 2012/13 (9%) than in 2009/10 (23%). Figure 6-3 shows the healthcare financing schemes for CHE_{TB} in 2009/10 and 2012/13.

Figure 6-3: Healthcare Financing Schemes for CHE_{TB}



The amount of CHE_{TB} mobilised by the central government scheme increased by 141 percent in 2012/13 over the 2009/10 estimates. Local government and voluntary health insurance schemes mobilised 86 percent more funds for CHE_{TB} in 2012/13, compared with 2009/10. There was an exponential increase in the amount of CHE_{TB} mobilised by enterprise financing schemes. Table 6-4 shows the healthcare financing schemes for CHE_{TB} in absolute values.

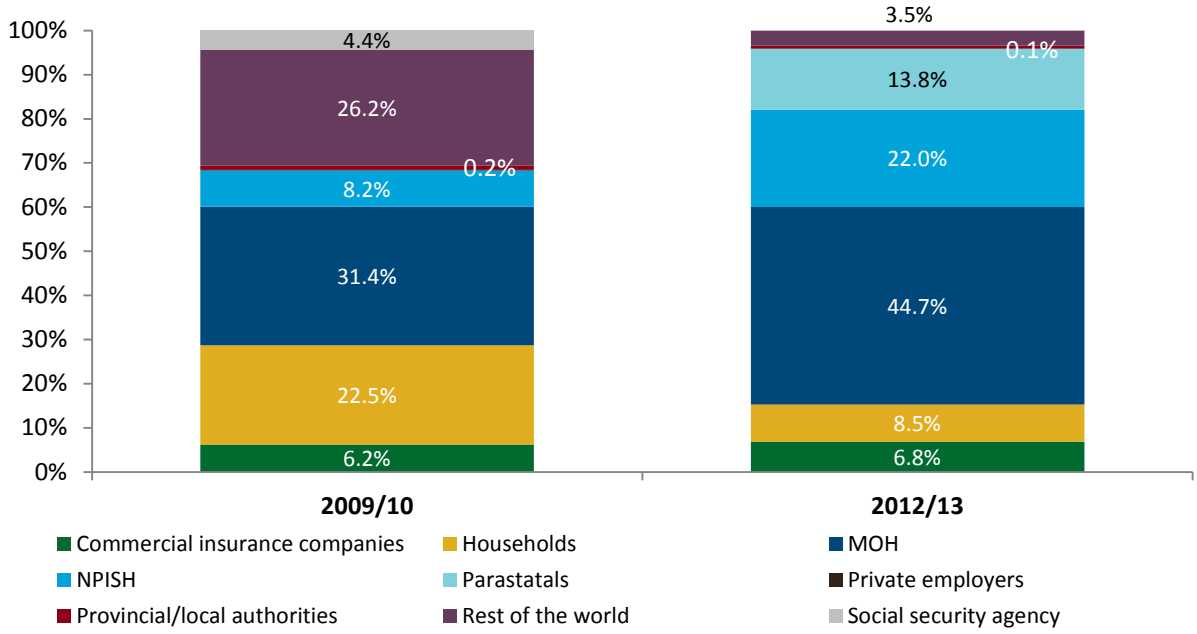
Table 6-4: Healthcare Financing Schemes for CHE_{TB} in Absolute Values

Healthcare Financing Schemes	**2009/10** (KSh)	**2012/13** (KSh)	Percentage Change
Central government schemes	541,567,887	1,306,244,098	141.2%
Local government schemes	9,629,518	17,872,693	85.6%
Social health insurance schemes	75,405,985	100,825,020	33.7%
Voluntary health insurance schemes	107,478,430	199,693,568	85.8%
NPISH financing schemes	594,218,836	642,796,680	8.2%
Enterprise financing schemes	2,837,487	405,768,022	14,200.3%
Out-of-pocket (excluding cost sharing) schemes	385,682,219	247,141,733	-35.9%
Total	**1,716,820,361**	**2,920,341,814**	**70.1%**

6.3.4 Healthcare Financing Agents for CHE_{TB}

As shown in Figure 6–4, the MOH managed the largest share of CHE_{TB} funds at 45 percent, up from 31 percent in 2009/10. This was followed by NPISH at 22 percent. Households' share as a financing agent for CHE_{TB} fell from 23 percent in 2009/10 to 9 percent in 2012/13. Figure 6–4 provides a breakdown of financing agents for CHE_{TB} for 2009/10 and 2012/13.

Figure 6-4: Financing Agents for CHE_{TB}



In absolute values, TB resources controlled by the MOH increased by 143 percent in 2012/13 over 2009/10 levels. There was an exponential increase in CHE_{TB} managed by parastatals. Table 6-5 shows the trend in absolute values and percentage change of each financing agent for 2009/10 and 2012/13.

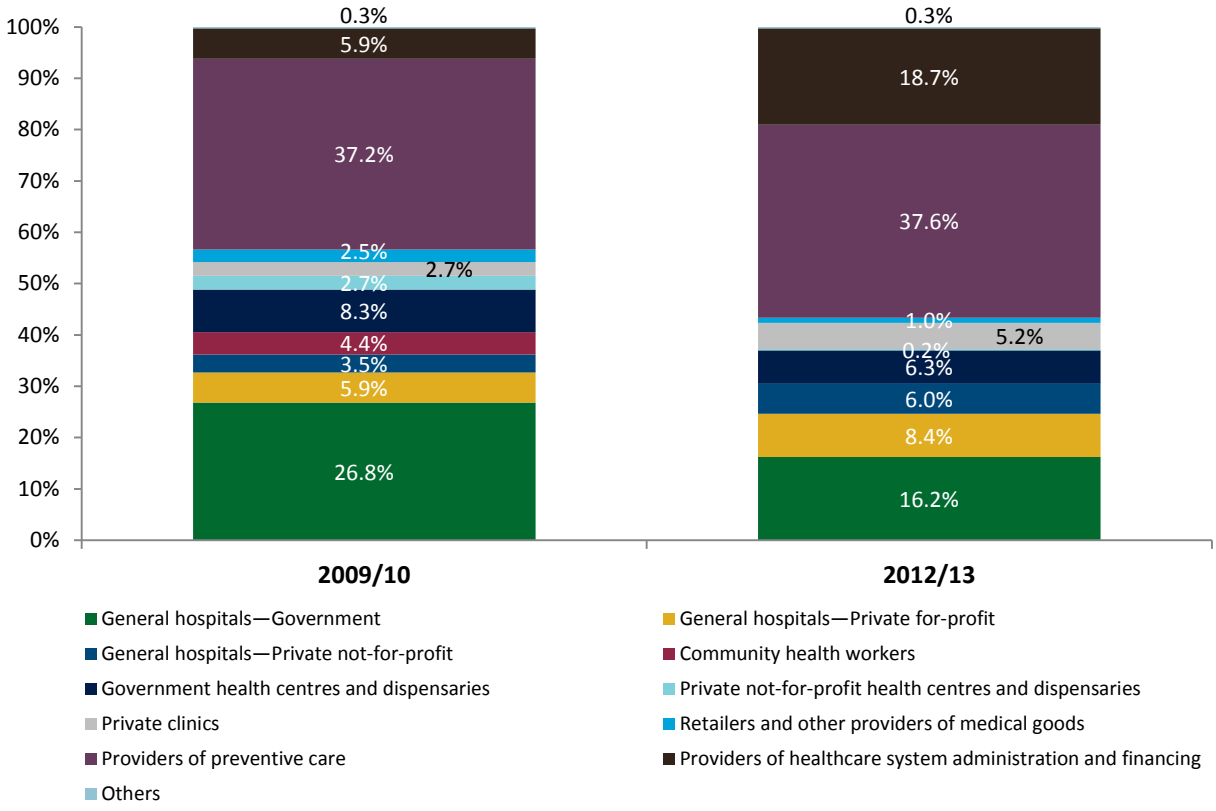
Table 6-5: Healthcare Financing Agents for CHE_{TB} in Absolute Values

Financing Agents	**2009/10** (KSh)	**2012/13** (KSh)	Percentage Change
Commercial insurance companies	107,216,530	199,693,568	86.3%
Households	385,682,219	247,141,733	-35.9%
MOH	538,504,730	1,306,244,098	142.6%
NPISH	141,245,200	642,796,680	355.1%
Parastatals	173,703	403,802,361	232,366.6%
Private employers	2,663,788	1,965,661	-26.2%
Provincial/local authorities	16,399,467	17,872,693	9.0%
Rest of the world	449,528,745	100,825,020	-77.6%
Social security agency	75,405,985		-100.0%
Total	**1,716,820,361**	**2,920,341,814**	**70.1%**

6.3.5 Healthcare Providers of CHE_{TB}

The major recipients of CHE_{TB} resources in 2012/13 were providers of preventive care. In all, preventive care providers accounted for 38 percent of CHE_{TB} in 201 2/13—almost the same as in the previous period. In 2012/13, government hospitals and government health centres and dispensaries controlled 16 percent and 6 percent of $CHE_{TB,}$ respectively, down from 27 percent and 8 percent in 2009/10. Figure 6-5 provides a breakdown of CHE_{TB} distribution by provider.

Figure 6-5: Healthcare Providers of CHE_{TB}



In absolute values, the amount of resources for CHE_{TB} utilised by providers of healthcare system administration and financing, and private clinics increased significantly in 2012/13, by 441 percent and 228 percent, respectively, above the 2009/10 levels. Table 6-6 shows providers of CHE_{TB} in absolute values for 2009/10 and 2012/13.

Table 6-6: Healthcare Providers for CHE_{TB} in Absolute Values

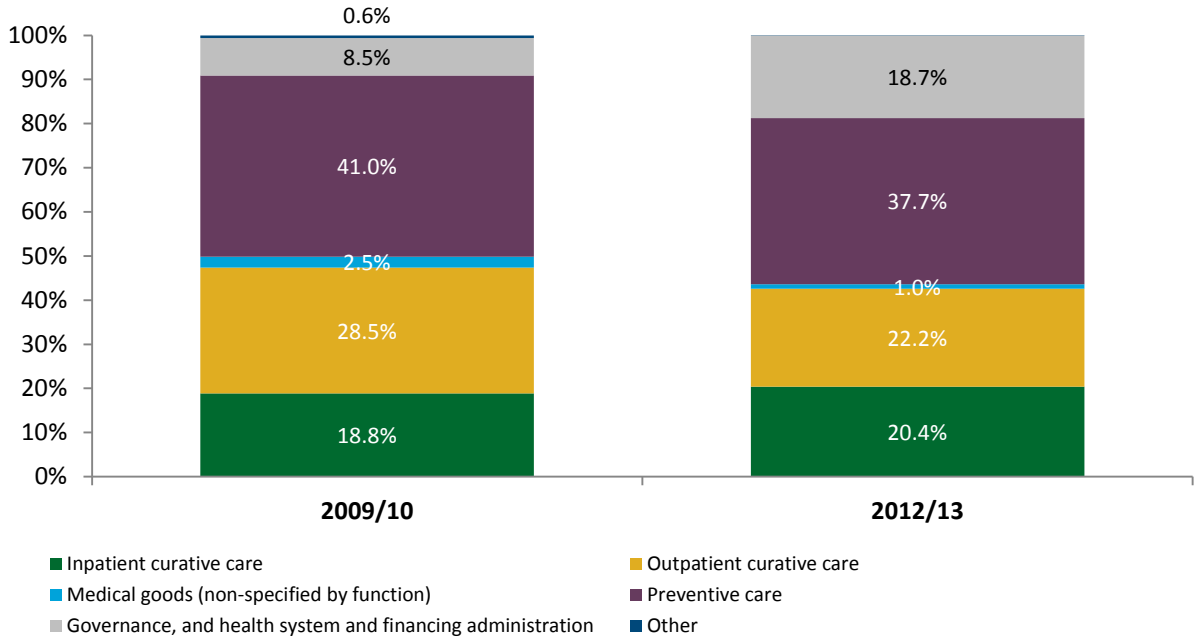
Providers	**2009/10** (KSh)	**2012/13** (KSh)	Percentage Change
General hospitals – Government	460,929,400	473,678,197	2.8%
General hospitals – Private for-profit	100,442,723	246,209,913	145.1%
General hospitals – Private not-for-profit	60,127,505	174,804,180	190.7%
Community health workers	74,885,144	507,299	-99.3%
Government health centres and dispensaries	142,418,812	184,828,823	29.8%
Private not-for-profit health centres and dispensaries	45,627,436	6,819,463	-85.1%
Private clinics	45,990,007	150,617,257	227.5%
Retailers and other providers of medical goods	42,082,076	28,183,067	-33.0%
Providers of preventive care	638,185,784	1,099,268,366	72.2%

Providers	2009/10 (KSh)	2012/13 (KSh)	Percentage Change
Providers of healthcare system administration and financing	101,100,550	547,114,562	441.2%
Others	5,030,925	8,310,689	65.2%
Total	**1,716,820,361**	**2,920,341,814**	**70.1%**

6.3.6 Healthcare Functions for CHE_{TB}

The bulk of CHE_{TB} spending in 2012/13 was for prevention and public health—38 percent, down from 41 percent in 2009/10. This was followed by outpatient care at 22 percent. Inpatient curative care accounted for 20 percent of CHE_{TB} in 2012/13. Figure 6-6 provides a breakdown of CHE_{TB} by function.

Figure 6-6: Healthcare Functions for CHE_{TB}



Resources for CHE_{TB} utilised on governance, and health system and financing administration, and inpatient curative care increased in absolute terms between 2009/10 and 2012/13 by 273 percent and 84 percent, respectively. During the same period, resources used to purchase preventive care and outpatient care increased by 56 percent and 33 percent respectively. Table 6-7 shows the distribution of CHE_{TB} by function in absolute values for 2009/10 and 2012/13.

Table 6-7: Healthcare Functions for CHE_{TB} in Absolute Values

Healthcare Functions	2009/10 (KSh)	2012/13 (KSh)	Percentage Change
Inpatient curative care	323,320,953	595,286,190	84.1%
Outpatient curative care	490,122,910	649,459,113	32.5%
Medical goods (non-specified by function)	42,082,076	28,183,067	-33.0%
Preventive care	704,587,057	1,099,864,794	56.1%
Governance, and health system and financing administration	146,570,929	547,114,562	273.3%
Other	10,136,437	434,088	-95.7%
Total	**1,716,820,361**	**2,920,341,814**	**70.1%**

6.4 CAPITAL FORMATION FOR TUBERCULOSIS

In 2012/13, the rest of the world was the major source of finances spent on capital formation for TB at 47 percent, followed by the government at 44 percent. Table 6-8 provides a breakdown of institutional units providing revenues for financing schemes for capital formation for TB in 2012/13.

Table 6-8: Institutional Units Providing Revenues for Financing Schemes for Capital Formation for TB

Institutional Units	**2012/13** (KSh)	Percentage (%)
Government	70,919,914	44%
Corporations	2,870,431	2%
Households	200,000	0%
NPISH	359,342	0%
Rest of the world	75,024,568	47%
Others	11,295,807	7%
Total	**160,670,063**	**100%**

7. REPRODUCTIVE HEALTH

7.1 INTRODUCTION

In Kenya, reproductive health (RH) is not only an essential component of the health system, it is embraced in the sexual and RH rights provided by the country. Reproductive health is a cross-cutting agenda beyond the MOH. Kenya has developed policies and strategies specific to this area of health, including the National Reproductive Health Policy, 2007 and the National Reproductive Health Strategy 2009–2015.

Health service delivery statistics have been on the increase, as reported in the 2013/14 annual performance report of the MOH (MOH, 2014b). The report indicated that 48.6 percent of women of reproductive age used modern methods of family planning. Further, of the more than 1.4 million deliveries per year, 43 percent were attended by a skilled health provider. Maternal deaths in public health facilities fell from 919 in 2013 to 885 in 2014.

7.2 SUMMARY STATISTICS

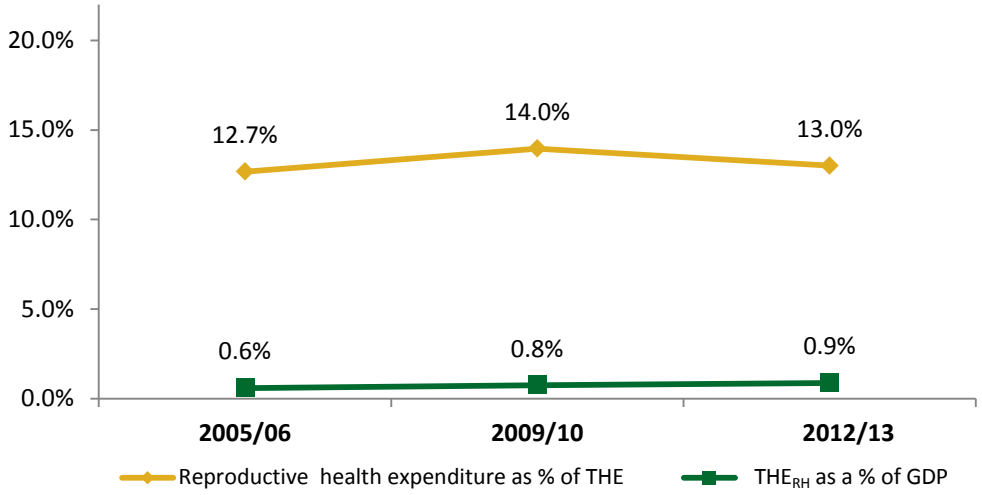
The total health expenditure for reproductive health (THE_{RH}) increased from KSh 17.2 billion (US$267 million) in 2009/10 to KSh 30.1 billion (US$353 million) in 2012/13. Approximately 87 percent of THE_{RH} was spent in supporting current health expenditure on reproductive health (CHE_{RH}) in 2012/13, with capital formation for reproductive health taking the remaining 13.5 percent. Table 7-1 provides a summary of selected RH expenditure indicators for 2005/06, 2009/10, and 2012/13.

Table 7-1: Reproductive Health Expenditure Summary Statistics

Indicators	2005/06	2009/10	2012/13
Total population of women (15–49 years)	5,898,388	7,791,794	10,292,991
THE_{RH} (KSh)	17,179,356,054	22,816,447,272	30,083,101,300
THE_{RH} (US$)	201,399,250	267,484,728	352,674,107
CHE_{RH} (KSh)			26,018,950,450
Capital formation for RH (KSh)			4,064,150,850
Reproductive health expenditure as a % of THE	12.67%	13.96%	13%
Reproductive health expenditure as a % of GDP	0.59%	0.75%	0.88%

The THE_{RH} as a percentage of THE increased to 14 percent in 2009/10 but dropped to 13 percent in 2012/13. The THE_{RH} as a percentage of GDP, although increasing, has remained constant at about 1 percent. Figure 7–1 shows the trend of THE_{RH} as a percentage of GDP and THE from 2005/06 to 2012/13.

Figure 7-1: Selected Health Expenditure Statistics

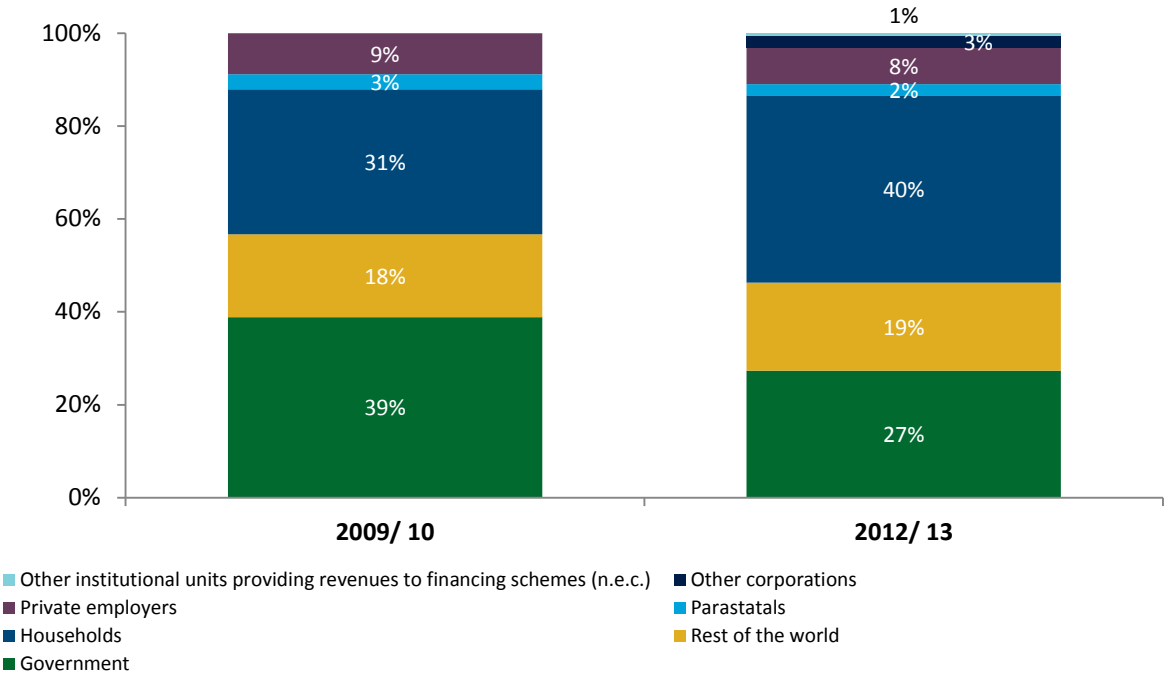


7.3 FINANCING DIMENSION FOR CHE$_{RH}$

7.3.1 Institutional Units Providing Revenues for Financing Schemes for CHE$_{RH}$

As shown in Figure 7-2, the proportion of revenue for financing schemes mobilised by the household as an institutional unit has increased from 31 percent in 2009/10 to 40 percent in 2012/13. The government mobilised only 27 percent in 2012/13, down from 39 percent in 2009/10. The proportion contributed by the rest of the world remained relatively constant in 2009/10 (18%) and 2012/13 (19%).

Figure 7-2: Institutional Units Providing Revenues for Financing Schemes for CHE$_{RH}$



The CHE_{RH} in absolute values increased by 21 percent between 2009/10 and 2012/13. There was an increase in absolute values on the amount of CHE_{RH} contributed by households (57%) and the rest of the world (29%) in 2012/13 over the 2009/10 estimates. Government contributions in absolute values decreased by 15 percent between 2009/10 and 2012/13. Table 7-2 shows the absolute values contributed by the different institutional units between 2009/10 and 2012/13.

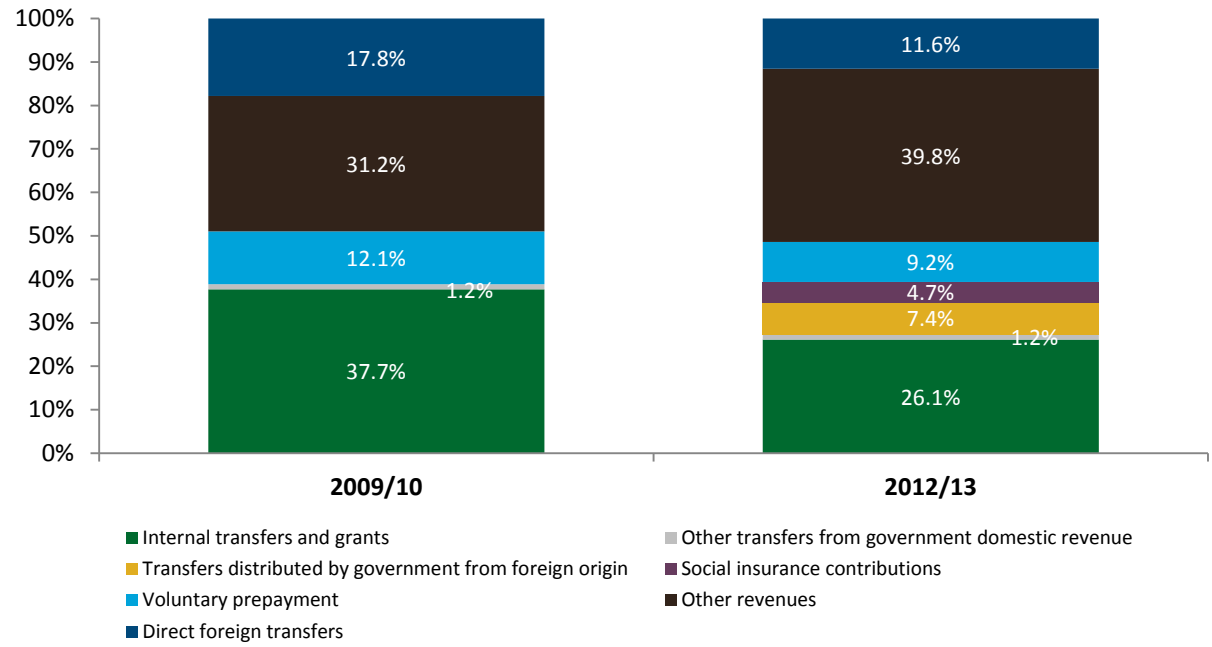
Table 7-2: Contributions by Institutional Units Providing Revenues for Financing Schemes for CHE_{RH}

Institutional Units	**2009/10** (KSh)	**2012/13** (KSh)	Percentage Change
Government	8,359,548,401	7,111,924,125	-15%
Rest of the world	3,836,714,981	4,935,756,069	29%
Households	6,697,816,934	10,490,608,495	57%
Parastatals	709,185,718	616,027,506	-13%
Private employers	1,895,477,840	2,043,558,381	8%
Other corporations	-	660,542,857	n/a
Other institutional units providing revenues to financing schemes (n.e.c.)	-	160,533,018	n/a
Total	**21,498,743,874**	**26,018,950,451**	**21%**

7.3.2 Sources of Revenues of Healthcare Financing Schemes for CHE_{RH}

Internal transfers and grants, and direct foreign transfers contributed 26 percent and 12 percent of $CHE_{RH,}$ respectively, in 2012/13, compared with 38 percent and 18 percent in 2009/10. Other revenues (including households) contributed 40 percent of CHE_{RH} in 2012/13, up from 31 percent in 2009/10. Figure 7-3 shows sources of revenues of healthcare financing schemes for $CHE_{RH.}$

Figure 7-3: Sources of Revenues of Healthcare Financing Schemes for CHE_{RH}



As shown in Table 7-3, the amount of CHE_{RH} in absolute values contributed through internal transfers and grants, and direct foreign transfers declined by 16 percent and 21 percent, respectively, in 2012/13, compared with the contributions in 2009/10. The

only increase in financing sources for CHE_{RH} between 2009/10 and 2012/13 was in other transfers from government domestic revenue. Other revenues contributed 55 percent more of CHE_{RH} in 2012/13 relative to 2009/10 estimates.

Table 7-3: Sources of Revenues of Healthcare Financing Schemes for CHE_{RH} in Absolute Values

Revenues of Financing Schemes	**2009/10** (KSh)	**2012/13** (KSh)	Percentage Change
Internal transfers and grants	8,101,395,555	6,794,231,412	-16.1%
Other transfers from government domestic revenue	258,152,846	317,692,712	23.1%
Transfers distributed by government from foreign origin		1,926,793,233	n/a
Social insurance contributions		1,214,587,138	n/a
Voluntary prepayment	2,604,663,558	2,392,837,518	-8.1%
Other revenues	6,697,816,934	10,363,845,600	54.7%
Direct foreign transfers	3,836,714,980.5	3,008,962,836	-21.6%
Total	**21,498,743,873**	**26,018,950,450**	**21.0%**

7.3.3 Financing Schemes of CHE_{RH}

In 2012/13, 37 percent of CHE_{RH} funds were mobilised through household OOP schemes, up from 20 percent in 2009/10. Government schemes mobilised 33 percent of CHE_{RH} in 2012/13, compared with 44 percent in 2009/10. Figure 7-4 shows the financing schemes of CHE_{RH} in 2009/10 and 2012/13.

Figure 7-4: Financing Schemes of CHE_{RH}

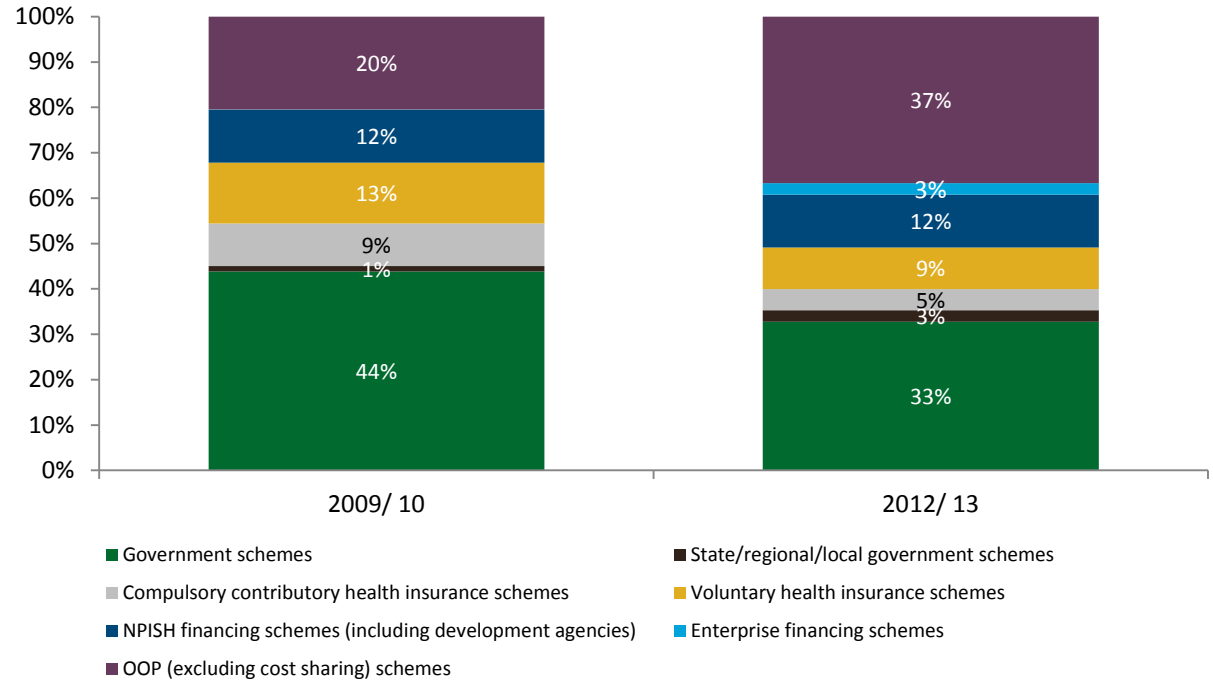


Table 7-4 shows the absolute values of funds mobilised through the financing schemes for 2009/10 and 2012/13. The amount of funds in absolute values mobilised by local government and household OOP schemes increased by 152 percent and 117 percent, respectively, between 2009/10 and 2012/13. The government schemes mobilised 10 percent less of CHE_{RH} in 2012/13, compared with 2009/10.

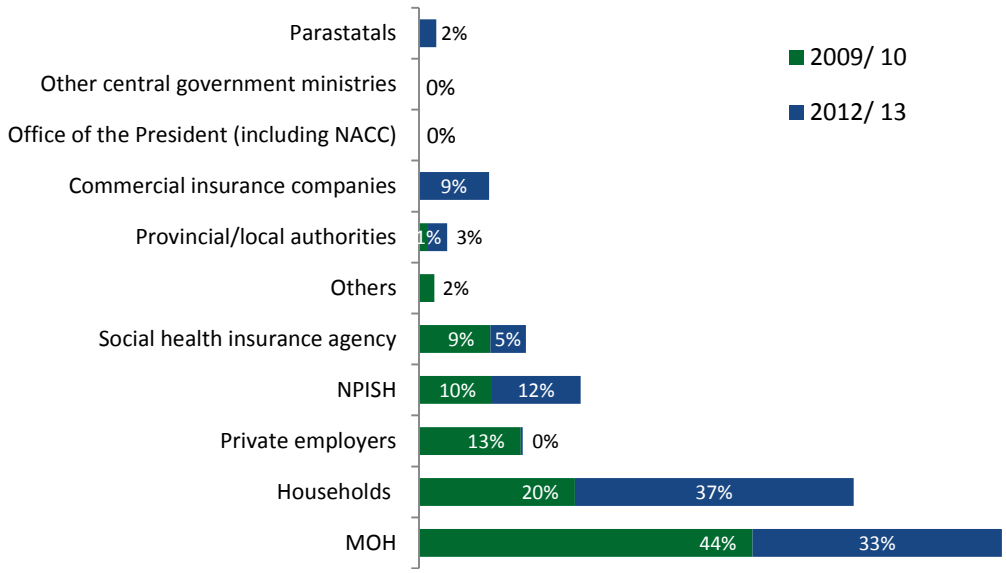
Table 7-4: Financing Schemes for CHE_{RH} in Absolute Values

Financing Schemes	**2009/10** (KSh)	**2012/13** (KSh)	Percentage Change
Government schemes	9,430,670,194	8,531,580,835	-10%
Local government schemes	258,152,846	651,009,656	152%
Compulsory contributory health insurance schemes	2,018,081,812	1,214,587,138	-40%
Voluntary health insurance schemes	2,876,433,027	2,392,837,519	-17%
NPISH financing schemes	2,507,440,341	3,025,622,720	21%
Enterprise financing schemes	3,618,193	660,542,857	18,156%
OOP (excluding cost sharing) schemes	4,404,347,459	9,542,769,725	117%
Total	**21,498,743,873**	**26,018,950,450**	**21%**

7.3.4 Healthcare Financing Agents of CHE_{RH}

The MOH and households continue to be the major financing agents of CHE_{RH}. Households managed 37 percent of CHE_{RH} in 2012/13, compared with 20 percent in 2009/10. The role of the MOH as a financing agent for CHE_{RH} declined from 44 percent in 2009/10 to 33 percent in 2012/13. Figure 7-5 shows the financing agents of CHE_{RH} in 2009/10 and 2012/13.

Figure 7-5: Healthcare Financing Agents of CHE_{RH}



In 2012/13, households and local authorities managed 117 percent and 152 percent more of CHE_{RH}, respectively, compared with what they controlled in 2009/10. The MOH controlled 10 percent less of CHE_{RH} in 2012/13, compared with 2009/10. Table 7-5 shows the financing agents of CHE_{RH} in absolute values.

Table 7-5: Healthcare Financing Agents of CHE_{RH}

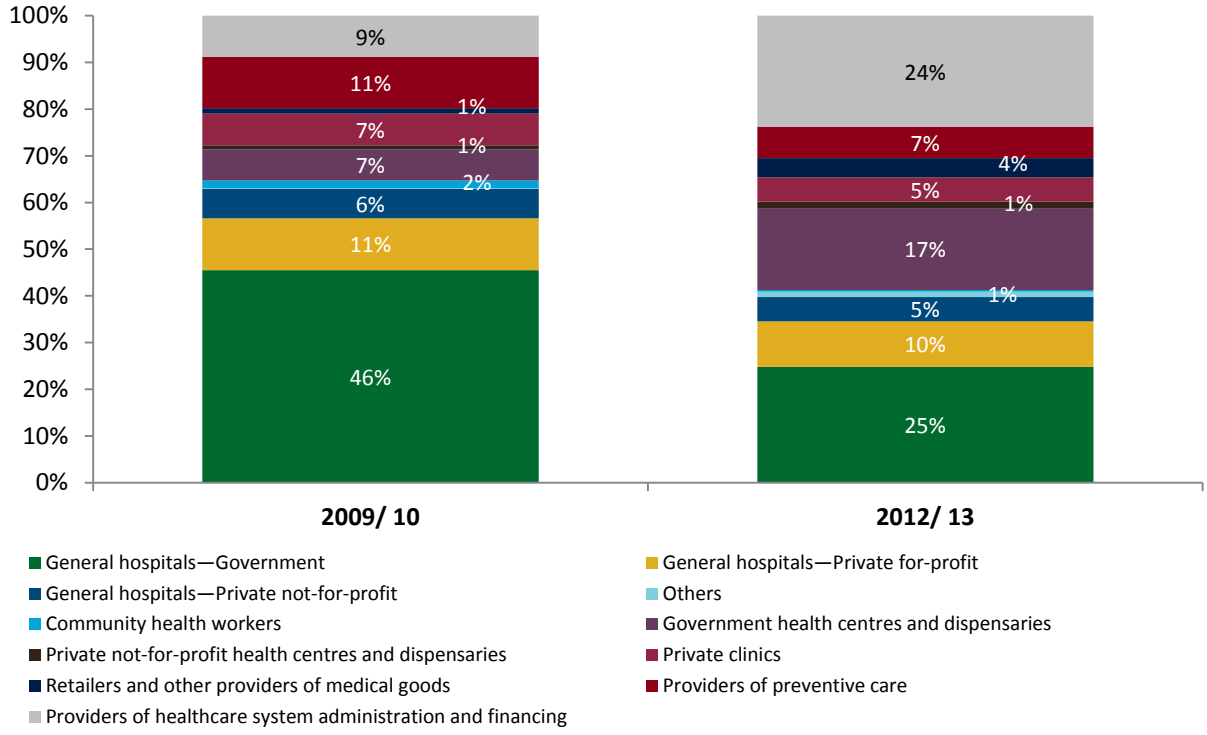
Financing Agent	**2009/10** (KSh)	**2012/13** (KSh)	Percent Change
MOH	9,430,670,194	8,531,580,835	-10%
Provincial/local authorities	258,152,846	651,009,656	152%
Social health insurance agency	2,018,081,812	1,214,587,138	-40%
Commercial insurance companies	3,618,193	2,392,837,519	66,033%

Financing Agent	2009/10 (KSh)	2012/13 (KSh)	Percent Change
Parastatals		595,002,648	n/a
Private employers	2,876,433,027	65,540,210	-98%
NPISH	2,067,781,481	3,025,622,720	46%
Households	4,404,347,459	9,542,769,725	117%
Others	439,658,860		-100%
Total	**21,498,743,873**	**26,018,950,450**	**21%**

7.3.5 Utilisation of CHE_{RH} by Type of Provider

Public facilities utilised 42 percent of CHE_{RH} in 2012/13, a decline from 53 percent in 2009/10. Providers of healthcare system and administration financing utilised more of CHE_{RH} at 24 percent in 2012/13 than they did in 2009/10 (9%). Figure 7-6 shows a breakdown of the proportions of CHE_{RH} controlled by each provider.

Figure 7-6: Providers of CHE_{RH}



As shown in Table 7—6, in absolute values, government health centres and dispensaries utilised 215 percent more of CHE_{RH} in 2012/13 than in 2009/10, and retailers and other providers of medical goods utilised 339 percent more. Table 7-6 shows a breakdown of the amount of CHE_{RH} utilised by each provider of healthcare.

Table 7-6: Healthcare Providers of CHE_{RH} in Absolute Values

Healthcare Providers	2009/10 (KSh)	2012/13 (KSh)	Percentage Change
General hospitals – Government	9,783,391,951	6,447,609,186	-34%
General hospitals – Private for-profit	2,385,165,500	2,532,714,311	6%
General hospitals – Private not-for-profit	1,353,697,223	1,369,673,051	1%
others	40,691,207	294,678,507	624%
Community health workers	347,234,402	91,772,933	-74%
Government health centres and dispensaries	1,437,480,679	4,535,231,183	215%
Private not-for-profit health centres and dispensaries	189,341,456	386,376,259	104%

Healthcare Providers	2009/10 (KSh)	2012/13 (KSh)	Percentage Change
Private clinics	1,459,282,785	1,347,297,428	-8%
Retailers and other providers of medical goods	244,672,100	1,075,199,678	339%
Providers of preventive care	2,362,508,096	1,746,602,147	-26%
Providers of healthcare system administration and financing	1,895,278,475	6,191,795,766	227%
Total	**21,498,743,873**	**26,018,950,450**	**21%**

7.3.6 Healthcare Functions of CHE_{RH}

The amount of CHE_{RH} spent on governance and healthcare systems increased from 10 percent in 2009/10 to 24 percent in 2012/13. Although the amount spent on outpatient curative care remained the highest in both periods, it decreased from 44 percent to 41 percent between 2009/10 and 2012/13. The proportion of CHE_{RH} spent on inpatient curative care declined from 33 percent in 2009/10 to 24 percent in 2012/13. Figure 7-7 shows the distribution of CHE_{RH} by functions in 2009/10 and 2012/13.

Figure 7-7: Distribution of CHE_{RH} by Healthcare Functions

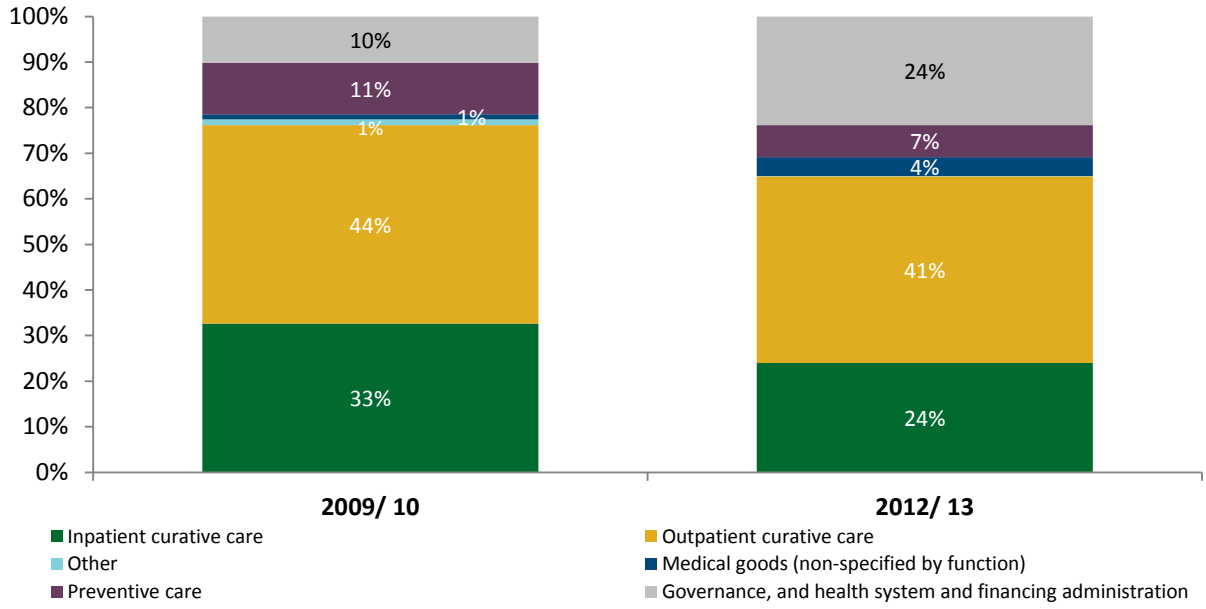


Table 7-7 shows the amounts spent by healthcare functions in absolute values. The amount of CHE_{RH} spent on medical goods more than doubled between 2009/10 and 2012/13, as did governance, and health system and financing administration.

Table 7-7: Healthcare Functions of CHE_{RH} in Absolute Values

Healthcare Functions	2009/10 (KSh)	2012/13 (KSh)	Percentage Change
Inpatient curative care	7,017,037,833	6,246,273,447	-11%
Outpatient curative care	9,360,265,420	10,649,718,772	14%
Other	271,650,282	14,794,989	-95%
Medical goods (non-specified by function)	244,769,366	1,075,199,678	339%
Preventive care	2,420,753,946	1,841,167,798	-24%
Governance, and health system and financing administration	2,184,267,027	6,191,795,766	183%
Total	**21,498,743,873**	**26,018,950,450**	**21%**

7.4 CAPITAL FORMATION FOR REPRODUCTIVE HEALTH

Table 7-8 shows the institutional units providing revenues to finance schemes for capital formation for RH in 2012/13. The main institutions financing capital formation for RH were the government and rest of the world.

Table 7-8: Spending on Capital Formation for RH, by Institutional Units Providing Revenues of Financing Schemes

Institutional Units	**2012/13** (KSh)	Percentage (%)
Government	2,613,414,698	64%
Corporations	64,686,840	2%
Households	2,380,000	0%
Rest of the world	923,936,961	23%
NPISH	323,514,687	8%
Other institutional units providing revenues to financing schemes (n.e.c.)	136,217,664	3%
Total	**4,064,150,850**	**100%**

8. MALARIA

8.1 INTRODUCTION

The health sector in Kenya recognises malaria as a health and socioeconomic burden. Malaria is responsible for 30 percent of outpatient consultations, 19 percent of hospital admissions, and 3–5 percent of inpatient deaths (MOH, 2013a). Seventy percent of Kenya's population lives in malaria-endemic areas.

Table 8-1 provides the summary statistics on malaria health expenditures for 2009/10 and 2012/13. In 2012/13, the total health expenditure for malaria ($THE_{MALARIA}$) was KSh 23 billion (US$269 million), a decrease from the KSh 41 billion (US$541 million) reported in 2009/10. Malaria health spending as a percentage of GDP also showed a significant drop, from 1.4 percent in 2009/10 to 0.7 percent in 2012/13. In 2012/13, $THE_{MALARIA}$ accounted for 10 percent of THE.

Table 8-1: Summary Statistics for Malaria Findings

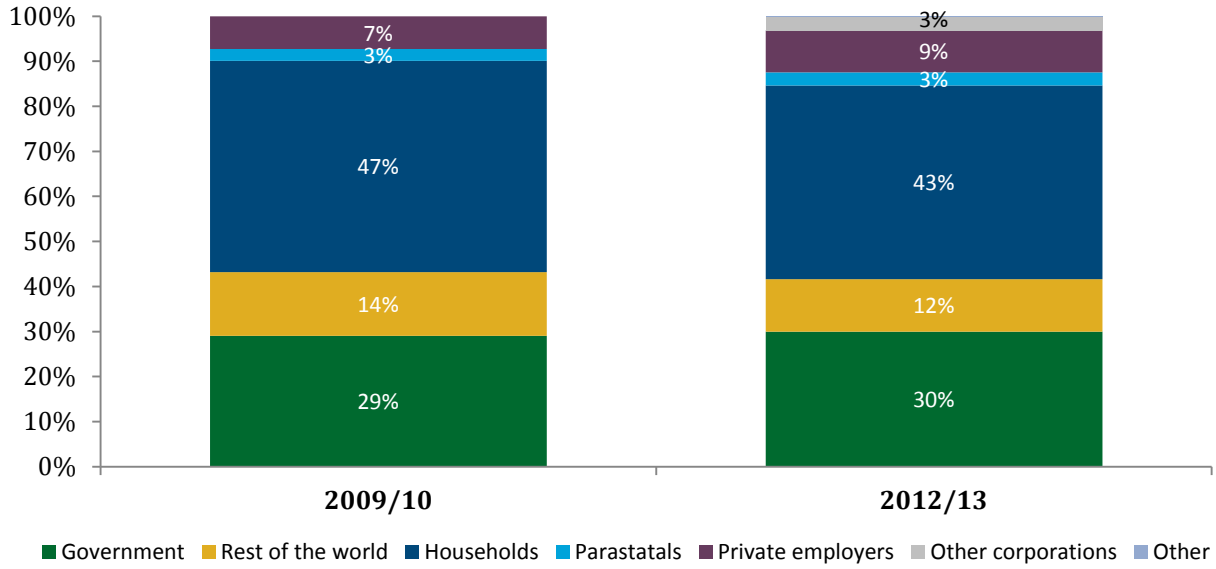
Indicators	2009/10	2012/13
Use of nets by pregnant women, 2008 (KNBS, 2010)	48.3%	73%
Insecticide-treated bed nets (ITN) coverage per household (ownership of at least one net), 2007 (Malaria Indicator Survey)	63.0%	61%
$THE_{MALARIA}$ (KSh)	41,024,697,628	22,953,331,855
$THE_{MALARIA}$ (US$)	541,080,159	269,089,471
Current health expenditure on malaria ($CHE_{MALARIA}$)	39,300,048,135	21,636,298,440
Capital formation for malaria (KSh)	1,724,649,493	1,317,033,416
Malaria spending as a % of general THE	33.3%	9.8%
Malaria spending as a % of GDP	1.36%	0.68%

8.2 FINANCING DIMENSION FOR $CHE_{MALARIA}$

8.2.1 Institutional Units Providing Revenues for Malaria Financing Schemes

Of the three major institutional units that provided revenues for malaria financing, households contributed the highest amount (43%) in 2012/13, followed by the government and the rest of the world at 30 percent and 12 percent, respectively. The same pattern was observed in 2009/10. Figure 8–1 shows the institutional units providing revenues for financing schemes for current health expenditure on malaria ($CHE_{MALARIA}$).

Figure 8-1: Institutional Units Providing Revenues for Financing Schemes for $CHE_{MALARIA}$



In absolute values, $CHE_{MALARIA}$ declined by 45 percent between 2009/10 and 2012/13. Contributions by the rest of the world declined by 55 percent between 2009/10 and 2012/13, whereas those of the government and households declined by 43 percent and 49 percent, respectively. There was a general decline in contributions from all institutions in 2012/13. The decrease in contributions in the subcategories is reflected by the large increase in household contributions in absolute values. Table 8-2 shows the contributions in absolute values.

Table 8-2: Institutional Units Providing Revenues for Financing Schemes for $CHE_{MALARIA}$ in Absolute Values

Institutional Units	2009/10 (KSh)	2012/13 (KSh)	Percentage Change
Government	11,402,986,128	6,488,141,436	-43%
Rest of the world	5,571,273,314	2,517,084,264	-55%
Households	18,432,342,067	9,311,436,049	-49%
Parastatals	1,046,333,895	619,929,590	-41%
Private employers	2,847,112,731	2,022,528,008	-29%
Other corporations	-	625,658,996	n/a
Other institutional units providing revenues to financing schemes (n.e.c.)	-	51,520,098	n/a
Total	**39,300,048,135**	**21,636,298,440**	**-45%**

8.2.2 Revenues of Financing Schemes for Malaria

In 2009/10 and 2012/13, households contributed the most revenue for financing schemes for $CHE_{MALARIA}$ at 47 percent and 39 percent, respectively. Revenues from internal transfers and grants increased from 29 percent in 2009/10 to 33 percent in 2012/13. Direct foreign transfers for $CHE_{MALARIA}$ declined from 14 percent in 2009/10 to 8 percent in 2012/13. Figure 8-2 shows sources of revenues of financing schemes for $CHE_{MALARIA}$.

Figure 8-2: Revenues of Financing Schemes for $CHE_{MALARIA}$

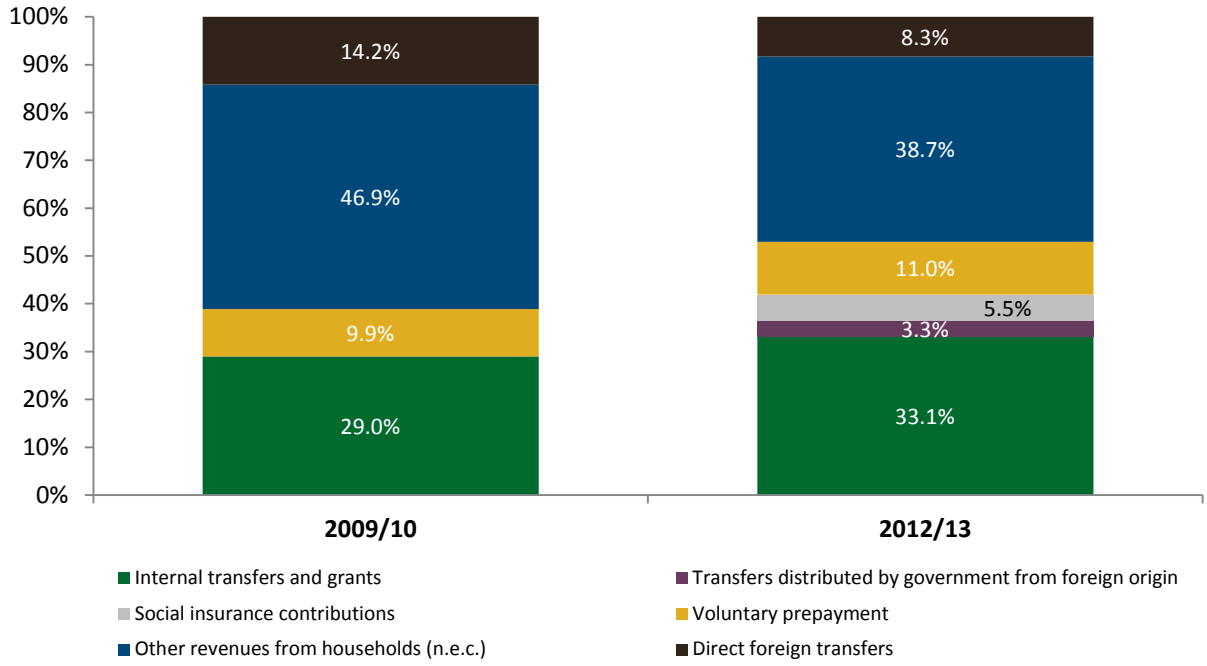


Table 8-3 highlights the sources of revenue for financing schemes for $CHE_{MALARIA}$. There was a decline in the amounts contributed by all sources between 2009/10 and 2012/13, with the largest decline seen in direct foreign transfers (68%).

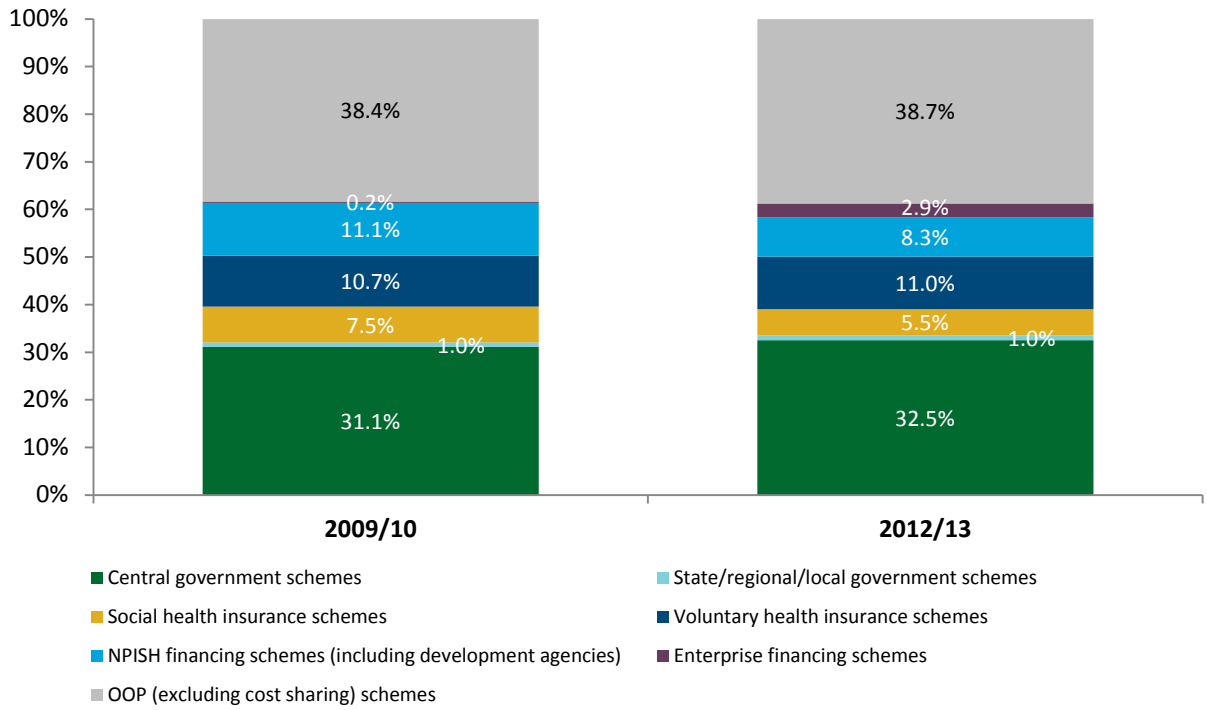
Table 8-3: Financing Schemes for $CHE_{MALARIA}$ in Absolute Values

Revenues of financing schemes	**2009/10** (KSh)	**2012/13** (KSh)	Percentage Change
Internal transfers and grants	11,402,986,128	7,165,320,529	-37.2%
Transfers distributed by government from foreign origin		722,206,977	n/a
Social insurance contributions		1,183,296,034	
Voluntary prepayment	3,893,446,626	2,386,883,748	-38.7%
Other revenues from households (n.e.c.)	18,432,342,067	8,383,713,864	-54.5%
Direct foreign transfers	5,571,273,314	1,794,877,287	-67.8%
Total	**39,300,048,135**	**21,636,298,440**	**-44.9%**

8.2.3 Health Financing Schemes for $CHE_{MALARIA}$

There are two dominant health financing schemes for $CHE_{MALARIA}$—the central government and OOP (excluding cost sharing) schemes. OOP (excluding cost sharing) schemes mobilised almost the same amount of $CHE_{MALARIA}$ in 2009/10 and 2012/13 at just under 40 percent, followed by the central government scheme (33%) in 2012/13. Figure 8—3 provides a breakdown of health financing schemes for $CHE_{MALARIA}$ in 2009/10 and 2012/13.

Figure 8-3: Health Financing Schemes for $CHE_{MALARIA}$



As shown in Table 8-4, the absolute values mobilised for $CHE_{MALARIA}$ through local government and voluntary health insurance financing schemes increased in 2012/13 by 60 percent and 43 percent, respectively, above the 2009/10 estimates. Enterprise financing schemes mobilised 572 percent more of $CHE_{MALARIA}$ between 2009/10 and 2012/13. The NPISH financing schemes and OOP (excluding cost sharing) schemes mobilised 59 percent and 44 percent less $CHE_{MALARIA}$ in 2012/13, compared with 2009/10.

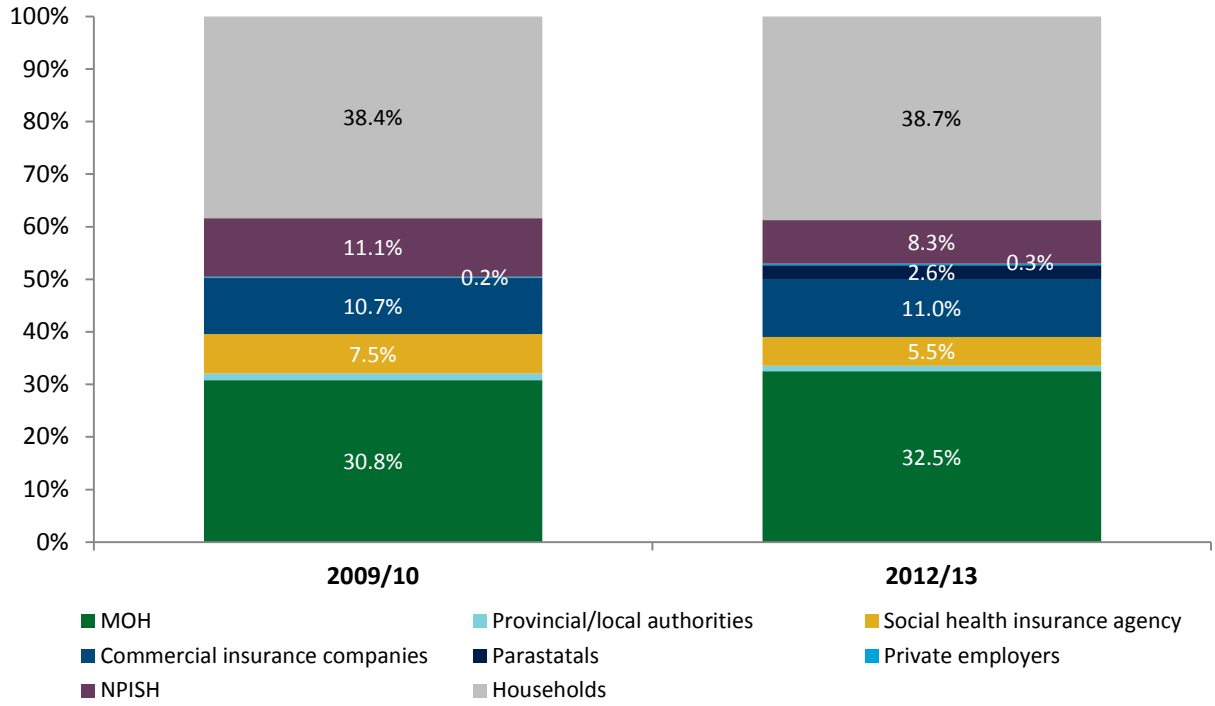
Table 8-4: Financing Schemes for $CHE_{MALARIA}$ in Absolute Values

Financing Schemes	**2009/10** (KSh)	**2012/13** (KSh)	Percentage Change
Central government schemes	12,219,251,318	7,034,713,544	-42%
State/regional/local government schemes	376,703,550	225,461,962	40%
Social health insurance schemes	2,948,607,208	1,183,296,034	60%
Voluntary health insurance schemes	4,202,739,011	2,386,883,748	43%
NPISH financing schemes (including development agencies)	4,378,304,575	1,796,570,291	-59%
Enterprise financing schemes	93,074,874	625,658,996	572%
OOP (excluding cost sharing) schemes	15,081,367,600	8,383,713,864	-44%
Total	**39,300,048,135**	**21,636,298,440**	**-45%**

8.2.4 Healthcare Financing Agents of $CHE_{MALARIA}$

The management of malaria funds still lies heavily with the households. As shown in Figure 8-4, households managed about 39 percent of $CHE_{MALARIA}$ in 2012/13, nearly the same proportion as in 2009/10. The government managed 33 percent of $CHE_{MALARIA}$ in 2012/13—a slight increase of 2.5 percent from 2009/10.

Figure 8-4: Financing Agents of $CHE_{MALARIA}$



All of the financing agents except parastatals managed less of $CHE_{MALARIA}$ in 2012/13, compared with 2009/10. There was a significant decrease in the management of $CHE_{MALARIA}$ in 2012/13. The social health insurance agency and NPISH controlled 60 percent less of $CHE_{MALARIA}$, compared with 2009/10. Table 8-5 shows the absolute values of $CHE_{MALARIA}$ controlled by each financing agent for 2009/10 and 2012/13.

Table 8-5: Healthcare Financing Agents of $CHE_{MALARIA}$ in Absolute Values

Financing Agents	**2009/10** (KSh)	**2012/2013** (KSh)	Percentage Change
MOH	12,100,114,020	7,034,713,544	-41.9%
Provincial/local authorities	506,081,942	225,461,962	-55.5%
Social health insurance agency	2,948,607,208	1,183,296,034	-59.9%
Commercial insurance companies	4,192,497,917	2,386,883,748	-43.1%
Parastatals	12,707,041	570,013,898	4386%
Private employers	80,367,833	55,645,098	-30.8%
NPISH	4,378,304,575	1,796,570,291	-59%
Households	15,081,367,600	8,383,713,864	-44.4%
Total	**39,300,048,135**	**21,636,298,440**	**-45%**

8.2.5 Healthcare Providers of $CHE_{MALARIA}$

In 2012/13, government hospitals and government health centres and dispensaries utilised 26 percent and 20 percent of $CHE_{MALARIA}$, respectively, compared with 44 percent and 12 percent in 2009/10. Providers of healthcare system administration and financing utilised 17 percent of $CHE_{MALARIA}$ in 2012/13, up from 6 percent in 2009/10. Figure 8-5 shows providers of $CHE_{MALARIA}$ in 2009/10 and 2012/13.

Figure 8-5: Healthcare Providers of $CHE_{MALARIA}$

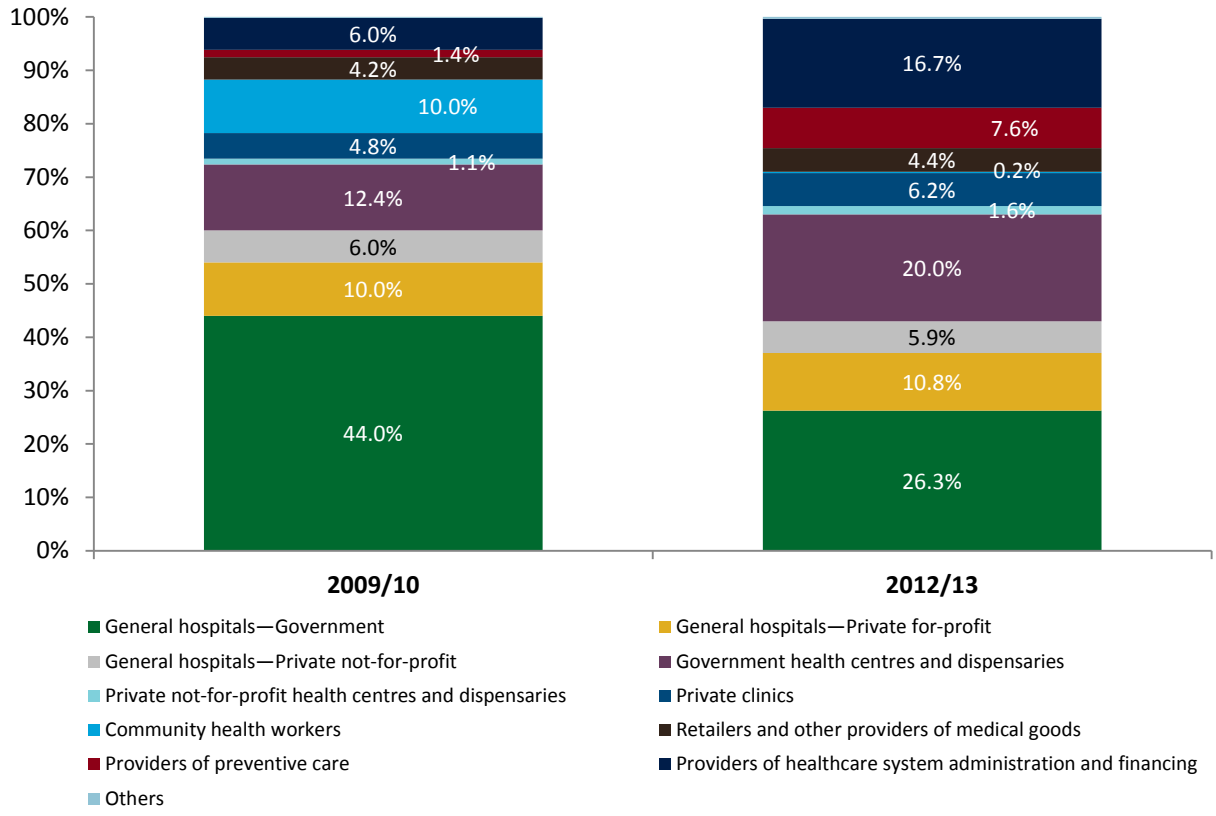


Table 8-6 shows the absolute values of $CHE_{MALARIA}$ by provider in 2009/10 and 2012/13. Providers of preventive healthcare utilised more the 200 percent of $CHE_{MALARIA}$ in 2012/13, compared with 2009/10. All other major providers utilised less of $CHE_{MALARIA}$ in 2012/13, compared with 2009/10 except for governance, and health system and financing administration, which utilised 53 percent more in 2012/13 than in 2009/10.

Table 8-6: Healthcare Providers of $CHE_{MALARIA}$ in Absolute Values

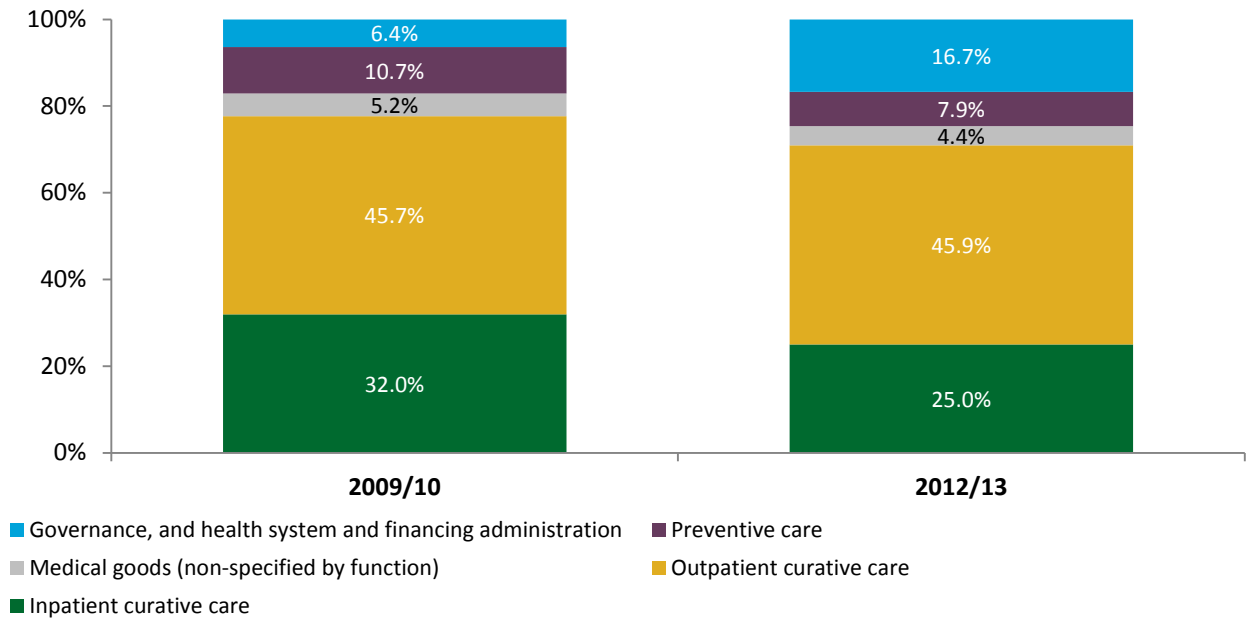
Providers of Malaria Healthcare	**2009/10** (KSh)	**2012/13** (KSh)	**Percentage Change**
General hospitals — Government	17,304,511,706	5,683,317,227	-67%
General hospitals — Private for-profit	3,927,621,098	2,335,212,656	-41%
General hospitals — Private not-for-profit	2,351,171,411	1,286,297,939	-45%
Government health centres and dispensaries	4,860,467,581	4,330,814,609	-11%
Private not-for-profit health centres and dispensaries	418,724,535	337,489,387	-19%
Private clinics	1,891,426,365	1,337,320,232	-29%

Providers of Malaria Healthcare	2009/10 (KSh)	2012/13 (KSh)	Percentage Change
Community health workers	3,932,799,689	53,093,566	-99%
Retailers and other providers of medical goods	1,645,539,304	951,946,968	-42%
Providers of preventive care	544,401,714	1,636,125,211	201%
Governance, and health system and financing administration	2,356,006,892	3,616,269,459	53%
Others	67,377,889	68,411,186	2%
Total	**39,300,048,184**	**21,636,298,440**	**-45%**

8.2.6 Healthcare Functions of $CHE_{MALARIA}$

In 2012/13, most $CHE_{MALARIA}$ funds were used to purchase outpatient and inpatient curative care. Outpatient curative care accounted for about 46 percent of $CHE_{MALARIA}$ in both 2012/13 and 2009/10. The proportion of $CHE_{MALARIA}$ spent on inpatient curative care declined from 32 percent in 2009/10 to 25 percent in 2012/13. Figure 8-6 shows the functions of $CHE_{MALARIA}$ in 2009/10 and 2012/13.

Figure 8-6: Healthcare Functions of $CHE_{MALARIA}$



As shown in Table 8-7, there was a reduction of more than 100 percent in the amount of $CHE_{MALARIA}$ spent on inpatient curative care, medical goods, and preventive care between 2009/10 and 2012/13. The amount spent on governance, and health system and financing administration increased by 30 percent during the same period.

Table 8-7: Healthcare Functions of $CHE_{MALARIA}$ in Absolute Values

Healthcare Functions	**2009/10** (KSh)	**2012/13** (KSh)	Percentage Change
Inpatient curative care	12,566,758,141	5,418,870,859	-131.9%
Outpatient curative care	17,969,836,260	9,931,356,676	-80.9%
Medical goods (non-specified by function)	2,041,905,340	957,577,633	-113.2%
Preventive care	4,202,791,101	1,712,223,813	-145.5%
Governance, and health system and financing administration	2,518,757,294	3,616,269,459	30.4%
Total	**39,300,048,135**	**21,636,298,440**	**-45%**

8.3 CAPITAL FORMATION FOR MALARIA

As shown in Table 8-8, revenues used to finance capital formation for malaria in 2012/13 came primarily from government (64%) and the rest of the world (23%).

Table 8-8: Malaria Spending on Capital Formation, by Institutional Units Providing Revenues of Financing Schemes

Institutional Units	2012/13 (KSh)	Percentage (%)
Government	843,963,280	64%
Corporations	34,158,132	3%
Rest of the world	297,595,728	23%
Households	2,380,000	0%
NPISH	4,516,170	0%
Other institutional units providing revenues to financing schemes (n.e.c.)	134,420,106	10%
Total	**1,317,033,416**	**100%**

9. NONCOMMUNICABLE DISEASES (NCDS)

9.1 INTRODUCTION

NCDs, also known as chronic diseases, are noninfectious, have a long duration, and generally progress slowly. The four main types of NCDs are cardiovascular diseases (e.g., heart attacks and stroke), cancers, chronic respiratory diseases (e.g., chronic obstructed pulmonary disease and asthma), and diabetes.

NCDs are on the rise and currently rank among the leading causes of death in Kenya. Despite efforts at creating awareness among the general population about the risk factors associated with NCDs, such as physical inactivity, tobacco use, unhealthy diet, and excessive use of alcohol, cases of these illnesses and conditions continue to increase.

NCDs disproportionately affect low- and middle-income countries, where nearly three-quarters of NCD deaths occur. In Kenya, the probability of an individual ages 30 to 70 years old dying from one of the four main NCDs currently stands at 1 in 5 (MOH, 2013b).

9.1.1 Summary Statistics

Total health expenditures for noncommunicable diseases (THE_{NCD}) was KSh 14.6 billion (US$170 million) in 2012/13. About 90 percent of these expenditures went to finance current health expenditures on NCDs (CHE_{NCD}), with the balance spent on capital formations for NCDs. In 2012/13, THE_{NCD} accounted for 6.2 percent of THE and 0.4 percent of the GDP. Table 9-1 shows the summary statistics of selected expenditure indicators for NCDs.

Table 9-1: Summary Indicators for NCDs

Indicators	2012/13
THE_{NCD} (KSh)	14,555,585,966
THE_{NCD} (US$)	170,639,929
CHE_{NCD} (KSh)	13,128,287,598
Capital formation for NCDs (KSh)	1,427,298,368
NCDs spending as a % of general THE	6.2%
NCDs spending as a % of GDP	0.43%

9.2 FINANCING DIMENSION

9.2.1 Institutional Units Providing Revenues for Financing Schemes

Health expenditure on more than 65 percent of CHE_{NCD} was financed from two sources: the government (47%) and households (20%). Private employers contributed 14 percent of the expenditure. Figure 9–1 and Table 9–2 show a breakdown of institutional units providing revenues for financing schemes for $CHE_{NCD.}$

Figure 9-1: Institutional Units Providing Revenues for Financing Schemes for NCDs

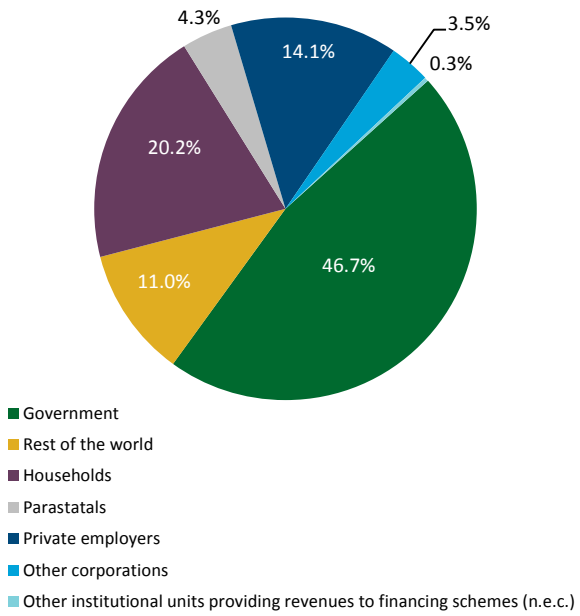


Table 9-2: Institutional Units Providing Revenues for Financing Schemes in Absolute Values (KSh)

Government	6,124,979,450
Rest of the world	1,439,354,532
Households	2,649,612,626
Parastatals	562,642,502
Private employers	1,855,016,151
Other corporations	454,971,781
Others	41,710,556
Total	**13,128,287,598**

9.2.2 Revenues of Financing Schemes of CHE_{NCD}

Most funding for CHE_{NCD} in 2012/13 was channelled through government internal transfers and grants (46%), followed by voluntary prepayment (16%). Figure 9-2 and Table 9-3 show revenues of financing schemes for CHE_{NCD}.

Figure 9-2: Revenues of Financing Schemes of CHE_{NCD}

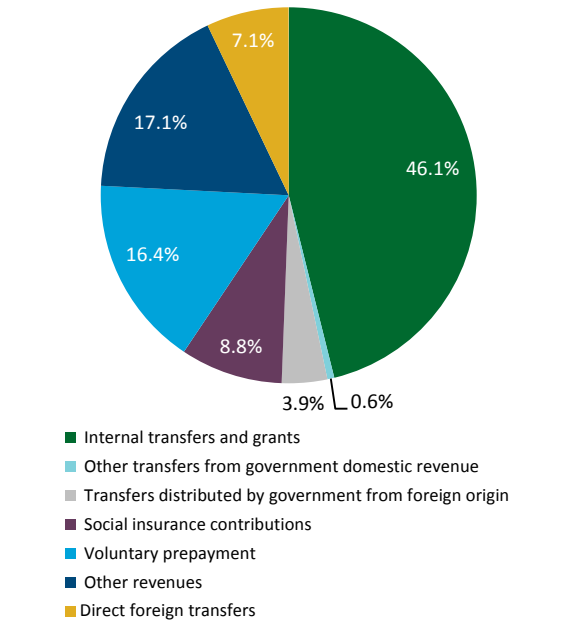


Table 9-3: Revenues of Financing Schemes in Absolute Values (KSh)

Internal transfers and grants	6,048,409,780
Other transfers from government domestic revenue	76,569,670
Transfers distributed by government from foreign origin	510,841,738
Social insurance contributions	1,161,370,925
Voluntary prepayment	2,153,334,784
Other revenues	2,249,247,908
Direct foreign transfers	928,512,794
Total	**13,128,287,598**

9.2.3 Healthcare Financing Schemes of CHE_{NCD}

As shown in Figure 9–3 and Table 9-4, the central government scheme mobilised 50 percent of CHE_{NCD} in 2012/13. Voluntary health insurance and household OOP (excluding cost sharing) schemes mobilised 16 percent and 13 percent of CHE_{NCD}, respectively, in 2012/13.

Figure 9-3: Healthcare Financing Schemes of CHE_{NCD}

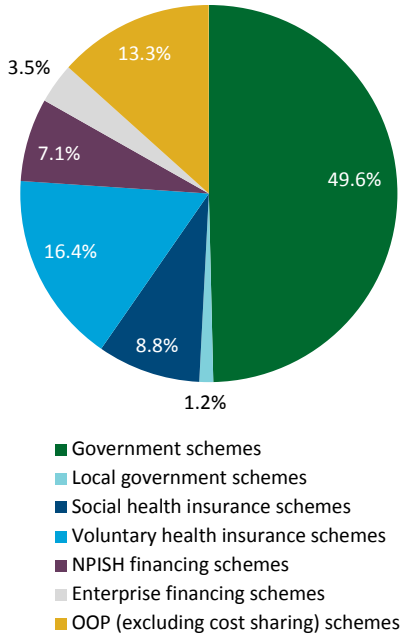


Table 9-4: Healthcare Financing Schemes for CHE_{NCD} in Absolute Values (KSh)

Government schemes	6,513,592,144
Local government schemes	156,905,062
Social health insurance schemes	1,161,370,925
Voluntary health insurance schemes	2,153,334,784
NPISH financing schemes	936,951,432
Enterprise financing schemes	453,567,680
OOP (excluding cost sharing) schemes	1,752,565,571
Total	**13,128,287,598**

9.2.4 Healthcare Financing Agents of CHE_{NCD}

Figure 9-4 and Table 9-5 show that in 2012/13, the MOH managed the largest amount of CHENCD (50%), followed by commercial insurance companies and households at 16 percent and 13 percent, respectively. Each of the other entities controlled less than 10 percent.

Figure 9-4: Healthcare Financing Agents of CHE_{NCD}

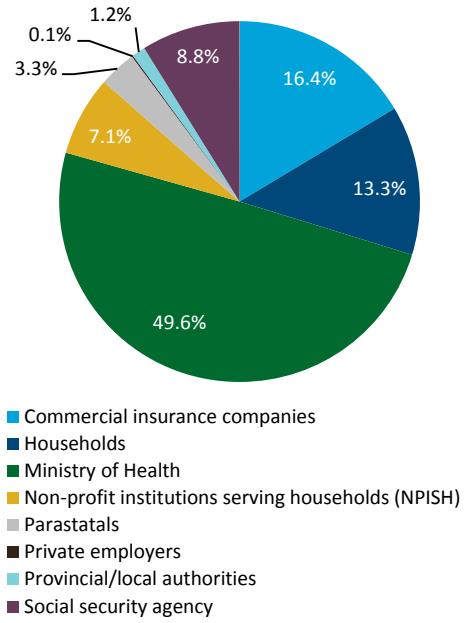


Table 9-5: Healthcare Financing Agents for CHE_{NCD} in Absolute Values (KSh)

Commercial insurance companies	2,153,334,784
Households	1,752,565,571
MOH	6,513,592,144
NPISH	936,951,432
Parastatals	437,488,105
Private employers	16,079,575
Provincial/local authorities	156,905,062
Social security agency	1,161,370,925
Total	**13,128,287,598**

9.2.5 Healthcare Providers of CHE_{NCD}

As shown in Figure 9-5 and Table 9-6, government hospitals, private not-for-profit health centres and dispensaries, and private for-profit hospitals utilised 31 percent, 14 percent, and 12 percent of CHE_{NCD}, respectively, in 2012/13.

Figure 9-5: Healthcare Providers of CHE_{NCD}

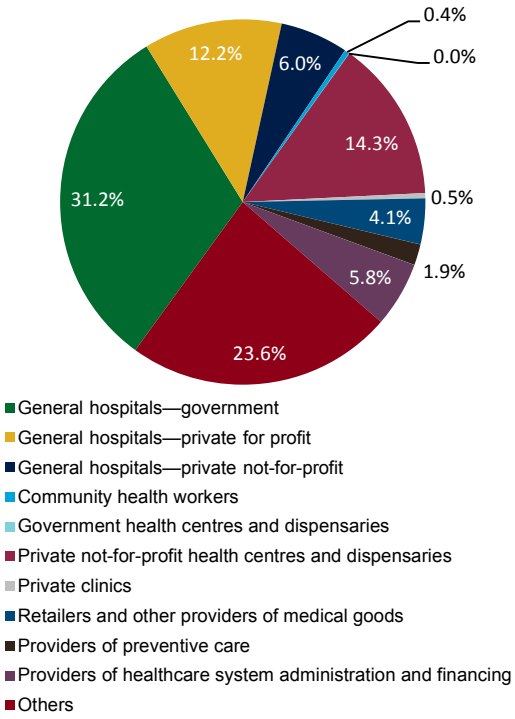


Table 9-6: Healthcare Providers for CHE_{NCD} in Absolute Values (KSh)

General hospitals – Government	4,093,458,290.0
General hospitals – Private for-profit	1,608,115,117
General hospitals – Private not-for-profit	789,602,117
Community health workers	57,436,308
Government health centres and dispensaries	4,476,804
Private not-for-profit health centres and dispensaries	1,877,029,849
Private clinics	59,274,418
Retailers and other providers of medical goods	534,108,404
Providers of preventive care	245,113,534
Providers of healthcare system administration and financing	758,998,759
Others	3,100,673,996
Total	**13,128,287,598**

9.2.6 Healthcare Functions for CHE_{NCD}

Of the total current health spending on NCDs in 2012/13, 36 percent was spent on outpatient curative care, whereas inpatient curative care accounted for 33 percent (see Figure 9–6 and Table 9-7).

Figure 9-6: Healthcare Functions for CHE_{NCD}

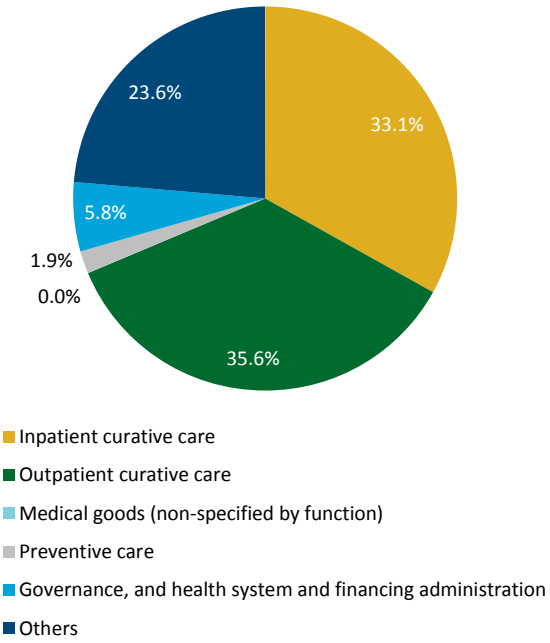


Table 9-7: Healthcare Functions for CHE_{NCD} in Absolute Values (KSh)

Inpatient curative care	4,344,751,552.5
Outpatient curative care	4,670,340,522
Medical goods (non-specified by function)	3,189,686
Preventive care	245,113,534
Governance, and health system and financing administration	764,218,307
Others	3,100,673,996
Total	**13,128,287,598**

9.3 Capital Formation for Noncommunicable Diseases

In 2012/13, a total of KSh 1.4 billion (US$16.7 million) was used for capital formation for NCDs (see Table 9–8). Government and the rest of the world contributed 55 percent and 33 percent of capital formation for NCD, respectively.

Table 9-8 Institutional Units Providing Revenues to Financing Schemes for Capital Formation for NCDs

Institutional Units	2012/13 (KSh)	Percent
Government	780,119,058	55%
Corporations	31,574,744	2%
Households	12,068,945	1%
NPISH	3,952,761	0%
Rest of the world	475,328,981	33%
Others	124,253,879	9%
Total	**1,427,298,368**	**100%**

10. NUTRITIONAL DEFICIENCIES

10.1 INTRODUCTION

Malnutrition in Kenya remains a large public health problem. Kenya has high stunting rates (35%) and currently is experiencing a rise in diet-related NCDs, such as diabetes, cancers, and kidney and liver complications, generally attributed to the consumption of foods low in fibre and high in fats and sugars (MOH, 2005). Without deliberate and concerted effort, this double burden on malnutrition will lead to increased loss of productivity and lives.

Malnutrition in Kenya is not only a threat to achieving Millennium Development Goals and Vision 2030 but is also a clear indication of the inadequate realisation of human rights. Reducing malnutrition in Kenya is not just a health priority but also a political choice—one that calls for a multisectoral focus driven by political will. Acknowledgement of the integral role that nutrition plays in ensuring a healthy population and productive workforce will also be key.

One of the strategic objectives of Kenya's *National Nutrition Action Plan 2012–2017* is to improve access to quality curative nutrition services, especially care and support during illness (MOPHS, 2012). According to the *Kenya Demographic and Health Survey 2008–09* (KNBS, 2010), 30 to 35 percent of children under age five are stunted, 16 percent are underweight, and 7 percent are wasted.

10.1.1 Summary Statistics

Total health expenditure on nutritional deficiency ($THE_{NUTRITIONAL}$) was KSh 896 million (US$10.5 million) in 2012/13. This amount accounted for 0.4 percent of overall THE and 0.09 percent of the GDP. Current health expenditure for nutritional deficiency ($CHE_{NUTRITIONAL}$) comprised 99.9 percent of $THE_{NUTRITIONAL}$, with capital formation for nutritional deficiency accounting for 0.1 percent in 2012/13. Table 10-1 gives summary statistics on nutritional deficiency health expenditure for 2012/13.

Table 10-1: Summary Statistics for Health Expenditure for Nutritional Deficiency

Indicators	2012/13
Population of children under 5 years	6,518,230
Children under 5 years with stunted growth	1,955,469
$THE_{NUTRITIONAL}$ (KSh)	895,780,147
$THE_{NUTRITIONAL}$ (US$)	10,501,526
$CHE_{NUTRITIONAL}$ (KSh)	894,758,195
Capital formation for nutritional deficiency (KSh)	1,021,952
Spending on nutritional deficiency as a % of THE	0.4%
Spending on nutritional deficiency as a % of GDP	0.09%

10.2 FINANCING DIMENSION

10.2.1 Institutional Units Providing Revenues to $CHE_{NUTRITIONAL}$ Financing Schemes

As shown in Figure 10–1 and Table 10-2, revenues for financing $CHE_{NUTRITIONAL}$ were financed mainly by the government and the rest of the world at 48 percent and 52 percent, respectively in 2012/13.

Figure 10-1: Institutional Units Providing Revenues to $CHE_{NUTRITIONAL}$

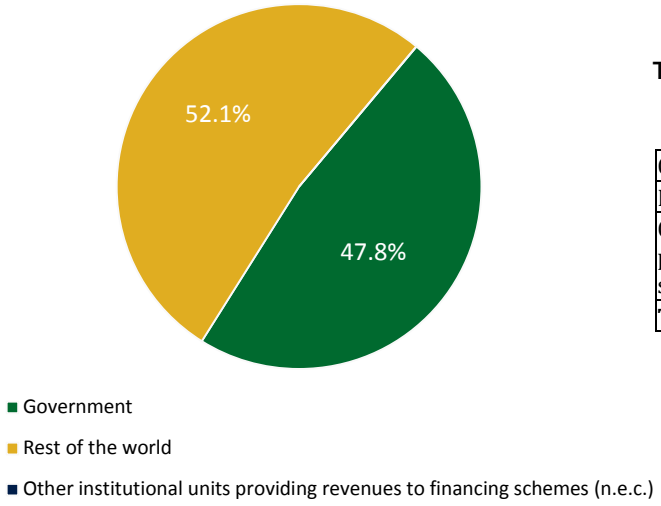


Table 10-2: Institutional Units Providing Revenues to $CHE_{NUTRITIONAL}$ in Absolute values (KSh)

Government	427,927,432
Rest of the world	466,603,611
Other institutional units providing revenues to financing schemes (n.e.c.)	227,152
Total	**894,758,195**

10.2.2 Sources of Revenue for the Financing Schemes for $CHE_{NUTRITIONAL}$

As shown in Figure 10-2 and Table 10-3, the main sources of financing for $CHE_{NUTRITIONAL}$ in 2012/13 were from internal transfers and grants (48%), and direct foreign transfers (52%).

Figure 10-2: Sources of Revenue Financing Scheme to $CHE_{NUTRITIONAL}$

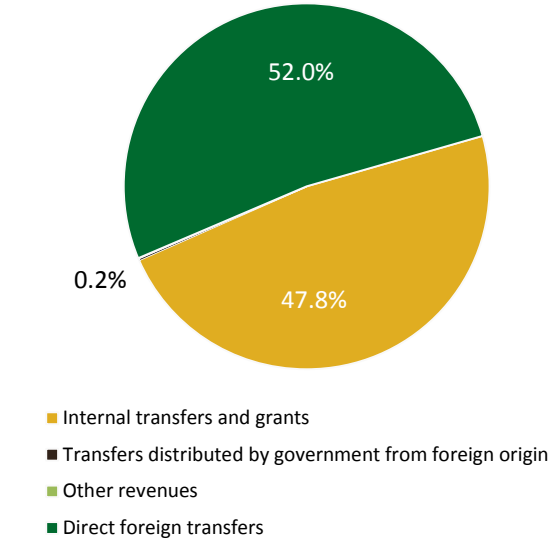


Table 10-3: Sources of Revenue for Financing Schemes for $CHE_{NUTRITIONAL}$ in Absolute Values (KSh)

Internal transfers and grants	427,927,432
Transfers distributed by government from foreign origin	1,500,000
Other revenues	227,152
Direct foreign transfers	465,103,611
Total	**894,758,195**

10.2.3 Healthcare Financing Schemes of $CHE_{NUTRITIONAL}$

Figure 10-3 shows that the revenues of $CHE_{NUTRITIONAL}$ were organised and managed by central government schemes (48%) and NPISH financing schemes (52%) in 2012/13. Table 10-4 shows revenues of $CHE_{NUTRITIONAL}$ in absolute values.

Figure 10-3: Healthcare Financing Schemes of $CHE_{NUTRITIONAL}$

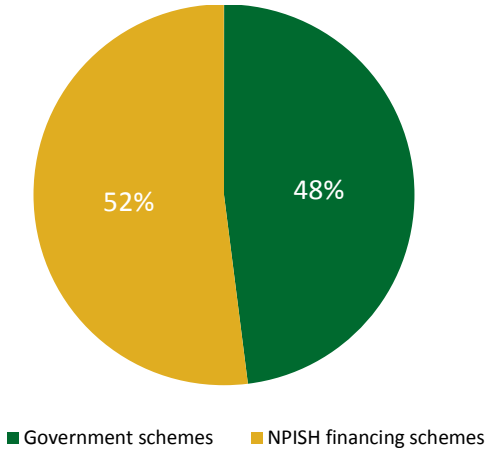


Table 10-4: Healthcare Financing Schemes of $CHE_{NUTRITIONAL}$ in Absolute Values (KSh)

Government schemes	429,427,432
NPISH financing schemes	465,330,763
Total	**894,758,195**

10.2.4 Healthcare Financing Agents for $CHE_{NUTRITIONAL}$

Figure 10–4 shows that the MOH managed 48 percent of $CHE_{NUTRITIONAL}$ revenues, whereas the remaining 52 percent were managed and administered by NPISH in 2012/13. Table 10-5 shows $CHE_{NUTRITIONAL}$ revenues in absolute values.

Figure 10-4: Healthcare Financing Agents for $CHE_{NUTRITIONAL}$

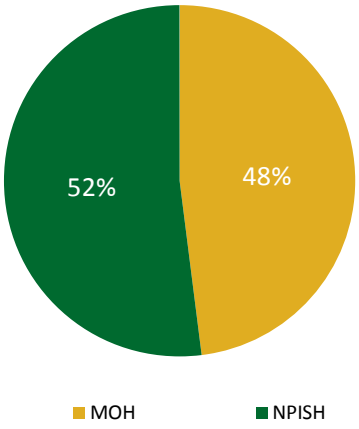


Table 10-5: Healthcare Financing Agents for $CHE_{NUTRITIONAL}$ (KSh)

MOH	429,483,934
NPISH	465,274,262
Total	**894,758,195**

10.2.5 Healthcare Providers for $CHE_{NUTRITIONAL}$

Figure 10–5 and Table 10–6 show the breakdown of healthcare providers for $CHE_{NUTRITIONAL}$. Providers of preventive care utilised 73 percent of the mobilised funds in 2012/13.

Figure 10-5: Healthcare Providers for $CHE_{NUTRITIONAL}$

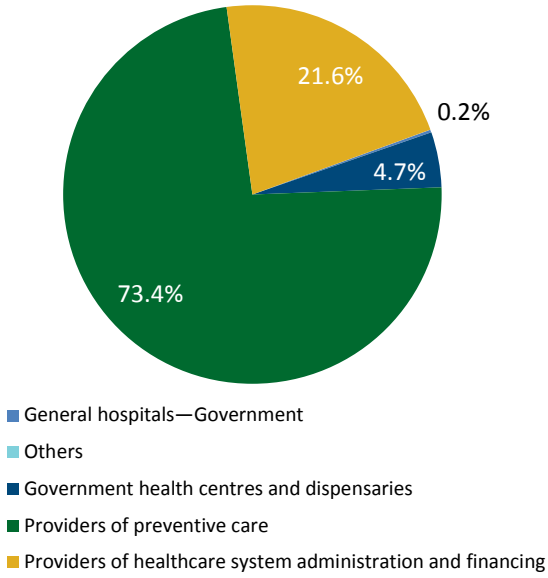


Table 10-6: Healthcare Providers for $CHE_{NUTRITIONAL}$ in Absolute Values (KSh)

General hospitals – Government	2,027,072
Others	7,468
Government health centres and dispensaries	42,157,272
Providers of preventive care	657,074,984
Providers of healthcare system administration and financing	193,491,401
Total	**894,758,195**

10.2.6 Healthcare Functions for $CHE_{NUTRITIONAL}$

Figure 10–6 shows that 78 percent of the mobilised funds were spent on preventive care and 22 percent on governance, and health system and financing administration in 2012/13.

Figure 10-6: Healthcare Functions for $CHE_{NUTRITIONAL}$

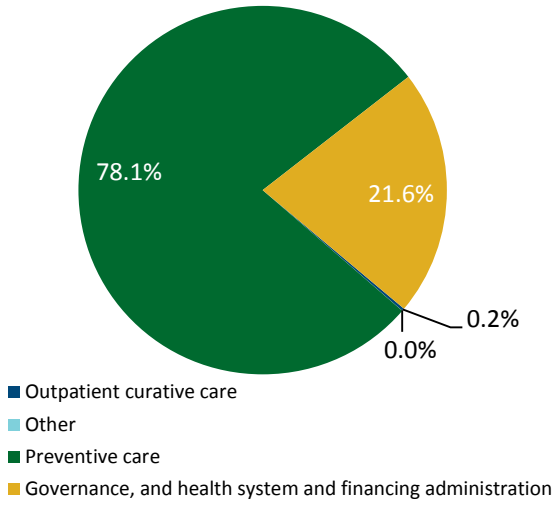


Table 10-7: Healthcare Functions for $CHE_{NUTRITIONAL}$ in Absolute Values (KSh)

Out-patient curative care	2,027,072
Other	7,468
Preventive care	699,232,255
Governance, and health system and financing administration	193,491,401
Total	**894,758,195**

10.3 CAPITAL FORMATION FOR NUTRITIONAL DEFICIENCIES

Table 10-8 shows revenues for financing schemes for capital formation for nutritional deficiencies. In 2012/13, 48 percent of revenues for capital formation for nutritional deficiency came from rest of the world, 38 percent from government, and 14 percent from NPISH.

Table 10-8: Institutional Units Providing Revenues for Financing Schemes for Capital Formation for Nutritional Deficiencies

Institutional Units Providing Revenues to Financing Schemes	**2012/13** (KSh)	**Percentage (%)**
Government	383,989	38%
NPISH	147,116	14%
Rest of the world	490,847	48%
Total	**1,021,952**	**100%**

11 VACCINE-PREVENTABLE DISEASES

11.1 INTRODUCTION

The GOK provides vaccines for vaccine-preventable diseases (VPDs) free of charge through the Division of Vaccines and Immunization. The introduction of a pneumococcal conjugate vaccine into the infant immunization schedule is aimed at improving life expectancy for children in Kenya and contributing to achieving the Millennium Development Goal 4 target.

Long-term annual trends in immunisation coverage are derived from facility reports and regular household surveys. VPD surveillance data (data on polio, measles, pneumococcal disease, and maternal and neonatal tetanus), and are monitored to address gaps in immunisation coverage in a timely manner, as appropriate. Pneumococcal disease and rotavirus surveillance will be used to inform the introduction of rotavirus and meningococcal vaccines (MOPHS, 2011).

11.1.1 Summary Statistics

The total health expenditure on VPD (THE_{VPD}) was KSh 14.6 billion (US$171.7 million) in 2012/13 (Table 11–1). This amount accounted for 6.3 percent of overall THE and 0.43 percent of GDP. Current health expenditure for VPD (CHE_{VPD}) comprised 91 percent of THE_{VPD}, with capital formation for VPD accounting for 9 percent in 2012/13. Table 11-1 gives summary statistics on VPD health expenditure.

Table 11-1: Summary Statistics for Health Expenditure for VPD

Indicators	2012/13
Number of children < 5 years fully immunised (KDHS, 2008/9)	77%
Infant mortality (KDHS, 2008/9)	52/1000
THE_{VPD} (KSh)	14,644,756,862
THE_{VPD} (US$)	171,685,309
CHE_{VPD} (KSh)	13,362,907,805
Capital formation for VPD (KSh)	1,281,849,057
THE_{VPD} spending as a % of THE	6.3%
THE_{VPD} spending as a % of GDP	0.43%

11.2 FINANCING DIMENSION

11.2.1 Institutional Units Providing Revenues for Financing Schemes

Figure 11–1 shows the relative proportions of institutional units providing revenues for financing schemes for CHE_{VPD}; Table 11–2 shows them in absolute values. The rest of the world and government provided 40 percent and 36 percent, respectively, of CHE_{VPD} revenues for financing schemes in 2012/13. Corporations (parastatals and private employers taken together) and households provided almost the same proportion of CHE_{VPD} revenues for financing schemes (11%).

Figure 11-1: Institutional Units Providing Revenues for Financing Schemes of CHE_{VPD}

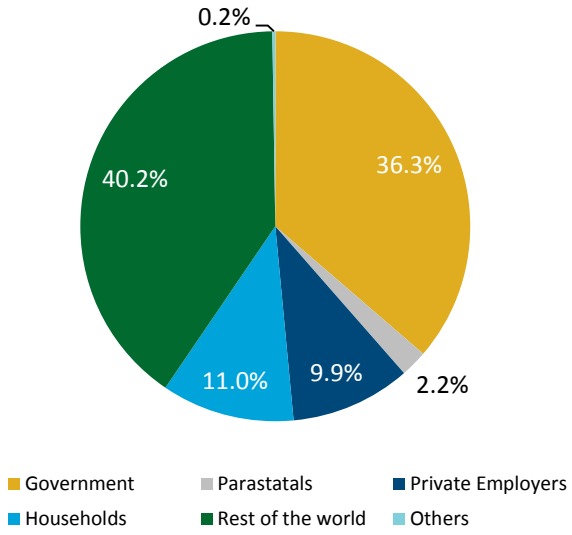


Table 11-2: Institutional Units Providing Revenues for Financing Schemes in Absolute Values (KSh)

Government	4,852,879,526
Parastatals	297,754,553
Private employers	1,329,143,069
Households	1,472,634,644
Rest of the world	5,378,368,662
Others	32,127,351
Total	**13,362,907,805**

11.2.2 Revenues of Healthcare Financing Schemes for CHE_{VPD}

Figure 11-2 indicates that internal transfers and grants provided 34 percent of CHE_{VPD} revenues for healthcare financing schemes in 2012/13, and transfers distributed by government from foreign origin provided 32 percent. Table 11–3 shows revenues of healthcare financing schemes for CHE_{VPD} in absolute values.

Figure 11-2: Revenues of Healthcare Financing Schemes for CHE_{VPD}

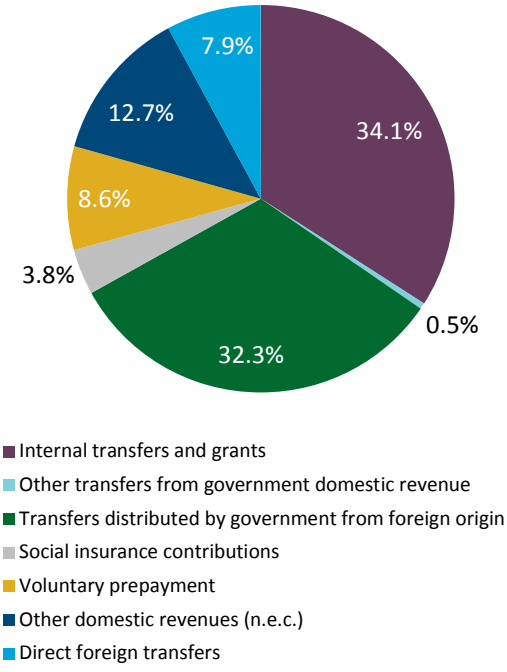


Table 11-3: Revenues of Healthcare Financing Schemes for CHE_{VPD} in Absolute Values (KSh)

Internal transfers and grants	4,553,583,778
Other transfers from government domestic revenue	68,367,407
Transfers distributed by government from foreign origin	4,321,789,880
Social insurance contributions	508,546,454
Voluntary prepayment	1,154,023,142
Other domestic revenues (n.e.c.)	1,700,018,363
Direct foreign transfers	1,056,578,782
Total	**13,362,907,805**

11.2.3 Healthcare Financing Schemes for CHE_{VPD}

As shown in Figure 11–3, about two-thirds of CHE_{VPD} was mobilised through government schemes in 2012/13, compared with 8 percent mobilised through OOP (excluding cost sharing) schemes. Table 11–4 shows healthcare financing schemes for CHE_{VPD} in absolute values.

Figure 11-3: Healthcare Financing Schemes for CE_{VPD}

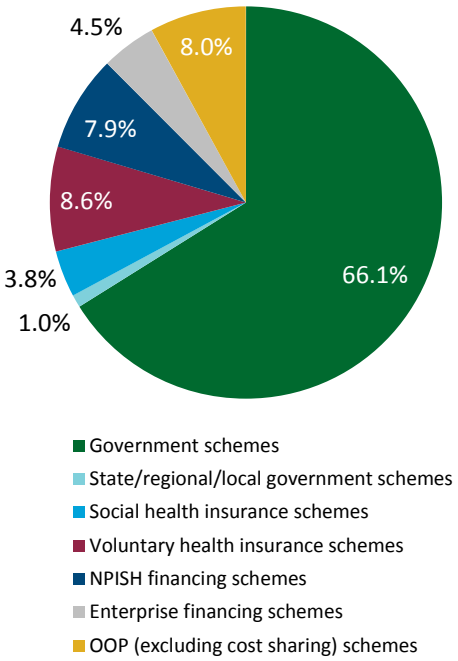


Table11-4: Healthcare Financing Schemes for CHE_{VPD} in Absolute Values (KSh)

Government schemes	8,834,605,389
State/regional/local government schemes	140,097,146
Social health insurance schemes	508,546,454
Voluntary health insurance schemes	1,154,023,142
NPISH financing schemes	1,057,744,663
Enterprise financing schemes	602,705,820
OOP (excluding cost sharing) schemes	1,065,185,192
Total	**13,362,907,805**

11.2.4 Healthcare Financing Agents for CHE_{VPD}

As shown in Figure 11–4, the MOH controlled the largest amount (66%) of CHE_{VPD} in 2012/13, followed by commercial insurance companies (9%) and households (8%). Table 11–5 shows healthcare financing agents for CHE_{VPD} in absolute values.

Figure 11-4: Healthcare Financing Agents for CHE_{VPD}

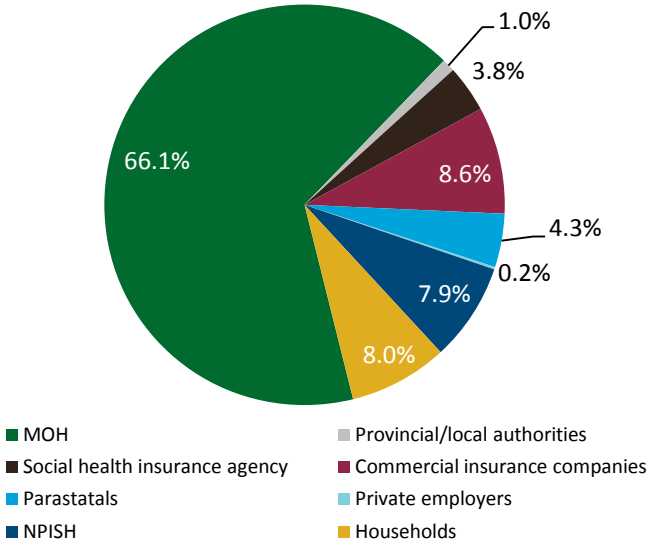


Table 11-5: Healthcare Financing Agents for CHE_{VPD} in Absolute Values (KSh)

MOH	8,834,605,389
Provincial/local authorities	140,097,146
Social health insurance agency	508,546,454
Commercial insurance companies	1,154,023,142
Parastatals	576,731,413
Private employers	25,974,407
NPISH	1,057,744,663
Households	1,065,185,192
Total	**13,362,907,805**

11.2.5 Providers of Healthcare for CHE_{VPD}

As shown in Figure 11–5, government health centres and dispensaries, and government hospitals utilised 34 percent and 17 percent of $CHE_{VPD,}$ respectively, in 2012/13. Providers of healthcare for CHE_{VPD} in absolute values are shown in Table 11–6.

Figure 11-5: Providers of Healthcare for CHE_{VPD}

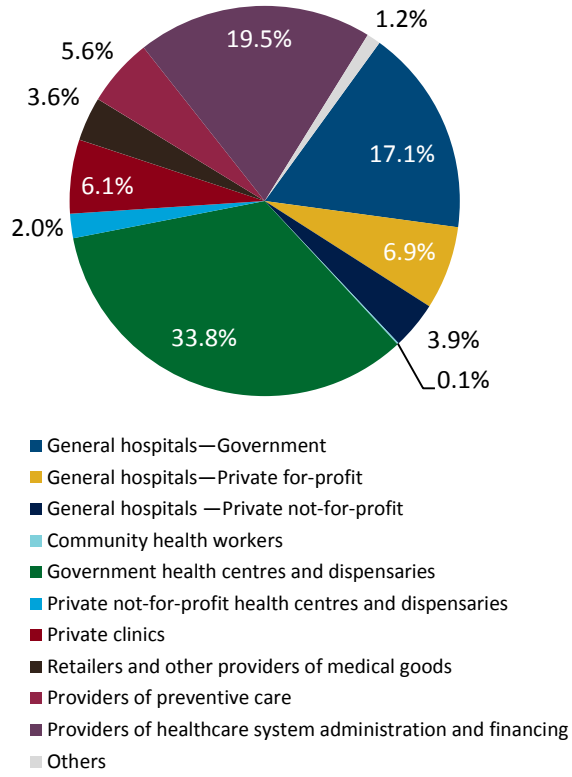


Table 11-6: Providers of Healthcare for CHE_{VPD} in Absolute Values (KSh)

General hospitals – Government	2,290,958,420
General hospitals – Private for-profit	923,978,611
General hospitals – Private not-for-profit	524,060,904
Community health workers	16,476,399
Government health centres and dispensaries	4,521,848,528
Private not-for-profit health centres and dispensaries	271,111,896
Private clinics	816,922,586
Retailers and other providers of medical goods	487,357,043
Providers of preventive care	753,263,217
Providers of healthcare system administration and financing	2,602,027,384
Others	154,902,818
Total	**13,362,907,805**

11.2.6 Healthcare Functions for CHE_{VPD}

Outpatient curative care consumed the largest share of CHE_{VPD} at 60 percent, followed by governance, and health system and financing administration at 34 percent (see Figure 11-6). Table 11–7 shows share of healthcare functions for CHE_{VPD} in absolute values.

Figure11-6: Healthcare Functions for CHE_{VPD}

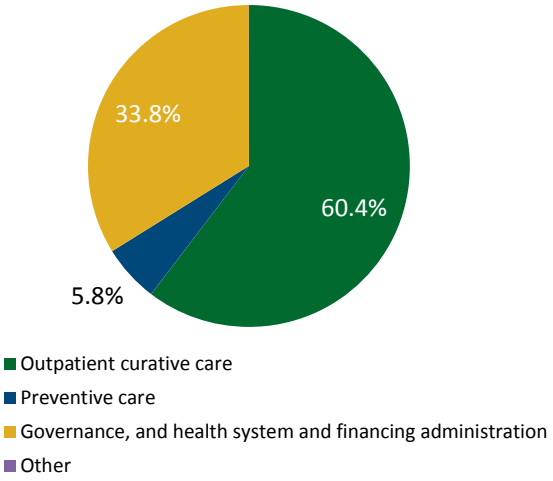


Table 11-7: Healthcare Functions for CHE_{VPD} in Absolute Values (KSh)

Outpatient curative care	8,068,111,257
Preventive care	770,377,703
Governance, and health system and financing administration	4,521,848,527
Other	2,570,317
Total	**13,362,907,805**

11.3 CAPITAL FORMATION FOR VACCINE-PREVENTABLE DISEASES

Table 11-8 shows revenues to financing schemes for VPD. In 2012/13, the majority of revenues for capital formation came from the government (67%).

Table 11-8: Institutional Units Providing Revenues to Financing Schemes for Capital Formation for VPD

Institutional units	**2012/13** (KSh)	Percentage (%)
Government	564,119,134	67%
Corporations	16,074,415	1%
Households	1,120,000	0%
NPISH	2,012,315	0%
Rest of the world	134,471,349	26%
Others	564,051,843	5%
Total	**1,281,849,057**	**100.0%**

12. DIARRHOEAL DISEASE

12.1 DIARRHOEAL DISEASE

The major cause of diarrhoeal illness is consumption of food or water that has been contaminated either by stool or directly from an infected person. Diarrhoeal disease is mainly spread through poor sanitation, especially unsafe drinking water. Notably, the majority of Kenyans still lack access to proper sanitation.

In Kenya, diarrhoeal diseases cause 16 percent of deaths among children below five years of age, second only to pneumonia (MOPHS, 2010). Further, diarrhoea is the third leading cause of ill health for children under five years old. The *2008/09 Kenya Demographic Health Survey* indicated that every child under five years experienced an average of three episodes of diarrhoea in one year, and that diarrhoea was the second leading cause of death among children under five years globally (KNBS and ICF Macro, 2010). Millions of dollars are spent on treatment of diarrhoea annually. In most rural public health facilities, diarrhoea is ranked as the third leading cause of outpatient attendance (MOPHS, 2010). In Kenya, about 80 percent of hospital attendance is due to preventable diseases, and 50 percent of these diseases are water, sanitation, and hygiene related (MOH, 2013b).

12.1.1 Summary Statistics for Diarrhoea Disease

Diarrhoeal disease was one of the top 10 conditions in spending during the NHA 2012/13 estimation period. Total health expenditure on diarrhoeal disease ($THE_{DIARRHOEAL}$) was KSh 5.6 billion (US$65.8 million) in 2012/13, representing 2.4 percent of THE. Expenditure related to diarrhoeal disease accounted for 0.2 percent of the GDP in 2012/13. This constituted 95 percent of current health expenditure for diarrhoeal disease ($CHE_{DIARRHOEAL}$) and 5 percent for capital formation for diarrhoeal disease. Table 12-1 shows the summary of selected health expenditure indicators for diarrhoeal disease in 2012/13.

Table12-1: Summary Indicators for Diarrhoeal Disease

Indicators	2012/13
Population with access to improved water source	52%
Contribution of diarrhoea to mortality	5.99%
$THE_{DIARRHOEAL}$ (KSh)	5,608,124,688
$THE_{DIARRHOEAL}$ (US$)	65,745,893
$CHE_{DIARRHOEAL}$ (KSh)	2,920,341,814
Capital formation for diarrhoeal disease (KSh)	268,468,665
$THE_{DIARRHOEAL}$ spending as a % of THE	2.4%
$THE_{DIARRHOEAL}$ spending as a % of GDP	0.16%

12.2 FINANCING DIMENSION

12.2.1 Institutional Units Providing Revenues for Financing Schemes

Individual households were the major financier of $CHE_{DIARRHOEAL}$, contributing 50 percent in 2012/13. Government and corporations contributed 15 percent and 26 percent of $CHE_{DIARRHOEAL}$, respectively. Figure 12-1 and Table 12–2 show the institutional units providing revenues for financing schemes for $CHE_{DIARRHOEAL}$.

Figure 12-1: Institutional Units Providing Revenues for Financing Schemes for $CHE_{DIARRHOEAL}$

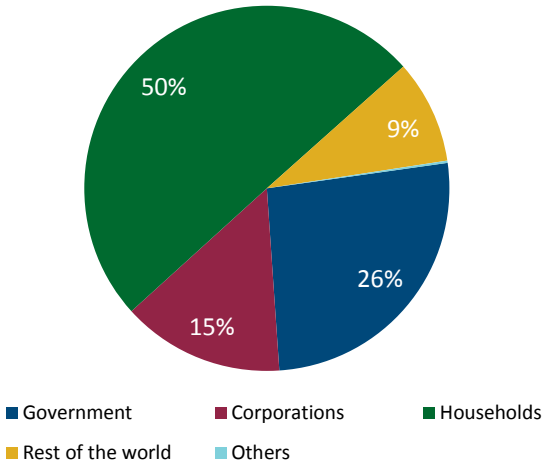


Table 12-2: Institutional Units Providing Revenues for Financing Schemes for $CHE_{DIARRHOEAL}$ in Absolute Values (KSh)

Government	1,394,546,419
Corporations	767,931,703
Households	2,676,689,977
NPISH	375,293
Rest of the world	489,409,255
Others	10,703,377
Total	**5,339,656,023**

12.2.2 Revenues of Healthcare Financing Schemes

As shown in Figure 12–2, most funding for diarrhoeal disease in 2012/13 was financed through voluntary prepayments from individuals/households at 53.8 percent and government internal transfers and grants at 23.3 percent. The two revenue sources accounted for 69 percent of $CHE_{DIARRHOEAL}$. Table 12–3 shows revenues of healthcare finacing for $CHE_{DIARRHOEAL}$ in absolute values.

Figure 12-2: Revenues of Healthcare Financing Schemes for $CHE_{DIARRHOEAL}$

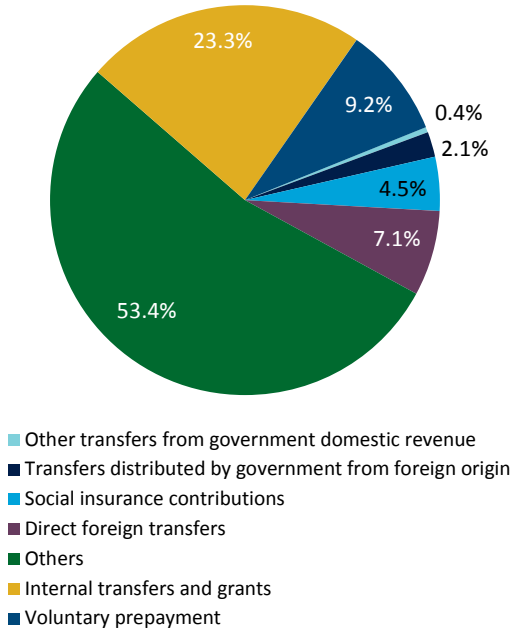


Table 12-3: Revenues of Healthcare Financing Schemes for $CHE_{DIARRHOEAL}$ in Absolute Values (KSh)

Internal transfers and grants	1,243,858,376
Other transfers from government domestic revenue	23,634,607
Transfers distributed by government from foreign origin	111,931,056
Social insurance contributions	238,248,134
Voluntary prepayment	491,606,363
Others	2,852,523,996
Direct foreign transfers	377,853,491.50
Total	5,339,656,023

12.2.3 Healthcare Financing Schemes for $CHE_{DIARRHOEAL}$

The majority of diarrhoeal disease funding in 2012/13 was paid through OOP (excluding cost sharing) and central government schemes, which mobilised 45 percent and 25 percent of the funds, respectively. Figure 12-3 and Table 12–4 show the financing schemes for diarrhoeal disease in 2012/13.

Figure 12-3: Healthcare Financing Schemes for $CHE_{DIARRHOEAL}$

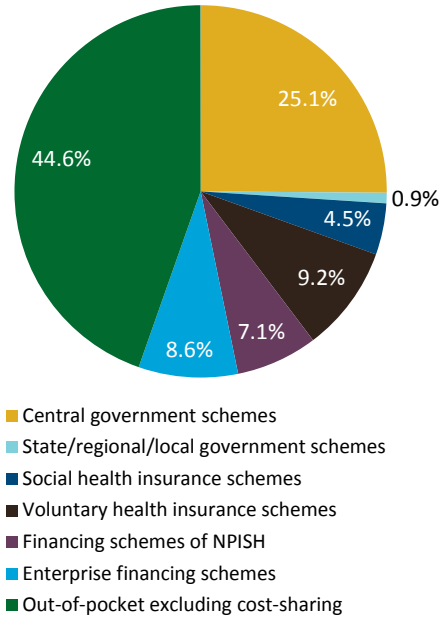


Table 12-4: Healthcare Financing Schemes for $CHE_{DIARRHOEAL}$ in Absolute Values (KSh)

Central government schemes	1,341,320,552
Local government schemes	48,431,571
Social health insurance schemes	238,248,134
Voluntary health insurance schemes	491,606,362
Financing schemes of NPISH	378,228,784
Enterprise financing schemes	459,555,700
OOP (excluding cost sharing) schemes	2,382,264,921
Total	**5,339,656,023**

12.2.4 Healthcare Financing Agents for $CHE_{DIARRHOEAL}$

As shown in Figure 12-4, households and the MOH controlled the majority of $CHE_{DIARRHOEAL}$ at 45 percent and 25 percent, respectively, in 2012/13. Table 12–5 shows healthcare financing agents for in absolute values.

Figure 12-4: Healthcare Financing Agents for $CHE_{DIARRHOEAL}$

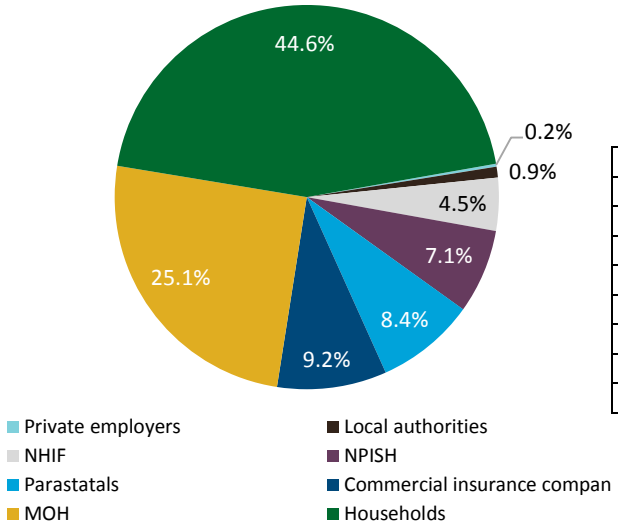


Table 12-5: Healthcare Financing Agents for $CHE_{DIARRHOEAL}$ in Absolute Values (KSh)

MOH	**1,341,320,552**
Local Authorities	48,431,571
NHIF	238,248,134
Commercial insurance companies	491,606,362
Parastatals	447,089,952
Private employers	12,465,748
NPISH	378,228,784
Households	2,382,264,920
Total	**5,339,656,023**

12.2.5 Providers of Healthcare for $CHE_{DIARRHOEAL}$

The highest spending on $CHE_{DIARRHOEAL}$ in 2012/13 was in government hospitals (26%) and health centres and dispensaries (21%). Providers of healthcare system administration and financing utilised 13 percent of $CHE_{DIARRHOEAL}$ in 2012/13. Figure 12–5 and Table 12–6 show healthcare providers of $CHE_{DIARRHOEAL}$ in 2013/13.

Figure 12-5: Providers of Healthcare for $CHE_{DIARRHOEAL}$

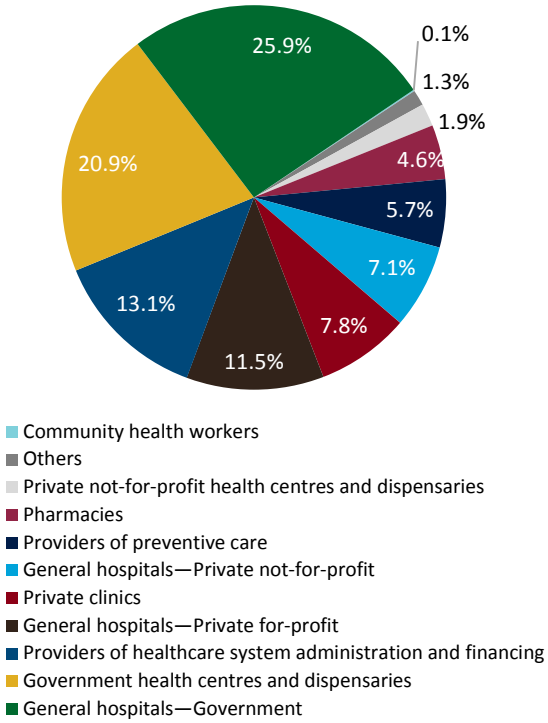


Table 12-6: Providers of Healthcare for $CHE_{DIARRHOEAL}$ in Absolute Values (KSh)

General hospitals – Government	1,382,229,253
General hospitals – Private for-profit	616,504,847
General hospitals – Private not-for-profit	378,111,076
Community health workers	6,151,911
Government health centres and dispensaries	1,113,996,290
Private not-for-profit health centres and dispensaries	102,809,165
Private clinics	419,120,464
Pharmacies	243,174,372
Providers of preventive care	306,285,223
Providers of healthcare system administration and financing	701,168,880
Others	70,104,544
Total	**5,339,656,023**

12.2.6 Healthcare Functions for $CHE_{DIARRHOEAL}$

Of the total $CHE_{DIARRHOEAL}$ in 2012/13, 52 percent was spent on outpatient curative care, whereas inpatient curative care expenditures accounted for 25 percent. Figure 12–6 shows the breakdown of healthcare functions for $CHE_{DIARRHOEAL}$ in 2012/13; Table 12–7 shows absolute values.

Figure 12-6: Healthcare Functions for $CHE_{DIARRHOEAL}$

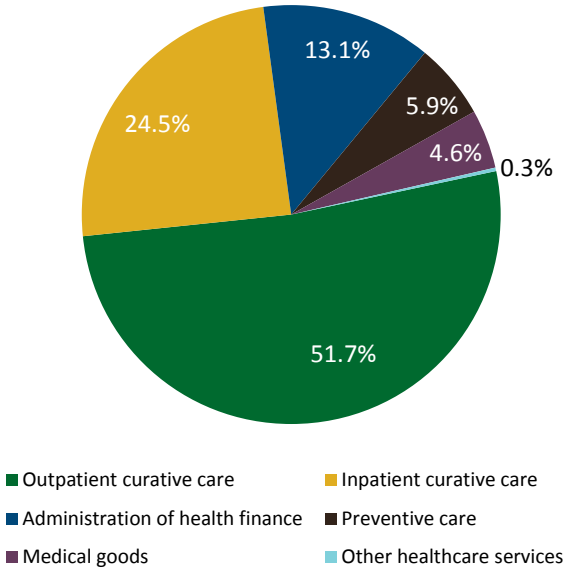


Table 12-7: Healthcare Functions for $CHE_{DIARRHOEAL}$ in Absolute Values (KSh)

Inpatient curative care	**1,308,689,598**
Outpatient curative care	2,759,705,649
Medical goods	243,174,372
Preventive care	312,971,909
Administration of health finance	701,168,880
Other healthcare services	13,945,616
Total	**5,339,656,023**

12.3 CAPITAL FORMATION FOR DIARRHOEAL DISEASE

In 2012/13, a total of KSh 268.5 million (US$3 million) was spent on capital formation for diarrhoeal disease. Government contributed most of the funds for capital formation at 64.3 percent, whereas the rest of the word contributed 23 percent. Table 12-8 shows the institutional units providing revenues for capital formation in 2012/13.

Table 12-8: Institutional Units Providing Revenues to Financing Schemes for Capital Formation for Diarrhoeal Disease

Institutional Units Providing Revenues to Financing Schemes	2012/13 (KSh)	Percentage
Government	172,751,411	64.3%
Corporations	4,345,419	1.6%
Households	480,000	0.2%
NPISH	2,030,195	0.8%
Rest of the world	61,751,704	23.0%
Others	27,109,937	10.1%
Total	**268,468,665**	**100.0%**

13. RESPIRATORY INFECTIONS

13.1 INTRODUCTION

Regardless of age or gender, acute respiratory tract infections are the most common illnesses and generally occur twice as frequently as the second most common condition, malaria. Acute respiratory tract infections contribute 2 to 4 percent of deaths in children under five years of age in developed countries, and 19 to 21 percent in the Eastern Mediterranean, Africa, and Southeast Asia regions.

A respiratory infection is one of the most common outpatient diagnoses in the Kenya health system. In 2012/13, respiratory infections accounted for about 35 percent of the top 10 leading causes of outpatient morbidity. Respiratory infections account for 3.1 percent of the leading causes of deaths and disability-adjusted life years (Institute for Health Metrics and Evaluation, 2010).

13.1.1 Summary Statistics for Respiratory Infections

As shown in Table 13-1, the total health expenditure for respiratory infections (THE_{RESP}) in 2012/13 was KSh 15.18 billion (US$178 million). Current health expenditure for respiratory infections (CHE_{RESP}) accounted for 94 percent, with capital formation for respiratory infections accounting for only 6 percent; THE_{RESP} was 6.5 percent of THE and 0.45 percent of GDP in 2012/13.

Table 13-1: Summary Statistics for Respiratory Infections

Indicators	2012/2013
THE_{RESP} (KSh)	15,176,040,635
THE_{RESP} (US$)	177,913,724
CHE_{RESP} (KSh)	14,265,478,197
Capital formation for respiratory infections (KSh)	910,562,438
THE_{RESP} as a % of THE	6.5%
THE_{RESP} as a % of GDP	0.45%

13.2 FINANCING DIMENSION

13.2.1 Institutional Units Providing Revenues for Financing Schemes of CHE_{RESP}

In 2012/13, households contributed the highest proportion of CHE_{RESP} at 38.2 percent, followed by government at 35.8 percent. The contribution of households and private employers accounted for almost half of total CHE_{RESP} contribution, implying that the burden is still borne by the households (see Figure 13–1 and Table 13–2).

Figure 13-1: Institutional Units Providing Revenues for Financing Schemes for CHE_{RESP}

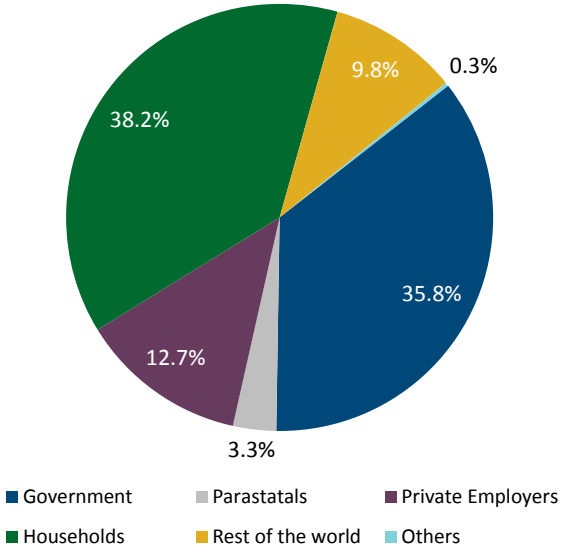


Table 13-2: Institutional Units Providing Revenues for Financing Schemes for CHE_{RESP} in Absolute Values (KSh)

Government	5,085,156,242
Parastatals	463,608,565
Private Employers	1,799,625,019
Households	5,421,062,028
Rest of the world	1,393,861,898
Others	36,366,936
Total	**14,199,680,688**

13.2.2 Revenues of Financing Schemes for CHE_{RESP}

As shown in Figure 13-2, revenue for financing schemes for CHE_{RESP} in 2012/2013 came mainly from other domestic sources, accounting for 38 percent. Other funding came from internal transfers and grants (32%), voluntary prepayment (13%), and social insurance (6.3%). Table 13-3 shows revenues of financing schemes for CHE_{RESP} in absolute values.

Figure 13-2: Revenues of Financing Schemes for CHE_{RESP}

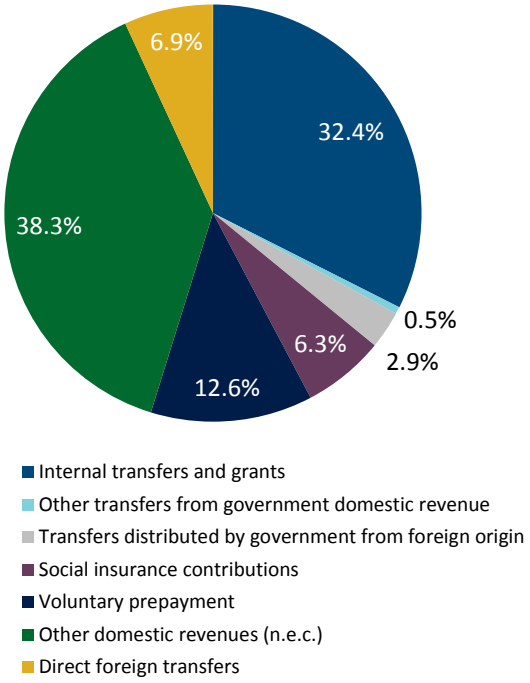


Table 13-3: Revenues of Financing Schemes for CHE_{RESP} in Absolute Values (KSh)

Internal transfers and grants	4,606,860,707
Other transfers from government domestic revenue	77,711,846
Transfers distributed by government from foreign origin	413,543,472
Social insurance contributions	901,120,628
Voluntary prepayment	1,784,828,059
Other domestic revenues (n.e.c.)	5,435,297,549
Direct foreign transfers	980,318,427
Total	**14,199,680,688**

13.2.3 Healthcare Financing Schemes for CHE_{RESP}

During 2012/13, respiratory infection services were mostly financed through the central government (35%), followed by households' OOP payments (33%), as shown in Figure 13-3 and Table 13–4.

Figure 13-3: Healthcare Financing Schemes for CHE_{RESP}

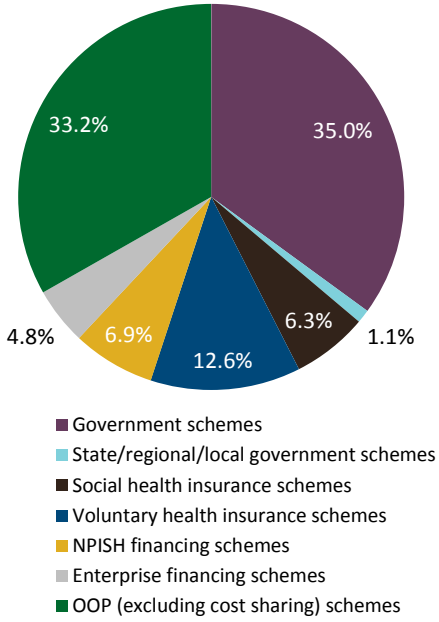


Table 13-4: Healthcare Financing Schemes for CHE_{RESP} in Absolute Values (KSh)

Government schemes	4,974,063,713
Local government schemes	159,245,586
Social health insurance schemes	901,120,628
Voluntary health insurance schemes	1,784,828,059
NPISH financing schemes	981,492,088
Enterprise financing schemes	682,697,727
OOP (excluding cost sharing) schemes	4,716,232,886
Total	**14,199,680,688**

13.2.4 Healthcare Financing Agents for CHE_{RESP}

The MOH and households managed 35 percent and 33 percent of CHE_{RESP}, respectively, in 2012/13. The other notable managers of CHE_{RESP} resources included commercial insurance at 12.6 percent. Figure 13–4 and Table 13–5 show the healthcare financing agents for CHE_{RESP}.

Figure 13-4: Healthcare Financing Agents for CHE_{RESP}

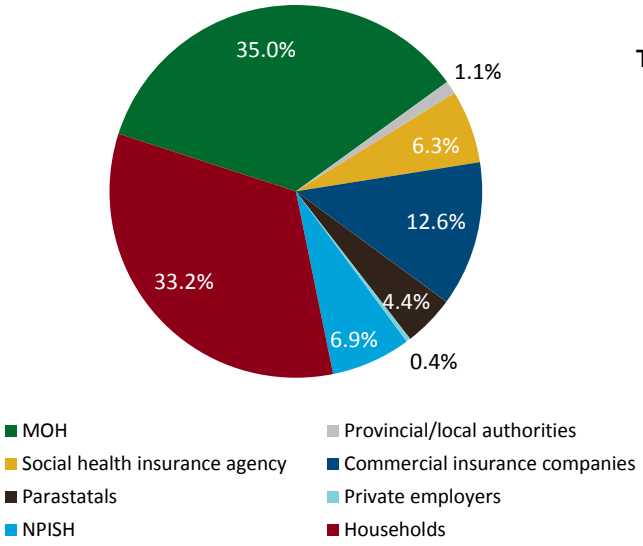


Table 13-5: Healthcare Financing Agents for CHE_{RESP} in Absolute Values (KSh)

MOH	4,974,063,713
Provincial/local authorities	159,245,586
Social insurance agency	901,120,628
Commercial insurance companies	1,784,828,059
Parastatals	629,897,288
Private employers	52,800,438
NPISH	981,492,088
Households	4,716,232,886
Total	**14,199,680,688**

13.2.5 Providers of Healthcare for CHE_{RESP}

Figure 13–5 and Table 13–6 show the utilisation of CHE_{RESP} by providers of healthcare. Public health facilities utilised almost half of CHE_{RESP} at 46.4 percent (government hospitals at 26.8% and government health centres and dispensaries at 19.6%). Healthcare system administration utilised 17.4 percent, whereas not-for-profit hospitals utilised 11.7 percent of the CHE_{RESP} in 2012/13.

Figure 13-5: Providers of Healthcare for CHE_{RESP}

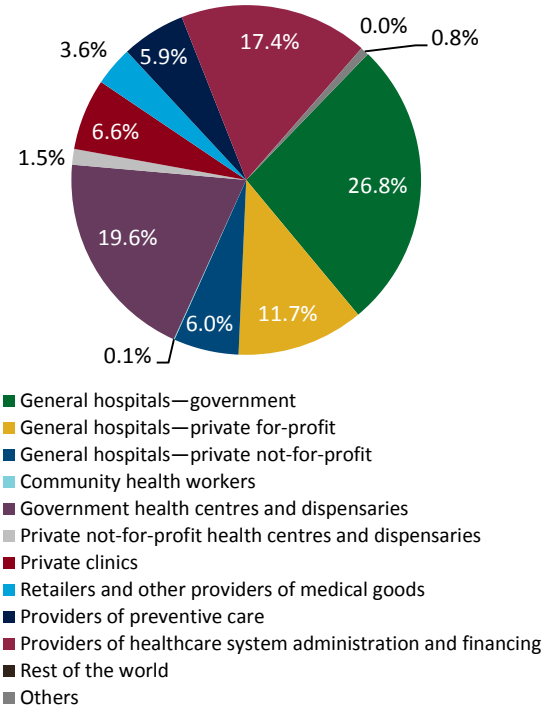


Table 13-6: Providers of Healthcare for CHE_{RESP}

General hospitals – Government	3,798,458,302
General hospitals – Private for-profit	1,666,295,057
General hospitals – Private not-for-profit	853,947,537
Community health workers	13,117,521
Government health centres and dispensaries	2,779,747,711
Private not-for-profit health centres and dispensaries	206,708,806
Private clinics	937,488,383
Retailers and other providers of medical goods	516,449,241
Providers of preventive care	839,470,032
Providers of healthcare system administration and financing	2,477,210,944
Rest of the world	1,631,813
Others	109,155,342
Total	**14,199,680,688**

13.2.6 Healthcare Functions for CHE_{RESP}

As depicted in Figure 13–6, about half of the resources for CHE_{RESP} in 2013/13 were spent on outpatient curative services (48%). Inpatient curative care utilised 24.5 percent of the total CHE_{RESP}. Table 13–7 shows healthcare functions for CHE_{RESP} in absolute values.

Figure 13-6: Healthcare Functions for CHE_{RESP}

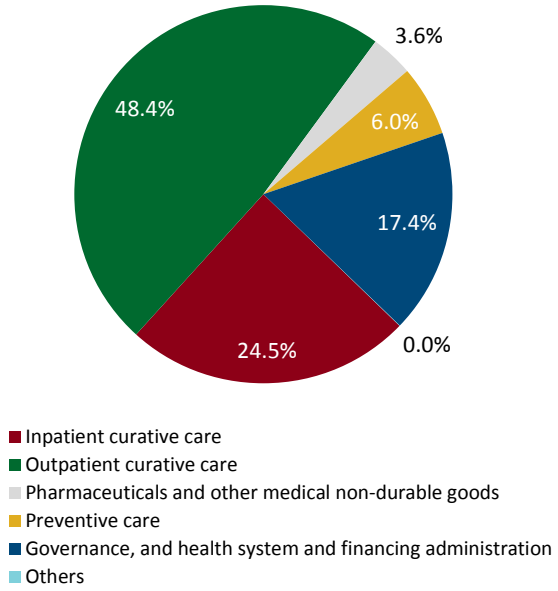


Table 13-7: Healthcare Functions for CHE_{RESP} in Absolute Values (KSh)

Inpatient curative care	3,478,927,267
Outpatient curative care	6,868,392,167
Pharmaceuticals and other medical non-durable goods	516,449,241
Preventive care	854,830,639
Governance, and health system and financing administration	2,477,210,944
Others	3,870,430
Total	**14,199,680,688**

13.3 CAPITAL FORMATION FOR RESPIRATORY INFECTIONS

Table 13-8 shows the breakdown of the institutional units providing revenues to financing schemes for capital formation for respiratory infections in 2012/13. Government financed 65 percent, followed by the rest of the world at 22 percent.

Table 13-8: Institutional Units Providing Revenues to Financing Schemes for Capital Formation for Respiratory Infections

Institutional Units Providing Revenues of Financing Schemes	**2012/13** (KSh)	Percentage
Government	631,187,238	64.7%
Corporations	25,546,838	2.6%
Households	1,780,000	0.2%
NPISH	3,198,144	0.3%
Rest of the world	214,115,043	21.9%
Other institutional units providing revenues to financing schemes (n.e.c.)	100,532,684	10.3%
Total	**976,359,947**	**100%**

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ANNEXES

ANNEX A: DEFINITIONS OF HEALTH EXPENDITURE INDICATORS

THE = Total health expenditure (THE) from all sources in a calendar year.

THE as share of GDP = Total health expenditure (THE) as percentage of gross domestic product (GDP).

THE per capita = Total health expenditure (THE) divided per total population.

GHE as share of GGE = Government expenditure on health (GHE) as a percentage of (total) general government expenditure (GEE) in all sectors.

OOP = Out-of-pocket (OOP) expenditure by individuals/households at the time of use or purchase of healthcare services and goods.


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