Republic of Kenya

KENYA NATIONAL HEALTH ACCOUNTS FY 2015/16: 2019 UPDATE

Ministry of Health

Collaborating institutions: Ministry of Health, Policy, Planning, and Health Financing Department and other departments and divisions; Ministry of Devolution and Planning, Kenya National Bureau of Statistics; U.S. Agency for International Development/Kenya; Health Policy Plus; and the World Health Organization.

Financial support: This study was funded by the U.S. Agency for International Development (USAID) through the Health Policy Plus (HP+) project. The views expressed in this publication do not necessarily reflect the views of USAID or the United States Government.

Recommended Citation: Ministry of Health. 2019. *Kenya National Health Accounts 2015/2016*. Nairobi, Kenya: Government of Kenya.

Contact İnformation: Ministry of Health, Policy and Planning, P.O. Box 30016, 00100 Nairobi, Kenya. Telephone: +254 (0) 20 2717077

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Acronyms

AIDS	acquired immune deficiency syndrome
CHE	current health expenditure
FY	fiscal year
GDP	gross domestic product
HIV	human immunodeficiency virus
HP+	Health Policy Plus
HPP	Health Policy Project
KSH	Kenyan shilling
MOH	Ministry of Health
NGO	non-governmental organization
NHA	National Health Accounts
NHAPT	National Health Accounts Production Tool
SHA	System of Health Accounts
THE	total health expenditure
USAID	U.S. Agency for International Development
USD	U.S. dollar

Acknowledgements

This report provides a comprehensive analysis of health expenditure and financing flows throughout the Kenyan healthcare sector. Data on expenditure was collected, analyzed, and validated to produce this report. This report was prepared with close collaboration between the Government of Kenya's Ministry of Health, its partners, and stakeholders.

The 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 Njuguna David (Health Economist, Ministry of Health). The report benefited greatly from the valuable contributions of Stephen Kaboro, Tom Mirasi, Henry Onyiego, and Dr. Elizabeth Wangia: officers in the Ministry of Health.

The U.S. Agency for International Development (USAID) provided technical and financial assistance through the Health Policy Plus (HP+) project. Without this support, it would have been impossible to undertake the analysis and complete this report. The Ministry of Health acknowledges technical guidance given by Stephen Muchiri (Programme Director, HP+), and project staff Thomas Maina (Senior Finance Advisor, HP+) and Dr. Daniel Mwai (Finance Advisor, HP+).

Lastly, we gratefully acknowledge the collaboration of various organizations and private firms in supporting data collection by providing data for the analysis. These organizations and institution include private firms, parastatals, non-governmental organizations (NGOs), insurance firms, government ministries, departments, and agencies.

Julius Korir

Principal Secretary

Executive Summary

The estimation of Kenya National Health Accounts (NHA) was undertaken in order to track the flow of funds in the health sector for the fiscal year (FY) 2015/16. The NHA is an important tool for understanding the financing of a country's health sector, providing a framework for measuring total public and private health expenditures.

Total health expenditure: Total health expenditure (THE), comprising current health expenditure (CHE) and capital formation in Kenya was 346 billion Kenyan shillings (KSh) (3,476 million U.S. dollars, or USD) in FY 2015/16, an increase of 27.7% from KSh 271 billion (USD 3,188 million) in FY 2012/13. Total health spending in FY 2015/16 accounted for 5.2% of gross domestic product (GDP), down from 6.8% in FY 2012/13. The government expenditure on health as a percent of total government expenditure increased from 6.1% in FY 2012/13 to 6.7% in FY 2015/16.

The per capita expenditure in USD has increased from KSh 6,602 (USD 77.4) in FY 2012/13 to KSh 7,822 (USD 78.6) in FY 2015/16 due to the weakening of the KSh against the USD. The per capita expenditure, government health expenditure as a percent of the THE, and the proportion of GDP spent on health have been increasing since 2001/02 estimates.

Revenues of financing schemes: Revenues for financing schemes come from three major sources—the government, households, and donors. The government was the major financier of health, contributing 33% of CHE in FY 2015/16, up from 31% in FY 2012/13. The household contribution to CHE was 32.8% in FY 2015/16—an increase over the FY 2012/13 estimate of 32%—while the donor contribution was 22% of CHE in FY 2015/16, down from 25.5% in FY 2012/13.

The overall amount of revenue mobilized to finance CHE increased by 24% between FY 2012/13 and FY 2015/16. Funds mobilized through the government and households increased by 32% and 28%, respectively.

Healthcare financing schemes for THE revenue FY 2009/10–FY 2015/16: In FY 2015/16, 37.4% of CHE was mobilized through central government schemes, up from 34% in FY 2012/13. Household out-of-pocket payments (excluding cost sharing) and NGO financing schemes mobilized 28% and 16.4% of CHE funds in FY 2015/16, respectively.

Overall, the amount for CHE financing schemes increased by 24% between FY 2012/13 and FY 2015/16. The funds for CHE mobilized through county government and voluntary health insurance scheme financing increased by 2395% and 54% between FY 2012/13 and FY 2015/16. The absolute value of THE funds mobilized through NGO financing schemes increased by 10% during the same period.

Financing agents: Financing agents manage healthcare financing schemes. The role of the Ministry of Health (MOH) as a financing agent has decreased to 18.7% of CHE in FY 2015/16 from 32.4% in FY 2012/13 with the entrant of counties who managed 18.2%. Households through out-of-pocket payments and NGOs controlled 27.7% and 16.4% of CHE, respectively, in FY 2015/16.

The MOH, the County Department of Health, and other government entities continue to control a large percentage of THE. The role of households in managing funds for health increased by 54% between FY 2009/10 and FY 2015/16, while that of NGOs was reduced by 3%.

Healthcare providers: Providers of healthcare receive money from financing agents in exchange for or in anticipation of providing the required healthcare services. These include public and private health facilities, pharmacies and shops, traditional healers, community health workers, providers of public health programmes, and general administration, among others.

Government hospitals utilized 20.5% of CHE in FY 2015/16, down from 25.6% in FY 2012/13. The role of providers of preventive health programmes remained at 14% in the study period, while that of providers of health administration increased from 8% in FY 2009/10 to 20% of CHE in FY 2015/16.

Providers of healthcare system administration and financing and government health centres and dispensaries utilized more of CHE in FY 2015/16 compared to FY 2012/13, with a 26% and 19% increase, respectively.

Healthcare functions: Healthcare functions consist of goods and services provided and activities performed by healthcare providers. General healthcare functions include curative care (inpatient and outpatient), provision of pharmaceuticals from independent pharmacies, prevention and public health programmes, healthcare administration, and capital formation.

The amount of CHE spent on inpatient care increased marginally, from 20.3% in FY 2012/13 to 20.4% in FY 2015/16, while that for outpatient curative care decreased, from 41.4% to 39.5%. Prevention and public health programmes utilized less of CHE, at 16.2% in FY 2015/16 compared to 14.7% in FY 2012/13. A notable increase was the amount of CHE spent on health administration, which more than doubled to 20.1% in FY 2012/13 and FY 2015/16 from 9.3% in FY 2009/10.

The amount of CHE in absolute values used for inpatient curative care, outpatient curative care, and medical goods increased by 25%, 19%, and 18%, respectively, in FY 2015/16 over FY 2012/13 levels. Absolute values of CHE spent on administration of healthcare increased by 24% between FY 2012/13 and FY 2015/16, partly due to better disaggregated data by reporting entities as well as devolution of healthcare services to 47 new administrative units.

Capital formation: The government contributed the largest share of resources for capital formation at 95%, 46%, and 55% in FY 2009/10, FY 2012/13, and FY 2015/16, respectively. The government contributed KSh 11 billion and donors contributed KSh 8.6 billion for capital formation in FY 2015/16.

Expenditure by disease area: The choice of priority diseases for analysis in the NHA was informed by the burden of disease in the country (top causes of death and disabilities) as classified in the World Health Organization's International Classification of Diseases.

HIV/AIDS took the largest share of resources for health, at 18.7% and 20.1% in FY 2012/13 and FY 2015/16, respectively, followed by reproductive health, at 12.9% and 12.1%.

Introduction and Background

The NHA is a systematic, comprehensive, and consistent method for monitoring resource flows in a country's health system. It is a tool for health sector management and policy development that measures total public and private (including household) health expenditures. It tracks all expenditure flows within a health system, linking the sources of funds to service providers and to the ultimate use of the funds. Thus, the NHA answers questions such as: Who pays for health services? How much does each entity pay? What do these resources purchase? Who manages health funds? Which providers are paid to provide health services? And which services are paid for by the healthcare funds?

The NHA is designed to facilitate the successful implementation of health system goals by policymakers who are entrusted with the responsibility of providing an optimal package of goods and services to maintain and enhance the health of individuals and populations. This is expected to protect families from an unfair financial burden. For any given year, the NHA traces all the resources that flow through the health system over time. Due to its internationally standardized framework, it also facilitates comparison across countries.

The NHA thus provides essential data for optimizing health resource allocation and mobilization, for identifying and tracking shifts in resource allocations (e.g., from curative to preventive, or from public to private sector), for comparing findings with other countries, and finally, for assessing equity and efficiency in a dynamic health sector environment. Given the flexibility of the NHA, it is also possible to collate NHA findings with other secondary health data to assess whether targeted health interventions are having the desired impact.

History of the NHA in Kenya

Healthcare is provided by a complex and changing combination of government, private for-profit, and non-profit providers. In such an environment, policymakers need reliable national and subnational information on sources and uses of funds for health, preferably comparable over time and across countries, in order to enhance health system performance.

National Health Accounts are a key policy tool for the health sector in Kenya. With their integrated and detailed presentation of health financing information, they have become an essential source of information, guiding the policy process and informing decision makers. Kenya has adopted the NHA methodology since 1990 to track resources in the health sector and has so far undertaken five rounds of NHA estimations. Specifically, the Kenyan Ministry of Health (MOH) has released NHA estimates of health spending for fiscal years (FYs) 1994/95, 2001/02, 2005/06, 2009/10, and 2012/13. Results emanating from NHA estimations have culminated in various policy decisions, key among them the abolition of user fees in primary health facilities, the introduction of the antiretrovirals budget line into the medium-term expenditure framework budget, and an advocacy tool for increased share of government allocations to the health sector.

The first four rounds of the NHA were conducted using the System of Health Accounts (SHA) 1.0 while the recent round used the updated SHA 2011 framework. The SHA is an internationally standardized framework that guides systematic tracking of the flow of expenditures in the health system. It is critical for improving governance and accountability at national and international levels of policymaking.

This round of the NHA was funded by the Government of Kenya and the U.S. Agency for International Development (USAID) through the Health Policy Plus (HP+) Project. It is expected that the findings will be used to shape the financing framework of the health sector in Kenya and will inform the development of the *National Health Sector Strategic Plan (NHSSP) 2018-2022* as well as the *Kenya Health Financing Strategy*.

Goals and Objectives of the NHA

The main goal of the FY 2015/16 NHA was to estimate the amount and characteristics of health spending. The study had six specific objectives:

- Estimate THE
- Document the distribution of THE by financing source and financing agent
- Determine the contribution of each stakeholder in financing healthcare
- Articulate the distribution of healthcare expenditures by function
- Develop a better understanding of the financial flows by disease area
- Analyse efficiency, equity, and sustainability issues associated with current healthcare financing and expenditure patterns

Social, Economic, and Political Background

In 2014, the rebasing of Kenya's national accounts resulted in an upward revision of the gross domestic product (GDP) per capita and a reclassification of the country as a lower-middle-income country.[1] The economic growth rate was 5.3% in 2014 with a GDP per capita estimated at 1,417 U.S. dollars (USD).

Kenya is a centre for trade and finance in the East Africa region and is considered to be one of sub-Saharan Africa's most developed economies. The country is classified as the fifth largest economy in sub-Saharan Africa, behind South Africa, Nigeria, Angola, and Sudan.

According to the 2016 Economic Survey, Kenyans in the economically productive age-group 15–64 were estimated to compose about 53.5% of the population. In absolute numbers, this amounts to 23.65 million Kenyans. The total labour workforce stood at 15 million Kenyans, with the balance of about 8 million not in employment. 83.5% of the economically productive population works in the informal economy, largely non-agriculture self-employment.

According to the 2014 Kenya Demographic Health Survey, health insurance coverage in Kenya is low, with about 17.1% of households reported to be in some form of pre-payment health scheme. Only 14.6% of women between ages 15–49 years have health insurance. Health insurance coverage amongst the poorest income quintile was 3%, compared to 42% in the richest income quintile. In addition, health insurance coverage is higher among the urban population (27%) than the rural population (12%).

In addition to the National Hospital Insurance Fund (NHIF), the 2014 Association of Kenya Insurers annual report shows that there were 17 private insurance companies offering health insurance products. About 88.4% of households with health insurance are covered through the NHIF, contributing about 5% of THE in FY 2012/13. The balance of 11.6%was covered

[1] http://www.worldbank.org/en/news/feature/2014/09/30/kenya-a-bigger-better-economy

through private health insurance (Kenya Household Health Expenditure and Utilization Survey, 2013).

Social protection is one of the main priorities for the Government of Kenya as outlined in the *National Social Protection Policy 2011* and is also a major goal in realizing universal health coverage for the country. Within the policy, the MOH has been mandated with provision of social health insurance in order to protect the poor and vulnerable from incurring catastrophic expenditure that may further push them into poverty. The MOH, with financial support from the World Bank, embarked on implementing a health insurance subsidy programme that aims to provide health insurance coverage for the poor through the NHIF. In 2015, it targeted to enrol a total of 21,525 poor households. The pilot was launched in April 2015; in FY 2015/16 a total of 21,546 households were registered, up from 16,474 in FY 2014/15, and were accessing care through various NHIF-accredited health facilities. The MOH also allocated a total of 500 million shillings in FY 2015/16—an increase from 365 million in FY 2014/15—to provide health insurance for the elderly and persons with disabilities through the NHIF. The NHIF has been able to enrol a total of 219,200 beneficiaries against a target of 210,000 in FY 2015/16, up from 189,717 against a target of 200,000 in the year 2014/15. In order for the MOH to continue to provide health insurance for the elderly and persons with disabilities, a total of KSh 500 million will be required for FY 2017/18.

Devolution and Health Service Delivery

The 2010 Kenya Constitution has devolved the responsibility of delivering and financing essential health services to the counties while the national MOH is mandated to provide policy support and technical guidance to priority national programs. With these changes in roles and responsibilities and expected equitable resource allocation in the counties, it is envisaged that service delivery for poor, underserved populations and accountability will improve.

The health sector recognizes the provisions under the 2010 Constitution, among which is the right to the highest attainable standard of health. The health sector is also aware that the devolution of governance requires properly designed systems of fiscal management, evidence-based planning, effective human resources planning, proper and effective coordination, political goodwill, and selfless leadership to ensure efficient and effective service delivery through the devolved governments.

Health Service Delivery

The infant mortality rate has decreased, from 77 per 1.000 live births in 2003 to 39 in 2014 and the under-five mortality rate has decreased from 115 per 1.000 live births in 2003 to 52 in 2014. However, neonatal mortality remains high, contributing about 35% of the infant mortality rate. The maternal mortality ratio has remained high at 362 deaths per 100.000 live births against a global trend of declining maternal mortality, from 400 to 210 deaths per 100.000 live births in 1990 and 2010, respectively.

The causes of maternal deaths are well-known and manageable when women access timely care from skilled providers. Maternal deaths not only affect families but have serious negative impacts on a country's economic development. Healthcare services in Kenya are provided by public and private providers, with the latter comprising both not-for-profit and for-profit providers.

According to 2015 MOH Master Facility List, there are 9,362 health facilities in the country, of which 46% are public, 14% are faith-based organizations, and 40% are private, as shown in Table 1.

Table 1. Health Facility By Ownership, 2015

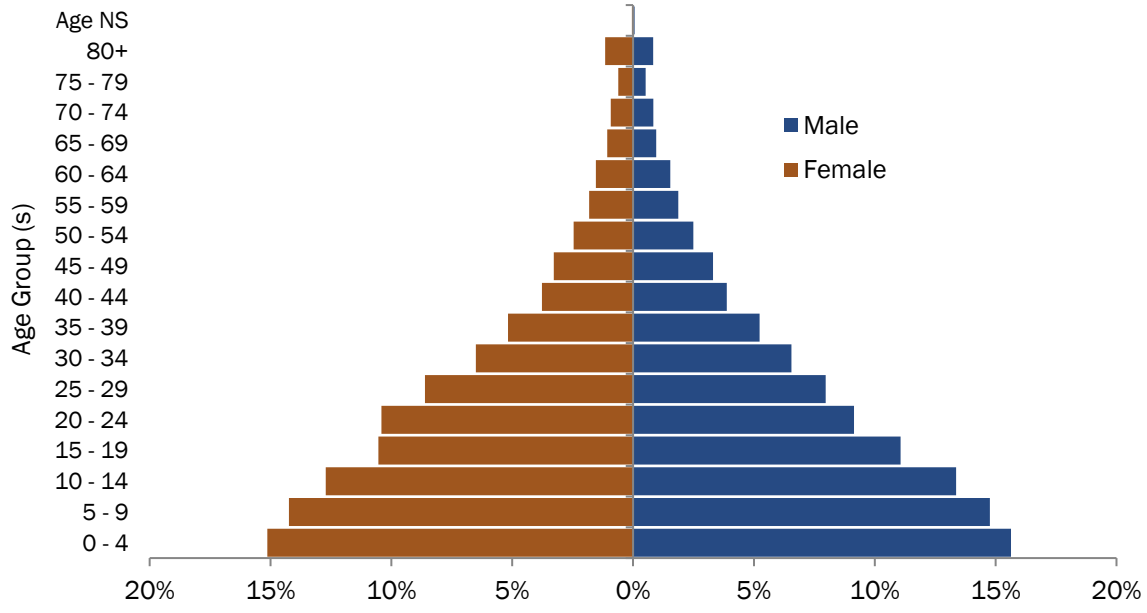
Ownership	Hospitals	Health Centres	Dispensaries	Maternity and Nursing Homes	Clinics	Total
Public (MOH + County)	295	789	2,976	-	-	4,060
Faith-Based & Other NGOs	93	322	695	23	213	1,346
Other Public Institutions	6	55	126	-	32	219
Private	144	143	327	215	2,908	3,737
Total	538	1,309	4,124	238	3,153	9,362

Source: e-health (www.e-health.go.ke)

Demographic Trends

The country's population was estimated to be 46.6 million people in 2015. With an estimated household size of five persons, this equates to about 10 million households. The average life expectancy in 2014 was 60 years, up from 51 years in 2004. The population growth rate has remained high at 2.7% per year, with a large young and dependent population that is increasingly urbanized. The male-to-female population ratio stands at 1:1.04. The 2015 population by age category is shown in Figure 1.

Figure 1. Kenya's Population Pyramid, 2015



Source: MOH Facts and Figures 2015

The Health Sector

Under the national long-term development agenda, *Vision 2030*, the health sector committed to contribute to ensuring that Kenya becomes a globally competitive, industrialized, and prosperous middle-income country with high quality of life. This is premised on the fact that a healthy population is a prerequisite for accelerated national development with higher and sustainable growth, employment generation, and poverty reduction. The Constitution of Kenya further guarantees every citizen the right to the highest attainable standards of healthcare, including reproductive health.

In order to realize the right to healthcare, national and county governments have been assigned specific functions and mandates that must be executed effectively and efficiently with limited resources in an effort to fulfil the constitutional requirement. The medium-term strategies and plans provide the framework for prioritization and implementation of the health sector priorities. The goal of the current medium-term plan 2013-2017 is to ensure an "equitable, affordable, and quality healthcare of the highest standard."

The mandates of the national health sector include referral facilities, policy formulation, capacity building, and regulations and technical support, while service delivery is assigned to the county governments. National government functions are further elaborated in the Executive Order No. 1 of 2016. County governments are responsible for county health services, including county health facilities and pharmacies, ambulance services, promotion of primary healthcare, licensing and control of undertakings that sell food to the public, veterinary services (excluding regulation of the profession), cemeteries, funeral parlours and crematoria, refuse removal, refuse dumps, and solid waste disposal.

Ministry's Vision, Mission, and Policy Objectives

The *KHSSP 2013-2017* set out the agenda for the health sector and defined the following vision and mission:

- Vision: A healthy, productive, and globally competitive nation.
- Mission: To build a progressive, responsive, and sustainable healthcare system for accelerated attainment of the highest standard of health to all Kenyans.

Further, the mandate of the health sector is to formulate policies, set standards, provide health services, create an enabling environment, and regulate the provision of health service delivery. The overall goal set out in the strategic plan is to reduce health inequalities and reverse the downward trends in health-related indicators by pursuing six broad policy objectives that are directly linked to the Economic Recovery Strategy, Vision 2030, and the Millennium Development Goals.

The strategic objectives of the health sector as set out in the *KHSSP 2013-2017* are to:

- Eliminate communicable conditions
- Halt and reverse the rising burden of non-communicable conditions
- Reduce the burden of violence and injuries
- Provide essential healthcare that is affordable, equitable, accessible, and responsive to client needs
- Minimize exposure to health risk factors

- Strengthen collaboration with private and other sectors that have an impact on health

The fourth schedule of the Constitution assigns the national government the following functions:

- Health policy
- National referral health facilities
- Capacity building and technical assistance to counties

The core mandates for the Ministry of Health are capacity building and technical assistance to counties, health policy and regulation, and national referral facilities.[2]

Organization of the Report

This report is organized as follows:

- Chapter 1 provides an introduction to NHA estimation.
- 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. It also discusses computation of the national expenditure figures based on the samples. Limitations of the survey are also noted in this chapter.
- Chapter 3 presents the general NHA findings: it identifies revenues and management of the financing schemes, financing agents, and functions. It also provides an overview of health spending share by major health sector priority areas.
- Chapters 4 to 11 present findings from the disease account, i.e. HIV/AIDS, tuberculosis, reproductive health, malaria, diarrhoea diseases, vaccine preventable conditions, non-communicable diseases, respiratory infections, and nutritional deficiencies.

[2] Executive Order No. 2 of 2013.

Methodology

The NHA estimation for FY 2015/16 was carried out in accordance with the guidelines of producing SHA 2011 (OECD, Eurostat and WHO, 2011). SHA 2011 is intended to constitute a system of comprehensive, internally consistent, internationally comparable accounts, which should be compatible with other aggregate economic and social statistics as far as possible.

SHA 2011 provides a standard for classifying health expenditures according to the three axes of consumption, provision, and financing. It provides guidance and methodological support in compiling health accounts. More specifically, the SHA 2011's purposes are to:

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

In order to ensure comparability from an international perspective, a common boundary of functional is defined for healthcare systems, setting limits on the scope of healthcare activities to be included. Four main criteria are used to determine whether an activity should be included within the core expenditure account of the SHA: first, an expenditure is included as a health expenditure if the primary intent of the activity is to improve, maintain, or prevent the deterioration of the health status of individuals, population groups, or the population as a whole, as well as mitigate the consequences of ill health. Second, if qualified medical or healthcare knowledge and skills are needed in carrying out the function, or it can be executed under the supervision of those with such knowledge, or the function is governance and health system administration and financing. Third, if the consumption is for the final use of healthcare goods and services of residents. Fourth, if there is a transaction of healthcare services or goods.

Healthcare expenditures for the NHA are not limited to the activity that takes place within the national border. They include health expenditures by citizens and residents temporarily abroad and exclude health spending by foreign nationals on healthcare in the country. They include donor spending (both cash and in-kind) whose primary purpose is the production of health and health-related goods and services in a country and exclude donor spending on the planning and administration of such healthcare assistance.

The NHA uses an accrual method, i.e., goods and services are accounted for in the same year in which they were provided, rather than when they are paid for. In this case, the fiscal or calendar year when they are provided should be specified.

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

- Provision of a greater distinction between current health spending vs. capital formation
- Improved consistency in financing classifications by separating various roles and flows (revenue, scheme, agent)

- Updated provider classifications for improved clarity
- Updated functional classifications for more complete and consistent coverage
- Tracking of the inputs to the provision of services ("factors of provision")
- Reporting on the characteristics of beneficiaries of health services

Data Sources

The data collection process for this NHA estimation extensively relied on secondary as well as primary data collected from questionnaires of respondents from the MOH, the County Department of Health, employer firms, insurance firms, NGOs, and development partners for the period FY 2015/16. Secondary data was used for the estimation and projection of expenditures, collation, and triangulation of primary data, including determining health expenditure ratios.

Primary Data Collection

Institutional Survey Instrument Development

The process commenced with the development of an inventory list of entities to survey that included employer firms (private firms and parastatals), insurance firms offering medical coverage, NGOs, and development partners. The compilation of the inventory list was developed in consultation with the Kenya National Bureau of Statistics. The process started with the constitution of a technical team comprising representation from the MOH, the Council of Governors, HP+, and the data collection team. The analysis benefited from the list obtained during the FY 2012/13 NHA.

The first step was to customise the NHA study in the National Health Accounts Production Tool (NHAPT) to fit the country context in terms of the three dimensions as guided by SHA 2011. Once this was completed, the production tool generated four study questionnaires for data collection. The respondents of the questionnaires included insurance organizations, enterprises, development partners, and NGOs. Government and household datasets were collected, organized in Excel forms, and entered into the tool.

Survey Administration Approach

A data collection plan was developed that indicated data source, what type of data was required, and the timeframe for collection. This was done to ensure that identification of tasks and timely implementation was achieved. As indicated in Table 2, a sample of 234 parastatals, 295 private firms, 218 NGOs, and 29 insurance companies was obtained. The survey attained a response rate of 88%, 80%, 77%, and 97%, respectively.

Table 2. Sampling and Response Rate

Entity	Population	Sample	Response	Response Rate
Parastatals	269	234	206	88%
Private Firms	448	295	236	80%
NGOs	286	218	167	77%
Insurance	32	29	28	97%

Household Survey Estimation

The household health expenditures were obtained from the 2013 Kenya Household Health Expenditure and Utilization Survey conducted by the MOH in collaboration with the Kenya National Bureau of Statistics. The comprehensive survey was undertaken to provide information on the health-seeking behaviour of households, household out-of-pocket spending, and health insurance coverage in Kenya as part of the overall NHA assessment. To generate the estimates for FY 2015/16, 2013 estimates were adjusted for inflation and population change, i.e., consumer price index for medical goods and the population growth between periods.

Donors and NGOs

The development partners' component captures the total amount of development assistance for health. 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's support).

Data for the development partners was collected through the Development Partners for Health in Kenya as well as through the National and County Treasury for On-Budget Support. The donor data was used to validate expenditure information obtained through the NGO survey.

NGOs receive support from development partners (both international and local). A fresh data collection was undertaken for FY 2015/16 targeting NGOs for the estimation process. The expenditures reported were then weighted to cover for the universe and triangulated with the donor reports.

Parastatal and Private Employers

An employer survey tool was administered to parastatals as well as private firms. The private employers cut across different economic sectors, such as agriculture, floriculture, manufacturing, transport, logistics, hospitality, industries, education, telecommunication, and financial institutions. State corporations (parastatals) incur health expenditures—some of which operate their own healthcare facilities, primarily offering outpatient care to employees and their families. As part of the NHA FY 2015/16 estimation, data was collected from employers that included health expenditure spent on workers, the total number of employees, and their dependents.

Insurance

For the County Health Accounts estimation of FY 2015/16, data was collected on the total health expenditure and the total value of claim in FY 2015/16 for each of the insurance schemes. These claims were then split by provider type, ownership, and health functions using ratios that had been generated from the FY 2012/13 NHA insurance data.

Health insurance data collected through this process was triangulated with data from the 2013 Kenya Household Health Expenditure and Utilization Survey and the 2015 Association of Kenya Insurers report.

County Government

At the county level, county management decides the share of funding to allocate to various sectors, including the department of health. The main sources of the County Department of

Health's expenditure data were government estimates of recurrent and capital expenditures and appropriation accounts for the period (recurrent and capital). Data was extracted from the expenditure returns submitted to the Controller of Budget and triangulated with the annual county government's budget implementation review report for FY 2015/16. Data collected related to breakdown of budgets for FY 2015/16 and appropriation accounts (expenditures) for FY 2015/16. The expenditure data was further disaggregated by level of care: hospitals; primary healthcare facilities, which comprise health centres and dispensaries; preventive and promotive health; and general administration.

With regard to disease-specific data, the choice of priority disease for analysis in the FY 2015/16 NHA was informed by the burden of disease in view of the top causes of death and disabilities as classified by the World Health Organization's International Classification of Diseases. The survey revealed two forms of expenditures for these diseases: 1) targeted, whereby expenditures had already been earmarked, and 2) un-targeted. For the untargeted expenditures, allocation shares were developed using the unit costs for treating a case and utilisation (caseloads). The One Health model, dynamic costing model, District Health Information Software, as well as the Kenya Household Health Expenditure and Utilization Survey provided important information for the distribution shares.

Following a one-week training of enumerators, each enumerator assigned a cluster of organizations to book appointments with respondents, visit, and administer the questionnaires. Respondents were not trained because questionnaires were administered by trained enumerators. Questionnaires were then checked and verified for data accuracy and completeness. The terms of reference for the research assistants were:

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

Data Entry, Cleaning, Processing, and Analysis

For the FY 2015/16 NHA estimation, development of study instruments, data entry, validation, and analysis was done through the NHAPT, a tool developed by the collaborative efforts of the USAID-funded Health Systems 20/20 Project, the World Health Organization, and the World Bank to help guide health accounts teams through the exercise, thereby reducing the need for technical assistance and increasing local capacity for health accounts production.

The NHAPT was developed to streamline and simplify the NHA estimation process, facilitating institutionalization of the NHA as a regular part of a country's efforts to monitor and improve health system performance. The NHAPT achieves these goals through a series of features designed around the themes of data quality, efficiency, ease of use, collaboration, consistency, and flexibility. NHA results are presented in 2x2 tables and any combination of the tables can be generated.

The data was reviewed and validated for consistency through document review and consultations with experts. During this process, call-backs were undertaken for verification. The cleaned and validated datasets were then coded using the SHA 2011 framework. The

country team and the NHA technical team analyzed and produced the standard tables and charts, which were used to produce the report.

Limitations and Considerations

The NHA faces some limitations in health system expenditure tracking and analysis. It is limited to tracking of what entities pay for healthcare, and not the production costs. In this case, it is noted that the NHA cannot be used as a tool for validation of existing policies on cost of provision, but rather as a tool for identifying issues related to the way the health system is organized. Data on factors of provision were not collected, limiting the analysis.

Most entities had incomplete data not disaggregated by NHA classification because records are not kept in the NHA format. However, they were able to provide informed estimates on the proportions of the respective expenditure categories.

General Findings

Summary Findings for General Health Accounts

Financing Dimension

The accounting framework articulated by SHA 2011 includes three dimensions of health financing: health financing schemes, revenues of financing schemes, and financing agents. The three classifications together provide a comprehensive framework to account for healthcare financing and describe the flow of financial resources in the health system. Health financing systems mobilize, pool, and allocate resources within the health system to meet the current health needs of the population. The SHA 2011 health financing framework therefore helps to answer the following key questions:

- How does a particular financing scheme collect its revenues?
- From which institutional units of the economy are the revenues of a particular financing scheme mobilized?
- 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?

Table 3 provides a summary of health expenditure indicators for FY 2001/02 to FY 2015/16.

Table 3. Selected Health Expenditure Indicators

Indicators	FY 2001/02	FY 2005/06	FY 2009/10	FY 2012/13	FY 2015/16
Total population, 2009 population census	31,190,843	35,638,694	38,610,097	41,193,418	44,200,000
Exchange rate, Kenya National Bureau of Statistics	78.60	73.40	75.82	85.30	99.48
Total GDP at current prices (Ksh)	2,483,087,895,837	3,372,242,485,458	3,502,864,214,981	3,986,072,438,769	6,709,670,650,000
Total government expenditure (Ksh)	469,454,107,719	891,152,529,242	1,173,991,183,006	1,485,559,882,940	2,271,729,850,000
Total government expenditure (USD)	5,972,698,571	12,141,042,633	15,483,924,862	17,415,707,889	22,836,045,939
Total health expenditure (THE) (Ksh)	125,436,833,424	155,556,805,311	200,622,887,192	281,216,602,402	345,746,685,197
Current health expenditure (Ksh)	Breakdown not available	Breakdown not available	193,858,239,565	261,901,511,259	325,690,079,566
Capital formation (Ksh)	Breakdown not available*	Breakdown not available*	6,764,647,627	19,315,091,143	20,056,605,631
THE (USD)	1,595,888,466	2,119,302,525	2,558,675,964	3,188,401,852	3,475,539,658
THE per capita (Ksh)	4,022	4,365	5,025	6,602	7,822
THE per capita (USD)	51.17	59.47	66.27	77.4	78.6
THE as a percent of nominal GDP	5.1%	4.6%	5.5%	6.8%	5.2%
Government health expenditure as a percent of total government expenditure	7.9%	5.1%	4.8%	6.1%	6.7%

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

Financing Sources as a Percent of THE

Indicators	FY 2001/02	FY 2005/06	FY 2009/10	FY 2012/13	FY 2015/16
Public	29.6%	29.3%	28.8%	33.5%	37.0%
Private	54.0%	39.3%	36.7%	40.6%	39.6%
Donors	16.4%	31.0%	34.5%	24.7%	23.4%
Other	0.1%	0.4%	0.0%	1.1%	0.0%

Financing Scheme as a Percent of THE

Indicators	FY 2001/02	FY 2005/06	FY 2009/10	FY 2012/13	FY 2015/16
Government schemes and compulsory contributory healthcare financing schemes	n/a	n/a	32.0%	40.6%	42.8%
Household out-of-pocket payment	n/a	n/a	25.1%	26.6%	26.1%
Donor financing schemes (non-resident)	n/a	n/a	30.4%	20.9%	17.9%
Voluntary healthcare payment schemes	n/a	n/a	12.5%	12.0%	13.2%

Financing Agents Distribution as a Percent of THE

Indicators	FY 2001/02	FY 2005/06	FY 2009/10	FY 2012/13	FY 2015/16
Public	42.8%	42.7%	36.6%	42.0%	45.4%
Private	49.8%	36.5%	33.9%	37.6%	36.7%
NGOs and donors	7.4%	20.8%	29.5%	20.5%	17.9%

Provider Distribution as a Percent of THE

Indicators	FY 2001/02	FY 2005/06	FY 2009/10	FY 2012/13	FY 2015/16
Public facilities	49.4%	44.3%	46.7%	39.1%	36.9%
Private facilities	35.7%	29.2%	22.2%	22.3%	27.0%
Providers of preventive care	n/a	n/a	13.8%	16.3%	15.8%
Providers of healthcare system administration and financing	n/a	n/a	8.4%	19.0%	19.2%
Rest of economy	n/a	n/a	n/a	2.20%	0.17%
Others	14.9%	26.5%	8.9%	1.1%	0.9%

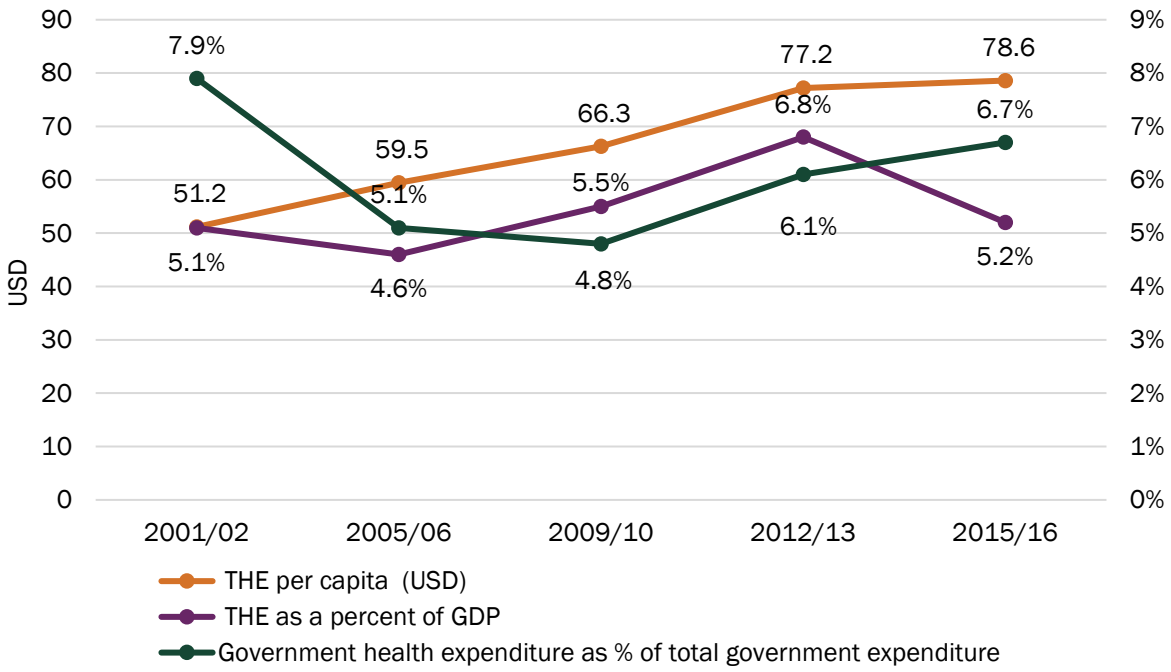
Function Distribution as a Percent of THE

Indicators	FY 2001/02	FY 2005/06	FY 2009/10	FY 2012/13	FY 2015/16
Curative inpatient care	32.1%	29.8%	21.9%	19.3%	19.2%
Curative outpatient care	45.1%	39.6%	39.1%	39.9%	37.2%
Medical goods (non-specified by function)	7.4%	2.6%	2.8%	2.8%	2.7%
Preventive care	9.1%	11.8%	22.8%	16.4%	15.2%
Governance, health system, and financing administration	5.0%	14.5%	9.0%	19.0%	19.0%
Fixed capital formation	n/a	n/a	3.6%	2.2%	5.8%
Others	1.3%	1.7%	0.8%	0.4%	0.9%

Total Health Expenditure and Government Health Expenditure

The THE in Kenya was KSh 346 billion (USD 3,476 million) in FY 2015/16, from KSh 271 billion (USD 3,188 million) in FY 2012/13. Total health spending in FY 2015/16 accounted for 5.2% of GDP, down from 6.8% in FY 2012/13. Total government expenditure on health as a percent of total government expenditure decreased from 6.1% in FY 2012/13 to 6.7% in FY 2015/16. In net present values, the per capita expenditure decreased from KSh 6,602 (USD 77.4) in FY 2012/13 to KSh 7,822 (USD 78.6) in FY 2015/16 due to the weakening of the KSh against the USD. The per capita expenditure, government health expenditure as a percent of THE, and the proportion of GDP spent on health have been increasing since FY 2001/02 (Figure 2).

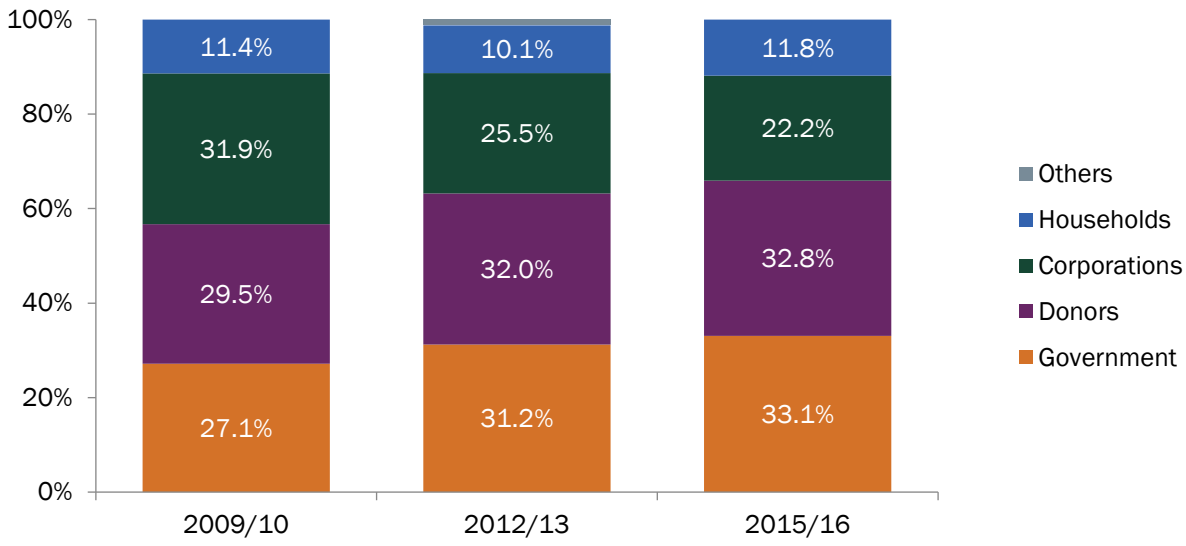
Figure 2. Selected Health Expenditure Statistics, FY 2001/02–FY 2015/16



Institutional Units Providing Revenues for Financing Schemes

Revenues for financing schemes come from three major sources: the government, households, and donors. As shown in Table 3, the government was the major financier of health, contributing 33% of Current Health Expenditure (CHE) in FY 2015/16, up from 31% in FY 2012/13. The household contribution to CHE was 32.8% in FY 2015/16—an increase over the FY 2012/13 estimate of 32%—while the donor contribution was 22% of CHE in FY 2015/16, down from 25.5% in FY 2012/13. Figure 3 shows the distribution of CHE by institutions providing revenues for financing schemes.

Figure 3. Distribution of CHE by Institutions Providing Revenues for Financing Schemes, FY 2009/10, FY 2012/13, and FY 2015/16



The overall amount of revenue mobilized to finance CHE increased by 24% between FY 2012/13 and FY 2015/16. Funds mobilized through the government and households increased by 32% and 28%, respectively, in FY 2015/16 over FY 2012/13 estimates. Table 4 provides the breakdown of absolute values of CHE by institutions providing revenues for financing schemes.

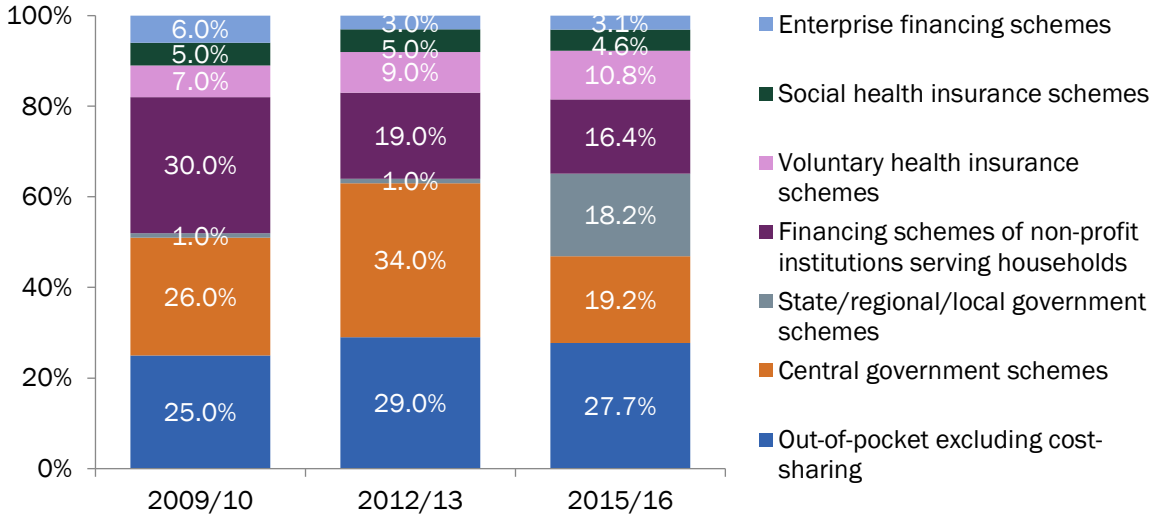
Table 4. Absolute values of CHE by Institutions Providing Revenues for Financing Schemes, FY 2009/10, FY 2012/13, and FY 2015/16

Institution	FY 2009/10	FY 2012/13	FY 2015/16	Percent Change (2012/13 to 2015/16)
Government	52,626,655,992	81,833,602,603	107,737,590,872	32%
Corporations	22,132,846,714	26,399,796,770	38,543,607,201	46%
Households	57,257,958,437	83,685,547,331	106,985,863,986	28%
Donors	61,840,778,421	66,784,885,371	72,423,017,507	8%
Others	-	3,197,679,185	-	-100%
Total	**193,858,239,565**	**261,901,511,259**	**325,690,079,566**	**24%**

Healthcare Financing Schemes for Revenues of Total Health Expenditure

In FY 2015/16, 37.4% of CHE was mobilized through central government schemes, up from 34% in FY 2012/13. Household out-of-pocket payments (excluding cost sharing) and NGO financing schemes mobilized 28% and 16.4% of CHE funds in FY 2015/16, respectively. Figure 4 shows the trends in CHE by financing schemes.

Figure 4. Trends in CHE by Financing Schemes, FY 2009/10, FY 2012/13, and FY 2015/16



Overall, the amount for CHE financing schemes increased by 24% between FY 2012/13 and FY 2015/16. The funds for CHE mobilized through county government and voluntary health insurance schemes financing increased by 2395% and 54% between FY 2012/13 and FY 2015/16 because at this time the county governments came on board. The absolute value of THE funds mobilized through NGO financing schemes increased by 10% during the same period. Table 5 provides the comparison of financing schemes for FY 2009/10 and FY 2015/16

Table 5. Absolute Values for CHE by Financing Scheme, FY 2009/10, FY 2012/13, and FY 2015/16

Financing Schemes	FY 2009/10	FY 2012/13	FY 2015/16	Percent Change (2012/13 to 2015/16)
Central government schemes	47,536,200,241	85,835,861,745	62,514,025,385	-27%
State/regional/local government schemes	1,491,448,033	2,380,522,437	59,383,073,199	2395%
Social health insurance schemes	8,853,183,331	11,850,913,223	15,094,580,000	27%
Voluntary health insurance schemes	12,618,709,895	22,749,933,355	35,038,031,692	54%
Financing schemes of NGOs	54,889,320,398	48,420,483,672	53,254,950,795	10%
Enterprise financing schemes	9,965,726,452	6,509,519,027	10,145,891,617	56%
Out-of-pocket, excluding cost-sharing	58,503,651,214	84,154,277,800	90,259,526,878	7%
Total	**193,858,239,565**	**261,901,511,259**	**325,690,079,566**	**24%**

Financing Agents for Total Health Expenditures

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

The role of the MOH as a financing agent has decreased to 18.7% of CHE in FY 2015/16 from 32.4% in FY 2012/13, following adoption of a devolved system of governance that brought another level of government, i.e. the counties who managed 18.2%. Households through out-of-pocket payments and NGOs controlled 27.7% and 16.4% of CHE, respectively, in FY 2015/16. Figure 5 and Table 6 show the trend in CHE by financing agents. The MOH, the County Department of Health, and other government entities continue to control a large percentage of THE. The role of households in managing funds for health increased by 54% between FY 2009/10 and FY 2015/16, while that of NGOs decreased by 3%.

Figure 5. Financing Agents for CHE, FY 2009/10, FY 2012/13, and FY 2015/16

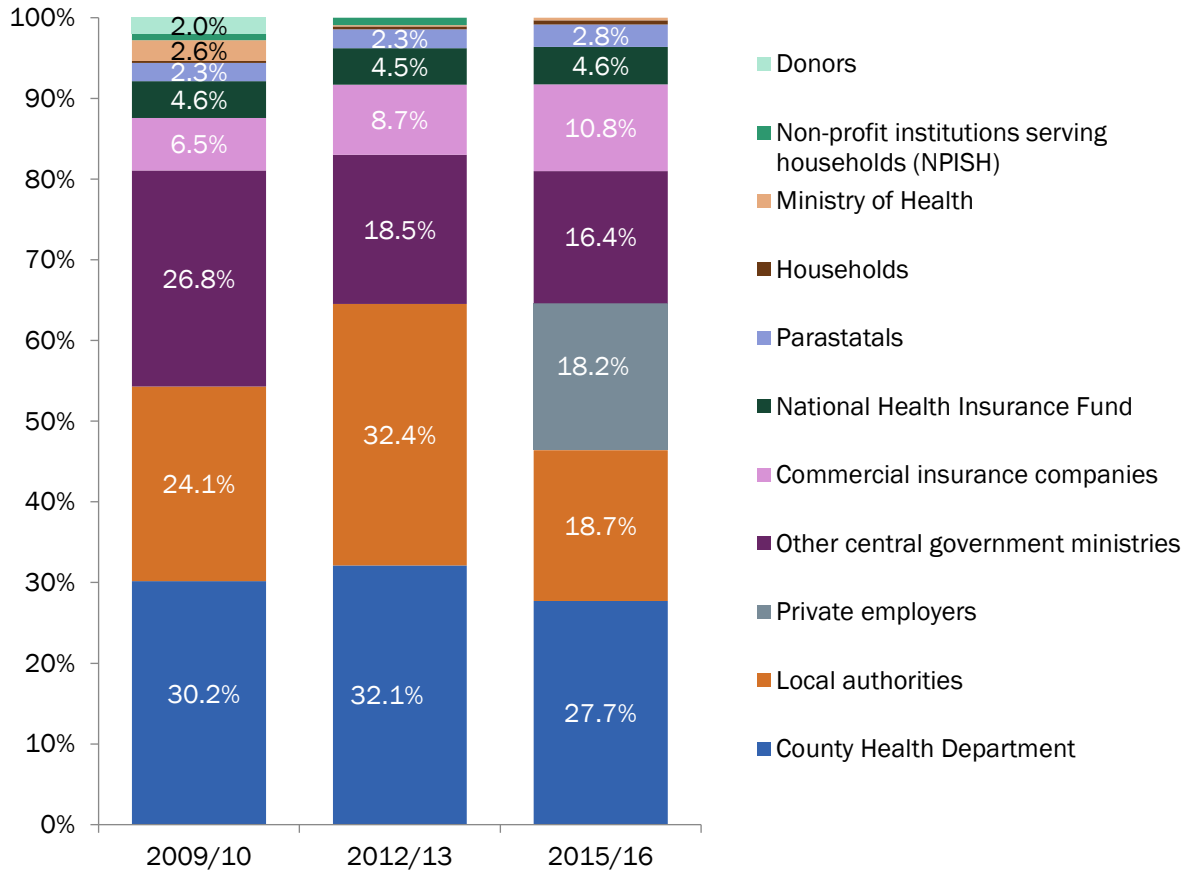


Table 6. Financing Agents of CHE, FY 2009/10, FY 2012/13, and FY 2015/16

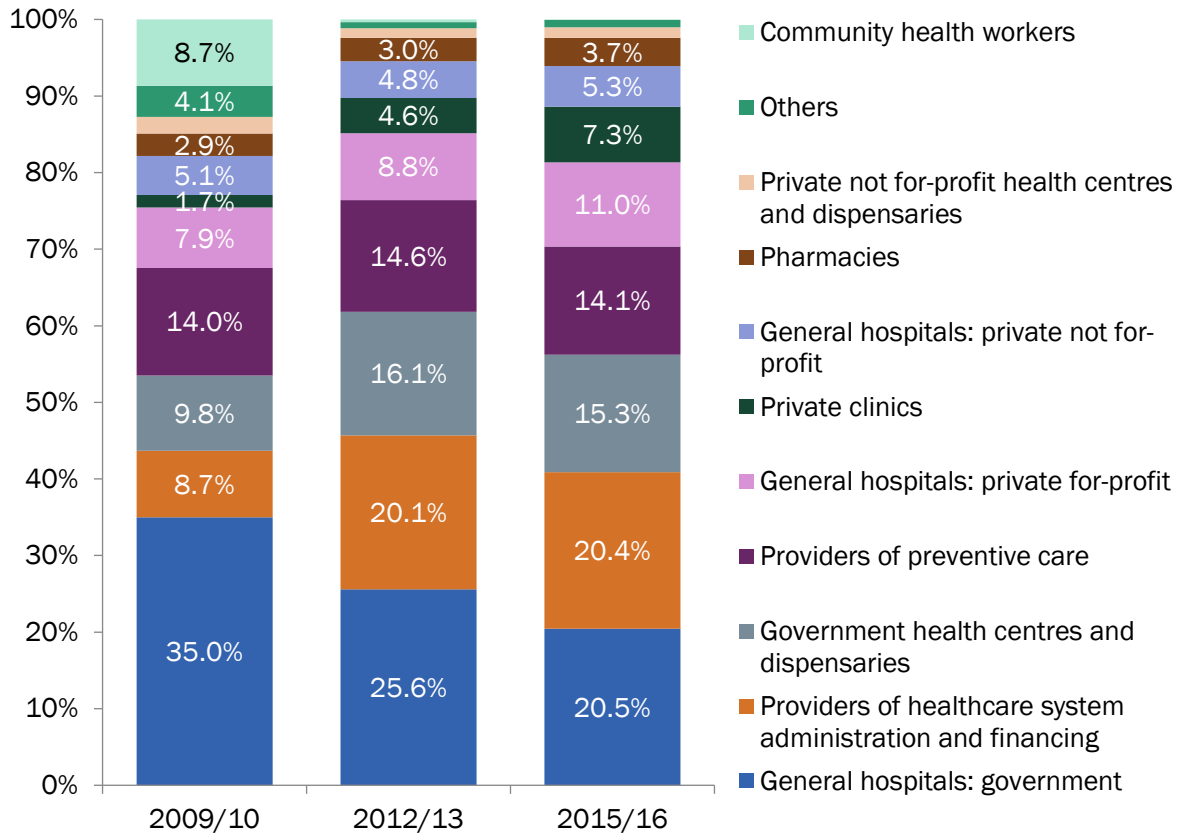
Financing Agents	FY 2009/10	FY 2012/13	FY 2015/16	Percent Change (2012/13 to 2015/16)
Ministry of Health	46,751,219,780	84,834,286,166	60,822,656,587	-28%
Other central government ministries	451,905,639	1,001,575,579	1,691,368,798	69%
Local authorities	1,522,358,231	2,380,522,437		-100%
County Health Department	-	-	59,383,073,199	0
National Health Insurance Fund	8,853,183,331	11,850,913,223	15,094,580,000	27%
Commercial insurance companies	12,587,961,044	22,749,933,355	35,038,031,692	54%
Parastatals	4,375,511,717	6,098,084,128	9,050,331,357	48%
Private employers	4,996,057,041	411,434,899	1,095,560,260	166%
NGOs	51,918,144,937	48,420,483,671	53,254,950,795	10%
Households	58,503,651,214	84,154,277,801	90,259,526,878	7%
Donors	3,898,246,629	-	-	0%
Total	**193,858,239,565**	**261,901,511,259**	**325,690,079,566**	**24%**

Healthcare Providers of Current Health Expenditures

Providers of healthcare receive money from financing agents in exchange for or in anticipation of providing the required healthcare services. These include public and private health facilities, pharmacies and shops, traditional healers, community health workers, providers of public health programmes, and general administration, among others.

Government hospitals utilized 20.5% of CHE in FY 2015/16, down from 25.6% in FY 2012/13. The role of providers of preventive health programmes remained 14% in the study period while that of providers of health administration increased, from 8% in FY 2009/10 to 20% in FY 2015/16. Figure 6 shows the providers of CHE, FY 2009/10 to FY 2015/16.

Figure 6. Providers of CHE, FY 2009/10, FY 2012/13, and FY 2015/16



Providers of healthcare system administration and financing and government health centres and dispensaries utilized more of CHE in FY 2015/16 compared to FY 2012/13, with an increase of 26% and 19%, respectively. Table 7 shows the providers of THE for FY 2009/10 to FY 2015/16 in absolute values.

Table 7. Providers of CHE, FY 2009/10, FY 2012/13, and FY 2015/16

Provider	FY 2009/10	FY 2012/13	FY 2015/16	Percent Change (20121/13 to 2015/16)
General hospitals: government	67,805,975,865	66,971,487,491	66,641,880,470	-0%
General hospitals: private for-profit	15,291,185,606	22,958,588,185	35,867,390,469	56%
General hospitals: private not for-profit	9,835,126,000	12,575,515,487	17,261,574,217	37%
Others	7,855,399,444	2,136,348,680	3,034,306,203	42%
Community health workers	16,842,827,550	889,528,485	237,927,086	-73%
Government health centres and dispensaries	19,065,908,429	42,177,558,826	49,993,107,990	19%

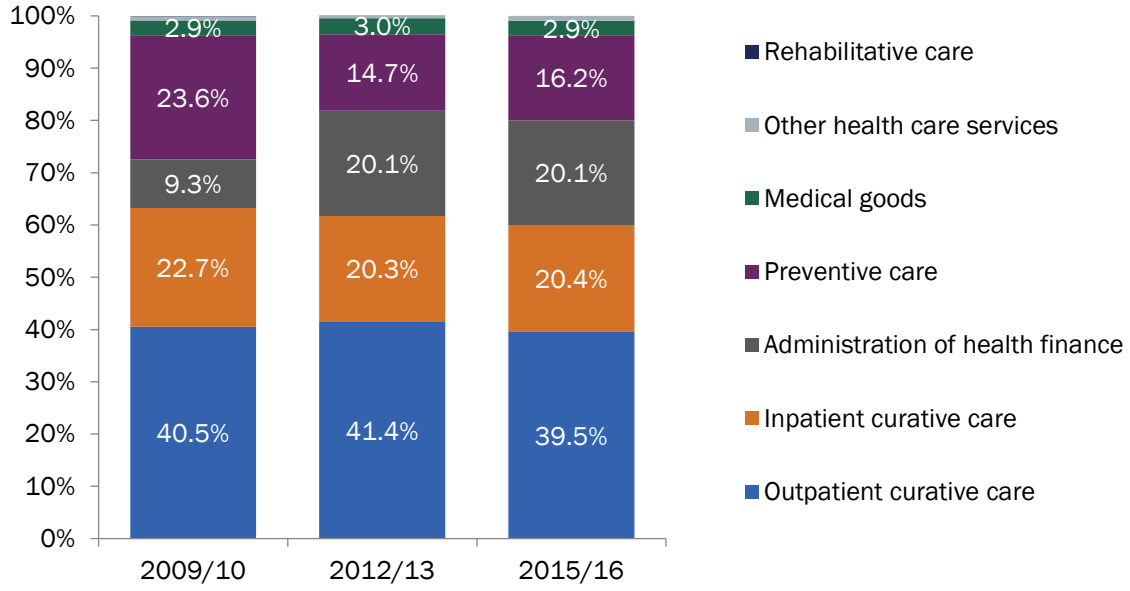
Provider	FY 2009/10	FY 2012/13	FY 2015/16	Percent Change (20121/13 to 2015/16)
Private not-for-profit health centres and dispensaries	4,210,049,610	3,268,447,400	4,531,088,063	39%
Private clinics	3,230,518,111	12,047,111,418	23,704,487,337	97%
Pharmacies	5,664,112,030	7,964,094,061	11,997,592,767	51%
Providers of preventive care	27,192,956,183	38,170,342,706	45,926,628,533	20%
Providers of healthcare system administration and financing	16,864,180,736	52,742,488,519	66,494,096,431	26%
Total	**193,858,239,565**	**261,901,511,259**	**325,690,079,566**	**24%**

Healthcare Functions of Current Health Expenditures

Healthcare functions consist of goods and services provided and activities performed by healthcare providers. General healthcare functions include curative care (inpatient and outpatient), provision of pharmaceuticals from independent pharmacies, prevention and public health programmes, healthcare administration, and capital formation.

The amount of CHE spent on inpatient care increased marginally, from 20.3% in FY 2012/13 to 20.4% in FY 2015/16, while that for outpatient curative care decreased, from 41.4% to 39.5%. Prevention and public health programmes utilized less of CHE, at 16.2% in FY 2015/16 compared to 14.7% in FY 2012/13. A notable increase was the amount of CHE spent on health administration, which more than doubled to 20.1% in FY 2012/13 and FY 2015/16 compared to 9.3% in FY 2009/10. Figure 7 shows distribution of CHE by function.

Figure 7. Distribution of CHE by Function, FY 2009/10, FY 2012/13, and FY 2015/16



The amount of CHE in absolute values used for inpatient curative care, outpatient curative care, and medical goods increased by 25%, 19%, and 18%, respectively, in FY 2015/16 over FY 2012/13 levels. Absolute values of CHE spent on administration of health finance increased by 24% between FY 2012/13 and FY 2015/16, partly due to better disaggregated data by reporting entities as well as devolution of healthcare services to 47 new administrative units. Table 8 shows distribution of THE by function, FY 2009/10 to FY 2015/16.

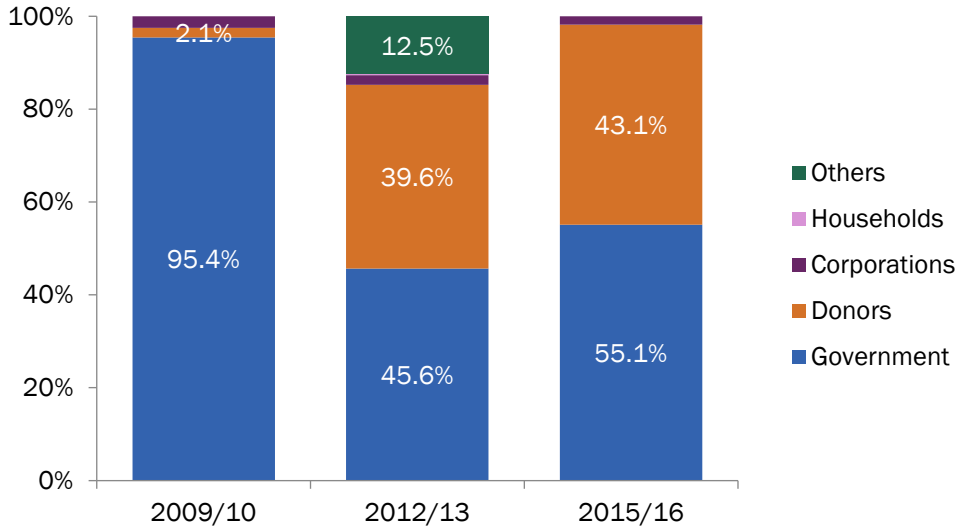
Table 8. Distribution of CHE by Function, FY 2009/10, FY 2012/13 and FY 2015/16

Healthcare Function	FY 2009/10	2012/2013	FY 2015/16	Percent Change (2012/13 to 2015/16)
Inpatient curative care	44,047,155,627	53,092,067,054	66,394,156,967	25%
Outpatient curative care	78,558,797,364	108,537,936,514	128,684,909,489	19%
Rehabilitative care	115,037,148	49,338,468	-	-100%
Medical goods	5,677,086,660	7,964,094,061	9,412,100,522	18%
Preventive care	45,794,640,919	38,400,312,010	52,619,635,706	37%
Administration of health finance	18,068,809,843	52,742,488,520	65,537,292,138	24%
Other healthcare services	1,596,712,004	1,115,274,633	3,041,984,743	173%
Total	**193,858,239,565**	**261,901,511,259**	**325,690,079,566**	**24%**

Capital Formation

Government contributed the largest share of resources for capital formation at 95%, 46%, and 55% in FY 2009/10, FY 2012/13, and FY 2015/16, respectively, as shown in Figure 8.

Figure 8. Institutional Units Providing Revenues to Financing Schemes for Capital Formation, FY 2009/10, FY 2012/13, and FY 2015/16



In absolute values, government contributed KSh 11 billion (USD 110 M) and donors KSh 8.6 billion (USD 86 M) for capital formation in FY 2015/16 (Table 9).

Table 9. Institutional Units Providing Revenues to Financing Schemes for Capital Formation, FY 2009/10, FY 2012/13 and FY 2015/16

Institutional Units	FY 2009/10	FY 2012/13	FY 2015/16	Percent Change (2012/13 over 2015/16)
Government	6,455,108,223	8,815,237,905	11,048,734,771	25%
Corporations	168,967,408	396,429,251	366,817,876	-7%
Households	-	34,257,240	-	-100%
Donors	140,571,997	7,653,459,854	8,641,052,984	13%
Others	-	2,415,706,892	-	-100%
Total	**6,764,647,627**	**19,315,091,142**	**20,056,605,631**	**4%**

Disease Conditions

Health accounts contribute a useful input for the planning, implementation, and monitoring of resource allocation to different diseases and conditions. (System of Health Accounts, 2011).[3] The information gained from the NHA can help to address the following questions:

- What diseases/conditions are consuming healthcare resources, and 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 type of care and type of provider?
- How does spending on diseases align with the burden of disease and other health measurements?

Figure 9 presents data on spending by disease (or illness or condition). HIV/AIDS consumed the largest share of resources for health at 18.7% and 20.1% in FY 2012/13 and FY 2015/16, respectively, followed by reproductive health at 12.9% and 12.1%.

[3] SHA 2011 Manual

Figure 9. Distribution of THE by Disease/Condition, FY 2012/13 and FY 2015/16

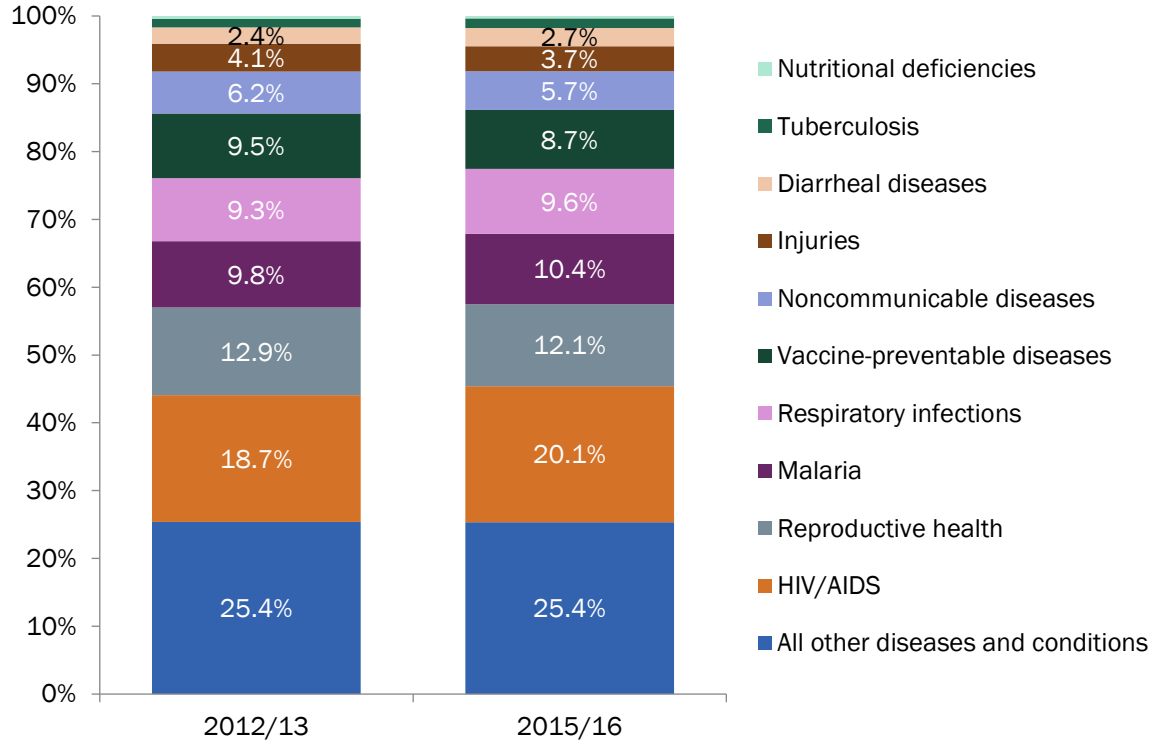


Table 10 presents expenditure data by disease conditions. The table shows that expenditures for Diarrheal diseases, TB, HIV, malaria and respiratory diseases increased by over 30% from FY2012/13 to FY 2015/16.

Table 10. Distribution of THE by Disease/Condition, FY 2012/13 and FY 2015/16

Disease area(s)	FY 2012/13	FY 2015/16	FY 2012/13	FY 2015/16	Percent Change
HIV/AIDS	18.7%	20.1%	50,858,516,787	69,369,237,666	36.40%
Tuberculosis	1.3%	1.4%	3,535,618,814	4,883,674,408	38.13%
Reproductive health	12.9%	12.1%	35,084,217,463	41,771,281,138	19.06%
Malaria	9.8%	10.4%	26,653,126,444	35,869,087,707	34.58%
Non-communicable diseases	6.2%	5.7%	16,862,182,036	19,753,618,257	17.15%
Nutritional deficiencies	0.4%	0.4%	1,087,882,712	1,221,024,543	12.24%
Vaccine-preventable diseases	9.5%	8.7%	25,837,214,410	30,034,115,001	16.24%
Diarrheal diseases	2.4%	2.7%	6,527,296,272	9,314,074,870	42.69%
Respiratory infections	9.3%	9.6%	25,293,273,054	33,059,550,476	30.70%
Injuries	4.1%	3.7%	11,150,797,798	12,792,627,352	14.72%
All other diseases and conditions	25.4%	25.4%	69,080,552,213	87,678,393,777	26.92%
Total	**100.00%**	**100.00%**	**271,970,678,005**	**345,746,685,197**	**27.13%**

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