THE REPUBLIC OF UGANDA

MINISTRY OF HEALTH

NATIONAL HEALTH ACCOUNTS FINANCIAL YEARS 2019/20 & 2020/21

With REPRODUCTIVE HEALTH AND NON-COMMUNICABLE DISEASES SUB-ANALYSIS

Published by: Ministry of Health

Department of Planning, Financing and Policy

PO Box 7272

Kampala, Uganda

Email: info@health.go.ug

Website: www.health.go.ug

Supported by:

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACRONYMS

BoU	Bank of Uganda
CHE	Current Health Expenditure
EPI	Expanded Program on Immunization
FY	Financial Year
GDP	Gross domestic product
GGHE	General Government Health Expenditure
GGHE-D	General Government Health Expenditure Domestic
GGHE-E	General Government Health Expenditure External
GoU	Government of Uganda
HAPT	Health Accounts Production Tool
HC	Health Centre
HIV/AIDS	Human Immunodeficiency Virus/Acquired immunodeficiency syndrome
HK	Capital Expenditure on Health
IFMIS	Integrated Financial Management System
MDA	Ministry Departments and Agencies
MoFPED	Ministry of
MoH	Ministry of Health
NCD	Non-Communicable Disease
NGO	Non-Governmental Organization
NHA	National Health Accounts
NPISH	Not-For-Profit Institutions Serving Households
OECD	Organization for Economic Cooperation and Development
OOP	Out-of-pocket expenditure
PHC	Primary Health Care
PHP	Private Health Practitioner
PNFP	Private-Not-For Profit
PHEIC	Public Health Emergencies of International Concern
RH	Reproductive health
ROW	Rest of the World
SHA-2011	System of Health Accounts for 2011
TCAM	Traditional, Complementary and Alternative Medicines

THE	Total Health Expenditure
UBOS	Uganda Bureau of Statistics
UGX	Uganda Shillings
UHC	Universal Health Coverage
USD	United States dollar
VHT	Village Health Team
WHO	World Health Organization

GLOSSARY OF KEY TERMS

1. **Ancillary services**: Ancillary services to health encompass a variety of services, mainly performed by paramedical or medical technical personnel with or without the direct supervision of a medical doctor. There are three sub-categories for ancillary services: Laboratory services; Imaging services; and Patient transportation.
2. **Capital formation (HK):** the types of the assets that health providers have acquired during the accounting period and that are used repeatedly or continuously for more than one year in the production of health services i.e. infrastructure, machinery and equipment, intellectual property products
3. **Current Health Expenditure:** the sum of health care goods and services for final consumption of resident units. It also represents the value of that part of the output of the health providers consumed by households, Non-profit institutions serving households (NPISH) and General Government, valued at market prices
4. **Financing schemes (HF):** components of a country's health financial system that channel revenues received and use those funds to pay for, or purchase, the activities inside the Health Accounts boundary
5. **Financing sources (FS):** the revenues of the health financing schemes received or collected through specific contribution mechanisms. It consists of the institutional units that provide revenues to financing schemes. There are five categories: government; corporations; households; NPISH; and rest of the world.
6. **GGHE:** This is the General Government Health expenditure which represent the amount of resources that government has mobilized and spent through the budget allocations for health
7. **Health Care Functions (HC):** the types of goods and services provided and activities performed within the health accounts boundary e.g. preventive, curative, administration among others
8. **Health care Providers (HP):** encompass organizations and actors that deliver health care goods and services as their primary activity, as well as those for which health care provision is only one among a number of activities e.g. hospitals, health centres, ambulatory, pharmacies, long-term care facilities, ancillary service providers etc.
9. **Health Care**: all activities with the primary purpose of improving, maintaining and preventing the deterioration of the health status of persons and mitigating the consequences of ill-health through the application of qualified health knowledge [medical, paramedical and nursing knowledge, including technology, and traditional, complementary and alternative medicine (TCAM)].
10. **Not for Profit Institution Serving Households:** Non-profit institutions serving households (NPISH) are a special type of non-profit organization. NPISH consist of non-profit institutions that provide financial assistance, goods or services to households free or at prices that are not economically significant. Their operation is not controlled by the government.
11. **System of Health Accounts**: tracks all health spending in a given country over a defined period of time regardless of the entity or institution that financed and managed that spending. It generates consistent and comprehensive data on health spending in a country, which contributes to evidence-based policy-making.

FOREWORD

Information on health expenditure is a critical input to informing strategic policymaking, planning, and resource allocation. It is also important for monitoring the health systems' performance and progress on policy goals, such as Universal Health Coverage, equity, efficiency, and sustainability. When conducted on a regular basis, National Health Accounts (NHA) is a systematic, consistent, and comprehensive methodology for monitoring financial flows within the health sector. The NHA tool was developed specifically to inform the health policy process: policy dialogue, design, and implementation, as well as monitoring and evaluation of ensuing health interventions. The Ministry of Health (MoH) in Uganda generates and uses evidence on the magnitude and flow of health sector resources using the health accounts (HA) methodology. The HA estimate informs how total health expenditure flows from financing sources to end users.

This is the ninth cycle of NHA for Uganda. The report presents the results of the analysis on health expenditure data from the Financial Years 2019/20 and 2020/21, including information on expenditure by source, provider, activity, input, disease, and beneficiary group as well as sub analyses for Reproductive Health and Non-communicable Diseases. The financing information contained in this report will provide inputs into the preparation of Sector Strategic plans, mobilization of resources for the sector in addition to providing critical recommendations on appropriate health financing policies as well as suggestions on how to reallocate resources efficiently.

We are grateful for the technical and financial support provided by development and implementing partners, who closely collaborated with the MoH starting from planning to the finalization of the study. Furthermore, the production of this round of the NHA would not have been possible without the support of different Government and non-government organizations who have generously shared their data on health expenditure.

This report in its wholeness facilitates and shades light on the resource commitments, disbursements and actual expenditures and their relationship with the policy statements. The stakeholders in the health sector are encouraged to read and make use of this report.

For God and My Country

Dr. Jane Ruth Aceng Ocero (MP)
MINISTER OF HEALTH

ACKNOWLEDGEMENT

The development of this ninth publication of Uganda National Health Accounts is based on the internationally recognized Systems of Health Accounts (SHA 2011). This was made possible through the collaboration and support of the World Health Organisation and USAID through the Uganda Health Systems Strengthening Activity and other Health Development Partners.

The MoH would like to express our sincere gratitude and recognise the support from the Uganda Bureau of Statistics and Ministry of Finance Planning and Economic Development for providing statistical data on households and national macro-economic statistics which were used to compile this report. They made significant contribution towards the compilation of this publication.

We also wish to thank the entire NHA team members for their patience and support throughout the production and development of this publication. Special thanks go to Dr. Sarah Byakika Kyeyamwa, Commissioner Planning, Financing and Policy; Dr. Sam Kamba the NHA focal point at MoH; Christabel Abewe Program Officer at WHO-Country Office Uganda, Thomas Maina of USAID/UHSSA and Mr Ezrah Trevor Rwakinanga the lead consultant for their invaluable effort in guiding the NHA technical team.

Data analysis was done using the Health Accounts Analysis Tool (HAAT) and MS-Excel. Interpretation of the results and the writing of the report were done by the NHA technical team guided by the Lead Consultant. Finally, the efforts, contributions and the enormous support from the various programs and units of MoH are greatly acknowledged.

We hope that this publication will be of great use to policy makers throughout the whole health sector in Uganda.

Dr. Diana Atwine
PERMANENT SECRETARY

EXECUTIVE SUMMARY

Background

The National Health Accounts (NHA) survey in Uganda dates to early 2000s and this report that covers a period from Financial Year (FY) 2019/20 to FY 2020/21, is the ninth round of NHA for this country and records health expenditure using the 2011 edition of System of Health Accounts (SHA-2011). The current methodology SHA-2011 focuses on the key areas of healthcare expenditure and therefore aims at answering the key policy questions that include how much is spent on healthcare in the country? Who pays for healthcare? Who manages the resources? How are these resources pooled? Who provides which healthcare services? What are the inputs for these services? And who actually benefits from these services provided. This round of NHA is further enriched with a Reproductive Health and Non-communicable diseases sub analysis.

Key Findings

NHA survey findings revealed that Uganda's total health expenditure (THE) was Uganda Shillings (UGX) 7.79 trillion and UGX 8.71 trillion for the FYs 2019/20 and 2020/21 respectively. This constituted current health expenditure (CHE) of UGX 7.39 trillion and UGX 8.41 trillion for the FYs 2019/20 and 2020/21 respectively. Capital health expenditure (HK) was UGX 0.40 trillion and UGX 0.30 trillion for the FYs 2019/20 and 2020/21 respectively. On average resources from Health Development Partners (HDPs) accounted for the biggest share of HK in the health sector followed by government resources.

Looking at the revenues of health care financing schemes, direct foreign transfers (off-budget donor funding) were the largest revenue mechanism for both years as it accounted for UGX 2.71 trillion (36.6% of CHE) in 2019/20 which even increased to UGX 3.82 trillion (45.4% of CHE) in 2020/21. Domestic revenues (majorly out-of-pocket) and government domestic revenue were the second (30% & 27.4% of CHE FYs 2019/20 and 2020/21 respectively) and third (22.7% & 21% of CHE FYs 2019/20 and 2020/21 respectively) revenue mechanisms respectively.

Most of the revenues for healthcare in Uganda came through schemes belonging to Not-For-Profit Institutions Serving Households (NPISH) totalling UGX 2.71 trillion (37.1%) and UGX 3.82 trillion (46.2%) for the FYs 2019/20 and 2020/21 respectively and these schemes are dominated by funds from the rest of the world or donors. This was on average followed by out-of-pocket scheme totalling UGX 2.21 trillion (29.9%) and UGX 2.30 trillion (27.4%) for the FYs 2019/20 and 2020/21 respectively which excludes prepaid expenditures by households to insurance companies.

Hospitals were the leading healthcare providers by spending UGX 3.7 trillion (49.8%) and UGX 3.5 trillion (42.2%) for the FYs 2019/20 and 2020/21 respectively and was followed by providers of preventive care who averaged 23.6% of CHE across this period.

Provision of curative care services took the largest share of all health care functions at 61.3% and 54.0% for 2019/20 and 2020/21 respectively. This was followed by preventive care services consuming 25.0% in 2019/20 and 28.0% in 2020/21. Further, there were other services like governance and administration that spent an average of 11.5% for the two FYs. However, the main concern is that curative care, on average, accounts for 57.7% for the study period which is an indication that more efforts are being directed towards curative care as compared to preventive care. This was similar for general CHE and government health expenditure.

Reproductive Health spending was 0.738 trillion (10%) and 0.83 trillion (9.9%) in FY 2019/20 and 2020/21 respectively. The RH functions financed included Maternal Conditions accounting for 56% of the resources in both FYs, Perinatal conditions accounting for 11% and 12% in FY 2019/20 and FY 2020/21 respectively, as well as contraceptive management which accounted for 15% and 18% in FY 2019/20 & FY 2020/21 respectively.

Non-Communicable Diseases (NCDs) spending was 1.49 trillion (20.1%) and 1.31 trillion (15.5%) in FY 2019/20 and 2020/21 respectively. The NCDs functions financed included Mental Health and behaviour disorders accounting for 15.6% and 19.9% in FY 2019/20 and FY 2020/21 respectively, Neoplasms accounting for 16.7% and 12.3% in FY 2019/20 and FY 2020/21 respectively, as well as cardiovascular diseases which accounted for 10.6% and 15.1% in FY 2019/20 & FY 2020/21 respectively.

Key policy implications and recommendations

(i) Uganda's per CHE per capita of USD 52 in FY 2019/20 and USD 57 in FY 2020/21 falls below the WHO recommendation of USD 86 per capita. This level of CHE per capita is above the average in the region if compared to Tanzania 39.3 USD, Kenya 83.4 USD, Rwanda 51.2USD, Burundi 16.4 USD, Malawi 32.3 and South Sudan 32.3 USD

(ii) The GGHE as a percentage of GDP was 1.68% and 1.43% in FY 2019/20 and FY 2020/21 respectively. This falls significantly short of the WHO recommendation of 5% if countries are to achieve Universal Health Coverage (UHC). It is also much lower than the reported average for low-income countries of 3.6%.

(iii) In terms of Out-of-pocket (OOP) Expenditure, Uganda is unique in having a relatively high proportion of its health expenditure financed through OOP payments by households. Its ratio of OOP Expenditure to General Government Health Expenditure (GGHE) of 2.56 is the highest in the region. This provides an opportunity to pursue risk pooling interventions like social health insurance since they are feasible considering other factors constant.

(iv) In terms of outcomes, Uganda's Neonatal mortality rate of 20 per 1,000 live births compares favorably with other countries in the region Kenya 19.4 per 1,000, Rwanda 18 per 1,000, Tanzania 20.8 per 1,000, Ethiopia 27.8 per 1,000. This is could indicate that Uganda's health system may be more efficient than other countries in the region which spend much higher but achieve similar outcomes.

(v) The Government only manages 25.1% of the CHE with NPISH accounting for 45.4% and Households 27.4%. Financing managed by government can be easily aligned to national priorities and should be preferred. While preventive care accounted for 27% of the CHE, only 24.3% of the funds managed by government were spent on preventive care.

(vi) Hospitals and Health administration accounted for 62% and 53.6% of CHE in FY 2019/20 and 2020/21 respectively. Indicating that 38% and 46.4% of the resources were use for Primary Health Care (PHC) interventions which is in line with the efforts to prioritize PHC.

(vii) The leading factors of provision were compensation of employees which accounted 23.8% and 26.4%, while healthcare goods accounted for 29.3% and 19.3%, and nonhealthcare services 17% and 18.6% in FY 2019/20 and 2020/21 respectively. Government however spent relatively higher on compensation of employees which accounted for 43.8% of its finances.

(viii) The leading disease conditions financed were HIV/AIDS 25.9% & 14.9%, NCDs 19.8% and 27.2%, Malaria 20% and 15.5% and RH 10% and 9.9% in FY 2019/20 and 2020/21 respectively. Public Health Emergencies of International Significance rose from 3.3% in FY 2019/20 to 14.2% in FY 2020/21 due to the Covid 19 outbreak.

1 BACKGROUND

1.1 Introduction: Concept of National Health Accounts

National Health Accounts (NHA) is an internationally recognized, systematic and comprehensive approach for measuring, summarizing, and monitoring the resource flows in a country's health system. In a standard set of matrices, NHA describes total health expenditure (THE) in a consistent and policy user-friendly practical manner from the financing sources to the user system. It helps to identify whether financing is in line with policy priorities and determine where effective levers for policy change lie. NHA allows for comparison between countries, which stimulates strategic vision for public policy reforms.

Regionally, most of the Sub-Saharan countries are implementing a number of health sector reforms that target improvement in efficiency and management of health services. This means there is a need to assess health system performance and identify health sector problems and opportunities for change. NHA supports this process and helps to generate and monitor reform strategies on health expenditure and financing[1].

NHA captures the full range of information contained in the health system resource flows including the main functions of health care financing. NHA enables health system stewards and other stakeholders to identify policy concerns and monitor the impact of policies developed, thereby facilitating the successful implementation of health system goals. It addresses basic questions such as: Where resources come from?, Who handles and manages the resources?, Where do they go?, and What kind of services and goods do they purchase?. To answer these questions, it categorizes health expenditures according to the International Classification for Health Accounts (ICHA) fundamental dimensions: financing sources, financing agents, providers, and functions. NHA is now carried out biennially in Uganda. The time series information generated permits the use of NHA as a standard management tool for policy formulation, situation analysis, planning, and monitoring and evaluation purposes.

Uganda operates an integrated health care system and majority of cost centers do not carry disease specific budgets/expenditures. NHA are therefore of paramount importance as they enable the country to identify disease specific expenditures and provide levers for policy changes geared towards improving efficiency. The compilation of NHA in Uganda dates to the early 2000s and to date a total of 9 rounds have been conducted. This report summarizes the results for the 9th round of NHA in Uganda covering the Financial Years (FYs) 2019/2020 to 2020/2021. The 9th cycle of the NHA also has provided health expenditure information on some of the key health programs by performing more detailed analyses for the following programs: Malaria, HIV/AIDS, Tuberculosis, Reproductive Health (RH), and Non-communicable Diseases (NCDs).

[1] (Berman, 1998)

1.2 Uganda's Demographic and Macro-economic status

1.2.1 Demographic Context

Uganda, a landlocked country in East Africa covering an area of 241,555 KM^2, is bordered to the north by South Sudan, to the south by Tanzania, to the west by the Democratic Republic of the Congo, to the east by Kenya, and to the south-west by Rwanda.

Uganda's population has continued to grow over time from 9.5 million in 1969 to 34.6 million in 2014 and it was estimated to be 39.1 million in FY 2018/19. The Uganda Bureau of Statistics (UBOS) estimates of FY 2019/2020 put Uganda's population at 40.3 million persons, out of which, 25% live in urban areas and 75% are adolescents and young people. In the same year, the country's population growth rate was estimated at 3.34% which is attributed to fertility rate and an increase in life expectancy. This high population growth rate that results into an additional over 1 million Ugandans each year has implications for health planning. Furthermore, refugee population has almost tripled in the country since July 2016 and is currently around 1.4 million which makes Uganda not only the largest refugee host in Africa but also among the largest in the whole world[2].

The country's infant mortality rate stands at 43 per 1,000, which is a significant reduction from 54 deaths per 1,000 live births over the last one decade. In the same period, the under-5 mortality rate has reduced from 90 per 1,000 live births to 64 per 1,000 live births. However, the neonatal mortality rate has remained stagnant at 27 per 1,000 live births.

1.2.2 Socio-Economic Context

Uganda registered a strong economic growth before the COVID-19 pandemic (6.2% and 6.8% real Gross Domestic Product (GDP) growth in the FYs 2017/18 and 2018/19 respectively[3]) which slowed it down and it is still on a recovery path since then. Uganda's economy weathered successive shocks in 2022 with GDP growth expected to recover to 5.7% during FY 2022/23. A post-COVID-19 recovery in services and industrial sectors offset the weather-induced decline in agriculture. An uptick in investments and employment growth reinforced domestic demand before lending rates rose in response to a tighter monetary stance starting in June 2022. Inflation subsided beginning November 2022, thanks to lower international commodity prices

[2] https://digitalcollections.sit.edu/cgi/viewcontent.cgi?article=3732&context=isp_collection

[3] Okumu, Kavuma & Bogere (2022). Efficacy of COVID-19 Macroeconomic Policy Responses in Uganda

and Bank of Uganda's (BoU) tight monetary policy[4]. In February 2023, BoU maintained its policy rate at 10%, 350 basis points above its level a year ago, for the fourth consecutive month. Hence, the annual headline and core inflation slid to 9.2% and 7.8%, respectively, in large part driven by the reduction in energy and utility prices. Uganda's economic growth is expected to accelerate to above 6% per year in the medium term as inflationary pressures lessen, BoU eases monetary policy, and government relies mainly on revenue collection and spending efficiencies to cut the deficit.

Accelerated growth may reduce poverty (measured at the USD 2.15/day international poverty line) from 41.4% in 2023 to 39% by 2025. But given that households have limited adaptive capacity, the pace of poverty reduction will ultimately depend on how food access and affordability evolve, and on the incidence of weather and any environmental shocks.

1.3 Health System in Uganda

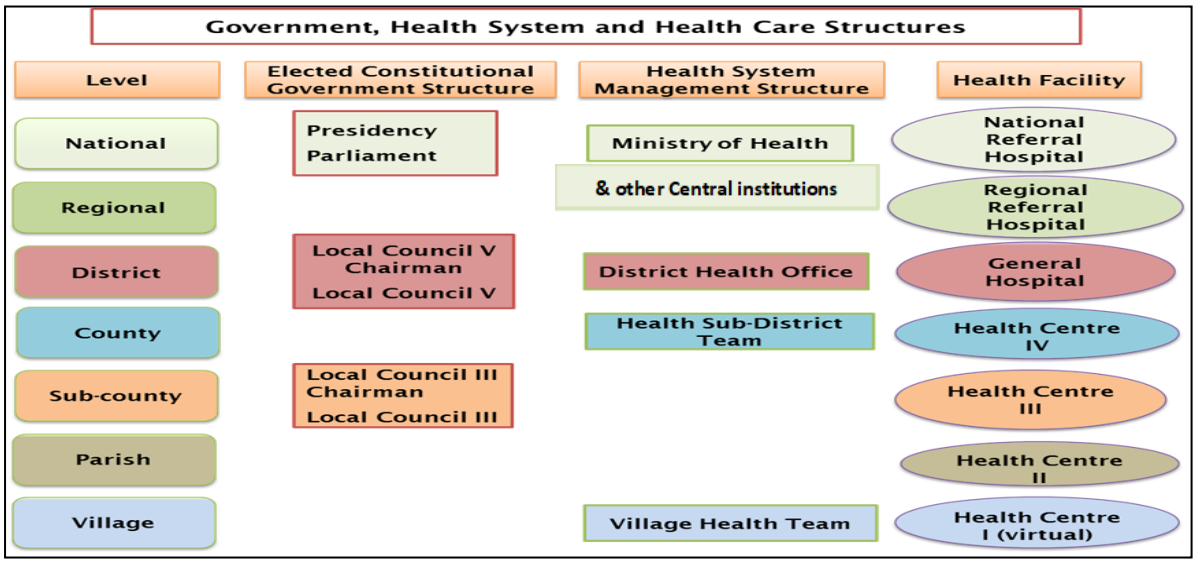
1.3.1 Context

Uganda has a mixed health-care system, inclusive of the public and private health-care service providers as well as the traditional and complimentary medicine practitioners (TCMPs). The health service delivery system in Uganda offers tiered services across 6 levels. For government, these start from the 5 National Referral Hospitals (NRHs) cascading downwards are the 17 Regional Referral Hospitals (RRHs), 153 General Hospitals (GHs), 215 Health Centre (HC) IVs providing referral services for 1,510 HC IIIs and 4,208 HC IIs that offer basic health care, and the 72,000 Village Health Teams (VHTs) that provide selected lifesaving interventions at the community level. Apart from the National and regional levels the remaining tiers are all part of the district health system which constitutes the core building block of the National Health System.

The private sector is composed of Private not for Profit (PNFP)and Private Health Practitioners (PHP) who are also categorised by levels similar to public facilities. The health system is also supported by an array of non-facility-based NGOs/CBOs as well as volunteer community health workers or VHT members. Community Health Extension Workers strategy is being piloted.

[4] https://www.worldbank.org/en/country/uganda/overview

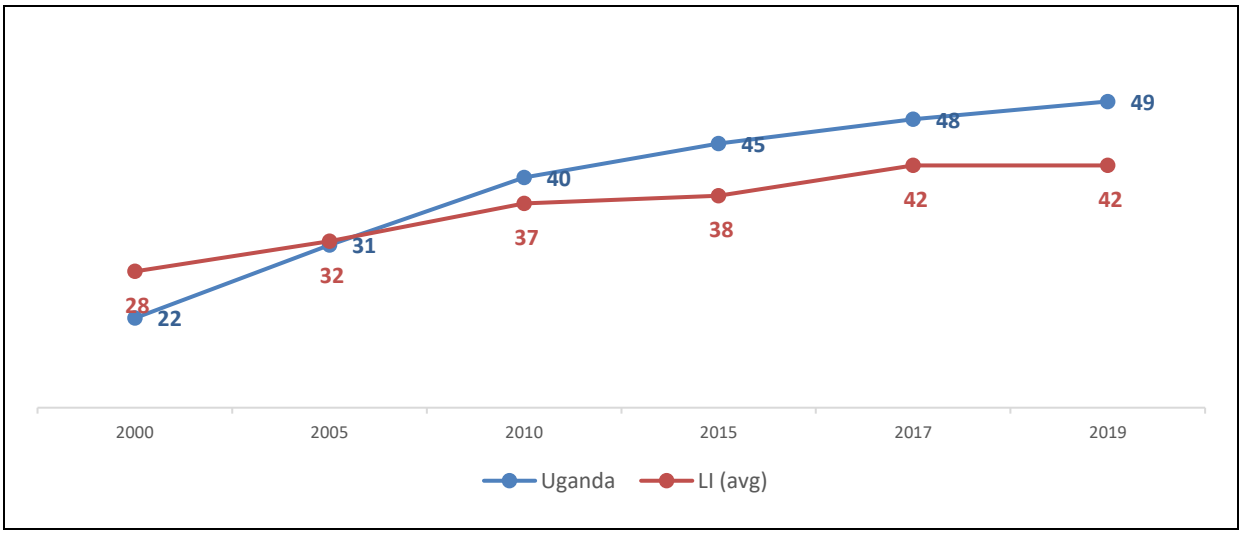
Figure 1: The Health System and Health Care Structure by Level, Uganda



1.3.2 Health System Performance

The **UHC service coverage index**, the average coverage of essential services based on tracer interventions[5], for Uganda has doubled since 2000 from 22 to 49.

Figure 2: Service coverage index trend in Uganda 2000-2019



Source: Global Health Observatory 2021 (https://www.who.int/data/gho/data/themes/topics/service-coverage)

[5] Includes reproductive, maternal, newborn and child health, infectious diseases, NCDs and service capacity and access.

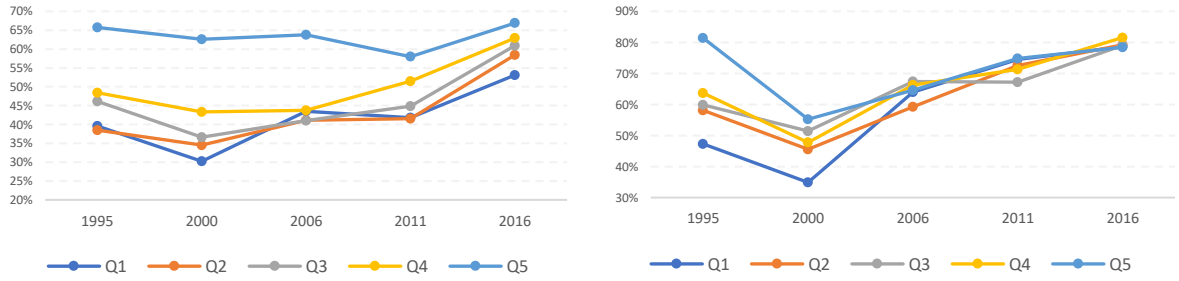
For **some of the service coverage components of the index**, there are marked inequalities. For **4th antenatal care visits**, the national average in 2016 was 60% with the coverage being 67% amongst the richest quintile and 53% amongst the poorest quintiles. For DTP3 **coverage**, the national average is 79% with the coverage varying from 79% in the poorest quintile to 82% amongst the rich.

The **density of doctors, nurses, and midwives per 10,000 population** in Uganda stands at 9.6 in 2018, which is an increase from 7.8 in 2005, and these are much lower than the 22.8 per 10,000 targets in the MDG era and the current 44.5 per 10,000 SDG index density threshold. This marked shortage is further compounded by geographical inequities in distribution, low stock of specialists and attraction and retention challenges.

Figure 3: Antenatal care and DPT3 coverage by quintile in 2016

Antenatal care +4 visits				
National average (2016): 60.2%				
Value by quintile – 2016				
Q1 (poorest)	Q2	Q3	Q4	Q5 (richest)
53.1%	58.4%	60.9%	62.9%	66.9%

DTP3 coverage 1-year olds				
National average (2016): 79.3%				
Value by quintile – 2016				
Q1 (poorest)	Q2	Q3	Q4	Q5 (richest)
78.6%	79.2%	79.0%	81.6%	78.4%



SOURCE: [HTTPS://APPS.WHO.INT/GHO/DATA/NODE.IMR](https://apps.who.int/gho/data/node.imr)

1.3.3 Health financing landscape in Uganda

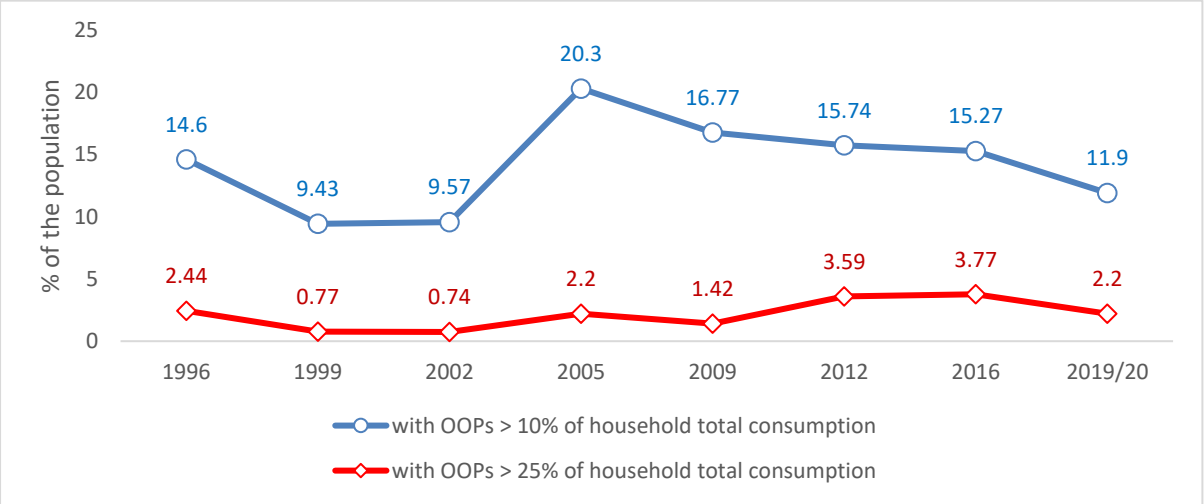
In Uganda, the Health System is generally financed through two main modalities which are on-budget and off-budget. The financing to these modalities comes through a variety of stakeholders who include GOU, Private Sector, Households and HDPs.

On-budget financing modality represents what government budgets for in a given FY and is contributed for by the domestic revenue as well as the external revenue (coming from HDPs to the national budget). In FY 2019/20 the health sector budget as a share of the National Budget was 7.2 percent which dropped to 6.1 percent in FY 2020/21 even though there was an increase in the nominal terms from UGX 2,589 billion in FY 2019/20 to UGX 2,788.90 billion in FY 2020/21.

According to the Annual Health Sector Performance Report for 2020/21, this increase was majorly attributed to additional allocations for interventions related to the Covid 19 pandemic response. In addition, the report adds that the sector received a supplementary budget of UGX 324 billion from MoFPED comprising UGX 259 billion for recurrent and UGX 65 billion for development expenditure. These resources were distributed largely to MoH, NRHs and RRHs (85%) for support to Covid-19 related interventions and to NMS (15%) for health supplies and commodities.

These resources, from all sources, are either for recurrent activities or capital investment for the health sector. A sum of recurrent spending and capital spending form the total health expenditure (THE). Uganda's THE per capita was USD 36.0 in 2017, USD 37.2 in 2018 and USD 36.9 in 2019 which is much lower than the USD 86 recommended by WHO as a minimum per capita spending required in low-income countries if quality of health is to improve in the country. Furthermore, catastrophic health spending continues to exist at a higher than acceptable rate.

Figure 4: Trend in catastrophic health spending in Uganda 1996-2020

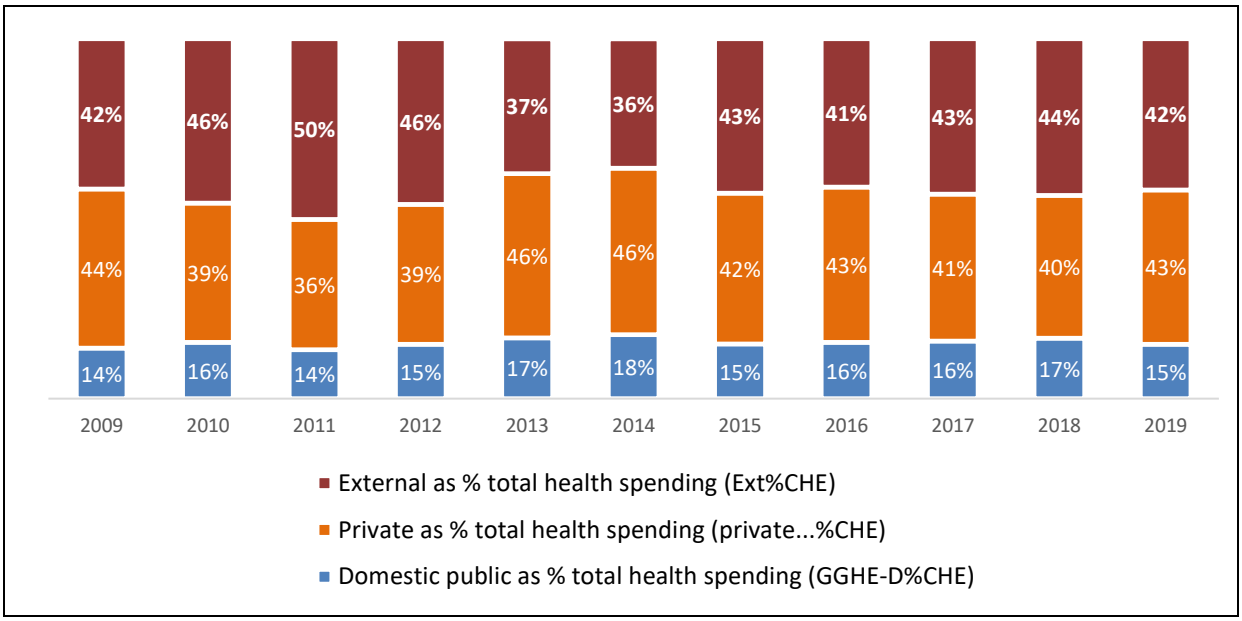


Source: Data for 1996-2016: https://www.who.int/data/gho/data/indicators/indicator-details/GHO/population-with-household-expenditures-on-health-greater-than-10-of-total-household-expenditure-or-income-(sdg-3-8-2)-(-). Data for 2019/20 was obtained from World Bank staff computation based on the UNHS 2019/20 (Uganda PER 2022-23)

The government budget allocation for the health sector as a percentage of the total government budget in the last five years has averaged around 7.5%. Additionally, there remains an increasing dependence in external funding in the health sector as shown in trends (Figure 5) where domestic public financing as a share of CHE remains the lowest for all the years representing a low share of government domestic resources

being allocated to the health sector in comparison to what is spent by households and private companies (Private) as well as the external resources.

Figure 5: Trend in health financing in Uganda 2009-2020



Source: The Global Health Observatory, 2020 https://apps.who.int/nha/database/Home/Index/en

Furthermore, for Uganda, Government Health Expenditure as a percentage of GDP was 0.8% in 2018 and 0.7% in 2019, which is much lower than the recommended 5% for low- and middle-income countries. So, in general, health service delivery at all levels still faces the challenges of insufficient financial investments in different aspects.

1.4 Rationale, objectives, and policy questions of the NHA

National Health Accounts are an invaluable tool for policy makers and managers of the Health System that helps them in their efforts to improve system performance by making evidence-based decisions. This it achieves by providing a reliable source of useful information on the use of financial resources which facilitates decisions linked to the allocation of resources to better meet the objectives of the health system in this complex and everchanging mix public, PNFP and private provision and financing of health services.

Uganda has been conducting NHA for the past decade since 2010 when the first NHA was conducted. This was followed by a series of other rounds where reports have been produced for the FYs 2008/09, 2009/10, 2010/11, 2011/12, 2012/13, 2013/14, 2014/15, 2016/17, 2017/18 and 2018/19. This is the ninth round NHA to be conducted in Uganda.

The overall objective of the 9th round of the NHA was to quantify health funding in Uganda for FYs 2019/20 and 2020/21 and to describe its financial flows, including a RH and NCDs sub analysis. In addition, this round has also continued the process for institutionalizing resource-tracking initiatives in the country.

In addition to providing a clear picture of the health financing environment in Uganda, this ninth round of NHA was more specifically designed to answer the policy questions below so as to give insight to the health management system and provide stakeholders with a basis for policy direction and decision making.

1. What was the overall level of funding for the health sector during FYs 2019/20 and 2020/21?
2. How does the health funding of Uganda compare with that of other countries in the region?
3. What were the major sources funding for the health sector?
4. How were the funds managed and channeled within the health care system?
5. How were resources allocated to the different levels of health care?
6. How are resources allocated to the different health functions?
7. How were the resources allocated to the different factors of provision?
8. Which disease conditions are being financed?

Reproductive Health remains a key priority area for the health system in Uganda and given that the country operates an integrated service delivery system the NHA provided an opportunity to determine the resource envelope allocated to RH and its functions. A sub analysis of RH financing was therefore conducted to answer the following policy questions;

1. How much did Uganda spend on RH during FY 2019/20 and 2020/21?
2. What is the percentage share of RH out of CHE?
3. Who are the main financiers of RH in Uganda?
4. How much is spent on different RH functions?
5. Which financing sources are funding the different RH functions?

Similarly, NCDs are major emerging epidemiological challenge and the 9th round of NHA includes a sub analysis of NCDs to determine the extent to which it is prioritized. This sub analysis attempts to answer the following Policy questions;

1. How much did Uganda spend on NCDs during FY 2019/20 and 2020/21?
2. What is the percentage share of NCDs out of CHE?
3. Which NCDs are being financed and by which source?
4. Who are the main financiers of NCDs in Uganda?

2 NHA METHODOLOGY AND DATA SOURCES

2.1 Overview

These NHA have been compiled using the framework of the System of Health Accounts 2011 (SHA 2011) as well as applying Health Accounts Production Tool (HAPT) Version 4.0.0.6in order to expand the scope of analysis and provide a more comprehensive look at health expenditure flows in the country. This has enabled the capturing of a full range of information contained in these resource flows and to reflect the main functions of health care financing: resource mobilization and allocation, pooling and insurance, purchasing of care, and the distribution of benefits. It tracks health expenditures covering FYs 2019/20 and 2020/21.

2.2 Data Sources for Uganda

2.2.1 Primary data sources

Government:

The estimates of government expenditure presented in this NHA report are based on statistics obtained from respondents including the government Ministries, Departments and Agencies (MDAs). The Integrated Financial Management System (IFMS) is the main expenditure data source for government transactions and this study utilized the actual expenditure captured in its final accounts for the FYs 2019/20 and 2020/21. This was supplemented by health facility surveys to inform on the health care functions.

Non-Government:

The Non-Government sources of data included donors (HDPs), Non-Government Organizations (NGOs), private employers, insurance companies, PNFP and PHP health facilities. Expenditure data from the private sector for the FYs under study were obtained through the data collection tools. All survey questionnaires were vetted by the NHA Technical team to reflect the needs of SHA 2011 reporting.

2.2.2 Secondary data sources

The team obtained data of secondary nature which included National and macro-economic data such as population and official GDP figures for the FYs under study were obtained from the UBOS and BoU. There were secondary sources of NHA information that included published and non-published documents in different formats (see Annex 2.) It is important to highlight that all data obtained, either directly from

respondents, their websites or through their implementing partners, were treated with the highest level of confidentiality.

Household data was obtained from the household survey data of 2016/2017 and using relevant methodologies was extrapolated to represent the respective FYs basing on national income and expenditure statistics by UBOS. A sample of questionnaires which were used in data collection has also been attached in Annex 3. A list of all primary sources of data has been added as Annex 4.

2.2.3 Data collection, cleaning and entry

The number of targeted institutions for data collection was 436 of which 398 have positively responded while 32 have negatively responded (they were not willing or able to answer the questionnaires) and 6 institutions did not respond at all. This report is therefore based on a 91.3% positive response rate and the biggest reason for negative responses was contact officers in the respective organizations not receiving permission from management to submit filled questionnaire.

In addition, due to COVID-19 conditions, the physical meetings were limited and a few engagements were online between the consultant, NHA Coordinator and Ministry of Health (MoH) technical team. The MoH Technical Team is confident that having obtained data from key Health Development Partners (HDPs), Government of Uganda (GoU) MDAs and private sector institutions, the final analysis will have a meaningful impact on policy making. Focal Person for these meetings/engagements was Dr. Sam Baleke Kamba (Senior Planner at MOH). Supervisors were responsible for confirming if data was obtained from right sources through emails and random calls to respondents as a way of ensuring quality of data collected and cleaning was made where inconsistencies were found and reconciled.

The IFMS is based on input-based accounting system whereas NHA reporting focuses on expenditure leading to the delivery of outputs and therefore, NHA Technical team used the IFMS chart of accounts and mapped the IFMS expenditures directly to the new SHA 2011 classification.

2.2.4 Data analysis and mapping

The data, after being cleaned, was grouped into major categories (Donor, NGOs, Employers, Insurance, etc.) and then imported into the HAPT software from where it was mapped. Mapping process includes allocating each expenditure line to different classifications of SHA-2011 within the HAPT. This was done by the national technical team with assistance from the consultant who gave each team areas to focus on and this was to improve capacity of the team.

The software generated tables from the mapped data and these tables were cross-examined to identify inconsistencies that appeared. These tables were cleaned and exported into MS-Excel where final graphs and report tables were generated from following the main aspects of health financing. The final graphics were, then, used in the report writing process using MS-Word.

Household expenditure was obtained from the Uganda National Household Survey (UNHS) for 2019/20 from UBOS. The survey variables included household ID, expenditure on different health items like outpatient services, inpatient services, pharmaceuticals, gender of the household head, etc. STATA18 was used to extract final data from the main database before using MS-Excel to manage necessary graphics for the report. The analyzed information was then transformed into the SHA2011 nomenclature using MS-Excel, then imported into the HAPT for mapping.

Basing on the requirements of the RH sub-account, the general NHA tables (e.g. DISxFSRI) were further sub-divided using HAPT to match what was needed. MS-Excel was used to draw final graphics that relate to RH sub-account such as financing sources for RH, financing schemes for RH, beneficiary categories, among others.

3 FINDINGS OF THE NHA STUDY

3.1 Financing the health system in Uganda

3.1.1 Key health financing indicators

Health financing is a major component of the health accounts which is represented, in general, by THE of a country. The THE is composed of the recurrent and capital components which are Current Health Expenditure (CHE) and Capital Expenditure on health (HK) respectively. In Uganda, the THE was UGX 7.798 trillion in FY2019/20 and UGX 8.709 trillion in FY2020/21. These figures were equivalent to UGX 193,450 (approx. USD 52.1) and UGX 209,421 (approx. USD 57.2) per capita expenditure on health for the FYs 2019/20 and 2020/21 respectively.

As a share of GDP aligned to THE, the above findings represented approximately 5.58% in FY2019/20 while it increased slightly to 5.89% in FY2020/21 as shown in Table 1. The HK decreased from UGX 403.0 billion in 2019/20 to UGX 303.8 billion in FY2020/21 which represents a 24.6% reduction for the period under study as shown in Table 1.

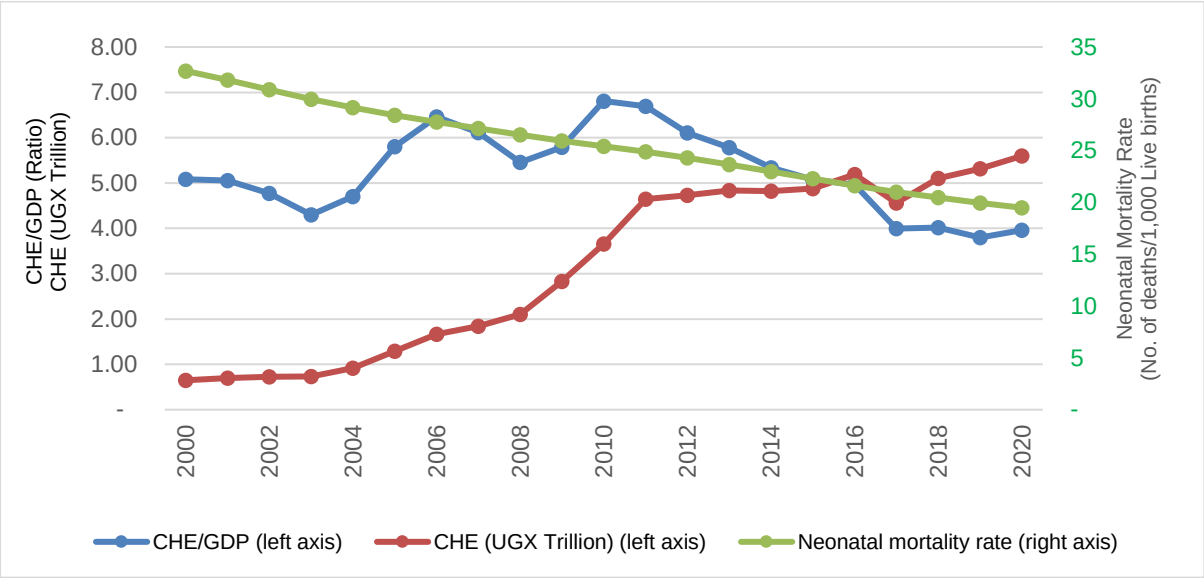
Table 1: General Health Financing, 2017/18 – 2020/21

	FY 2017/18	FY 2018/19	FY 2019/2020	FY 2020/2021
CHE (UGX Millions)	5,107,226	5,273,022	7,394,624	8,404,668
HK (UGX Millions)	134,360	219,456	402,961	303,800
THE (UGX Millions)	5,241,586	5,492,478	7,797,584	8,708,468
GGHE (UGX Millions)	942,343	945,369	2,351,289	2,109,882
GGHE-D (UGX Millions)	856,316	803,339	1,680,293	1,761,576
GDP (UGX Millions)	119,907,000	128,499,000	139,689,000	147,962,000
THE % GDP	4.40%	4.30%	5.58%	5.89%
GGHE % GDP	0.80%	0.70%	1.68%	1.43%
POPULATION	38,535,758	39,779,408	40,308,000	41,583,600
THE Per Capita (UGX)	136,019	138,073	193,450	209,421
CHE Per Capita (UGX)	132,532	132,557	183,453	202,115
GGHE-D Per Capita (UGX)	22,221	20,195	41,686	42,362
Exch. Rate	3,656	3,742	3,715	3,661
THE Per Capita (USD)	37.2	36.9	52.1	57.2
CHE Per Capita (USD)	36.3	35.4	49.4	55.2
GGHE-D Per Capita (USD)	6.1	5.4	11.2	11.6

The CHE has increased from UGX 7.39 trillion in FY2019/20 to UGX 8.41 trillion in FY2020/21 and this represents a 13.8% change. Looking at the trends, CHE generally increased from 2000 to 2010 and then stagnated from then up to 2020. During the period of 2000-2010, the CHE increased with economy (5.1% of GDP in 2000 to 6.8%

of GDP in 2010) while the following years, CHE has decreased as the economy grows (3.8% of GDP in 2019) as shown in Figure 6.

Figure 6: Current health expenditure, 2001–2020

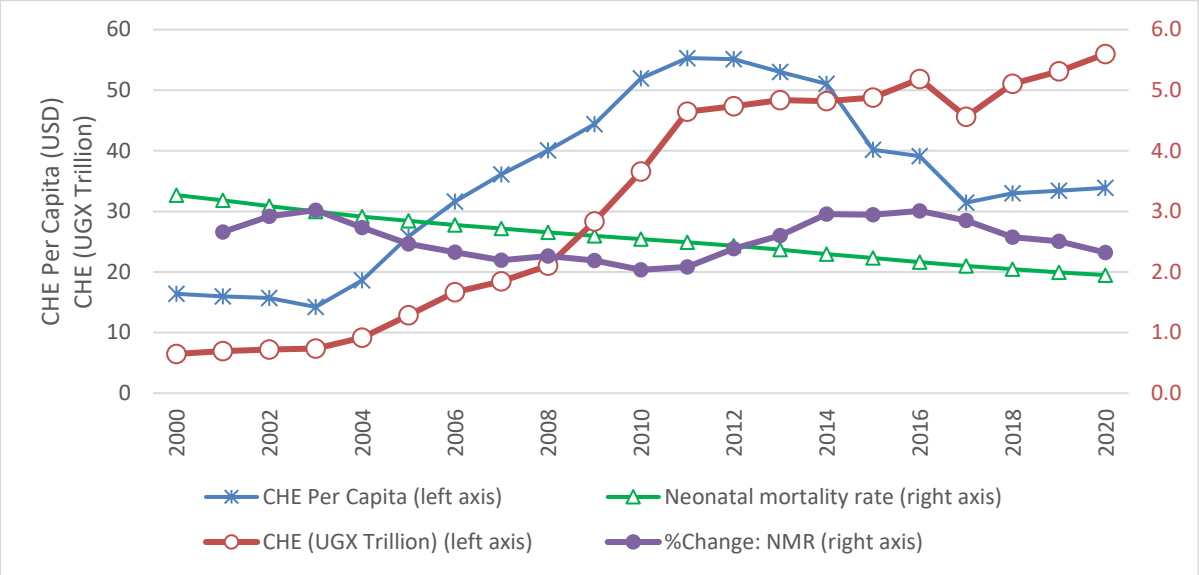


It has been reported in different studies that health expenditure is has an effect on health outcomes of the population like maternal mortality rate, infant mortality rate, neonatal mortality rate among others (Novignon & Lawanson, 2017; Arthur & Oaikhenan, 2017). For this study, therefore, it was plausible to relate our health expenditure variables with neonatal mortality rates for Uganda. Findings in Figure 6 show that there is a negative relationship between CHE and neonatal mortality rate for a period from 2000 to 2020. These findings are in line with Kiross *et al*. (2020) who found out that both public and external health expenditure were significantly negatively associated with infant mortality and neonatal mortality while Shetty & Shetty (2017) found that low-income countries which allocate a reasonable proportion of expenditure on health enjoy relatively lower infant mortality.

Looking at how the resources are shared among the population, the THE per capita increased from UGX 193,450 (approx. USD 52.1) in 2019/20 to UGX 209,421 (approx. USD 57.2) in 2020/21 as shown in Table 1. The CHE per capita increased from 2003 to 2011 and stagnated up to 2014, since then it has continued to decrease over the years as shown in Figure 7. In linking the per capita health expenditure on health outcomes, the findings show that while CHE per capita is increasing (2003-2011), the neonatal mortality is reducing at a higher rate than when the CHE per capita is decreasing (2012-2020) (Figure 7). Though not conclusive because of other factors that are held constant, the results resonate with findings of Sultana et. al. (2023) who found that increase in government expenditure on health, the per capita health

expenditure, and the number of hospital beds tend to lower the neonatal mortality rate, infant mortality rate, and mortality rate for underaged children (who are less than five years old).

Figure 7: Current health expenditure per capita, year-to-year real growth, 2001–2020



For instance, CHE per capita increased from USD 14.2 in 2003 to the highest of USD 55.3 in 2011 and a decreasing trend has brought it to USD 35.4 in 2017 (Figure 7). This means that the population growth has not been matched by the increase in the CHE in the last decade and this has an adverse impact on health and wellbeing of the population. In support of this WHO (2009) asserts that health expenditure is fundamental to the ability of health systems to maintain and improve human welfare and that without financing, skilled and appropriate health workers would not be employed, medical equipment would not be available and health promotion or prevention of disease would not take place.

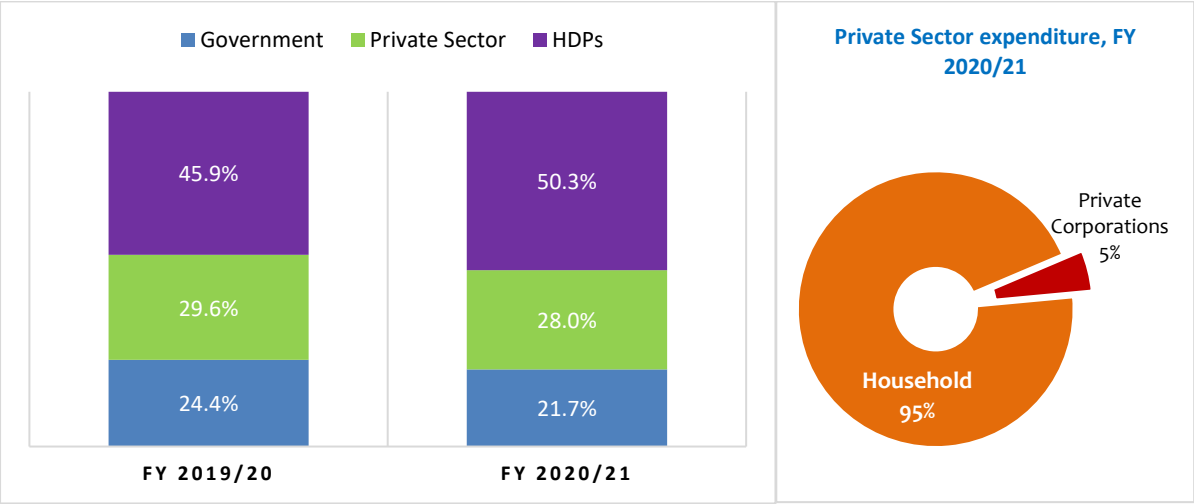
3.1.2 Financing sources: where do resources come from?

Uganda follows a SHA-2011 framework methodology whose focus on financing is on the financing sources, financing schemes and financing agents. This section aims at identifying the key sources of revenue for financing health in the country. Findings show that funding for CHE was largely from HDPs who contributed 46.6% in FY2019/20 and 50.9% in FY2020/21.

This was followed by the private sector whose contribution reduced from 29.6% in 2019/20 to 28.0% in 2020/21. Apart from the private corporations, Government

domestic or public resources spent on health (GGHE-D) contributed 24.4% and 21.7% in 2019/20 and 2020/21 respectively as shown in Figure 8.

Figure 8: Financing Sources for CHE, 2019/20 – 2020/21



It should be noted that while the private sector category includes expenditure from households and private companies, the household expenditure forms the largest share which was 95% in 2020/21 as compared to the share of private companies at 5% as shown in Figure 8.

The findings above, generally, show that the health system is heavily dependent on the resources from external sources which does nor agar well for sustainability purposes.

3.1.3 Revenues of health financing schemes

According to SHA-2011, resources increase in the health care financing scheme through specific contribution mechanisms. The revenues of health care financing schemes explain the categories of transaction (mechanisms) through which the financing schemes obtain their revenues. These include government on-budget mechanisms (domestic vs external), voluntary prepayment mechanisms, foreign transfers (off-budget), among others.

Study findings show that direct foreign transfers (off-budget donor funding) were the largest revenue mechanism for both years as it accounted for UGX 2.71 trillion (36.6% of CHE) in 2019/20 which even increased to UGX 3.82 trillion (45.4 % of CHE). This was followed by other domestic revenues (majorly out-of-pocket) which accounted for 30% of CHE in 2019/20 and 27.4% in 2020/21. Government domestic revenue (allocated to health purposes) was the third mechanism which accounted for 22.7% in 2019/20 but the share reduced to 21% in 2020/21 (Table 2).

Table 2: Revenues of health care financing schemes, 2019/20 – 2020/21

Revenue sources	FY2019/20		FY2020/21	
	Amount (UGX, Millions)	Share (%)	Amount (UGX, Millions)	Share (%)
Transfers from government domestic revenue (allocated to health purposes) _ GGHE-D	1,681,266.3	22.7%	1,761,576.4	21.0%
Transfers distributed by government from foreign origin _GGHE-EXT	695,953.6	9.4%	388,162.9	4.6%
Voluntary prepayment (Insurance revenues/payments)	91,851.2	1.2%	137,108.2	1.6%
Other domestic revenues (OOP and Private Corporation)	2,219,962.0	30.0%	2,301,845.4	27.4%
Direct foreign transfers (HDP off-budget)	2,705,590.6	36.6%	3,815,975.1	45.4%
TOTAL	**7,394,623.7**	**100.0%**	**8,404,668.0**	**100.0%**

These findings reveal that the donor contribution which is off-budget is still the major mechanism for revenue raising in the country. This is quite huge in comparison with the external on-budget support which accounted for 9.4% in 2019/20 which reduced even further to 4.6% in 2020/21. These mechanisms, as they appear, point to the question of whether government priorities are aligned to the largest mechanism of revenue (off-budget external support). If this is not the case, then, there is likelihood that there will be duplication of services and loss of efficiencies that arise due to grouped or aligned resource mobilization structures.

3.1.4 Financing schemes: how are resources pooled?

The SHA-2011 methodology shows the different types of financing arrangements through which people receive healthcare. These are financing schemes which help in defining how healthcare resources are managed and organized, and to what extent resources are pooled by different healthcare financing partners/agents.

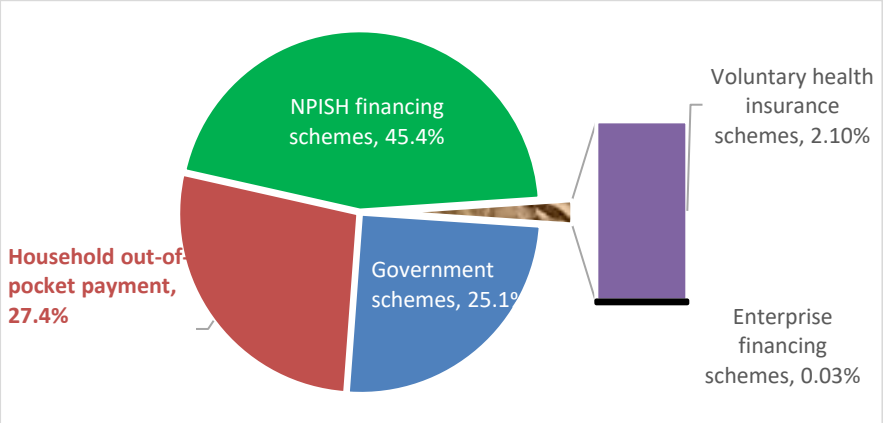
On average, the schemes belonging to Not-for-Profit Institutions Serving Households (NPISH) pooled much of the health financing resources to a tune of UGX 2.71 trillion (37.1% of CHE) in 2019/20 which increased to UGX 3.82 trillion (46.2% of CHE) in 2020/21. This was followed by government schemes (both central and Local Government (LG)) that pooled UGX 2.35 trillion (31.8%) in 2019/20 which reduced to UGX 2.11 trillion (25.1%) in 2020/21.

Table 3: Health Financing Schemes (detailed), 2019/20 – 2020/21

Billion, UGX	**FY2019/20**	**FY2020/21**
Government schemes	2,351.29	2,109.88
Voluntary health care payment schemes		
- Employer-based insurance (Other than enterprises schemes)	98.52	159.24
- Complementary/supplementary insurance schemes	18.53	17.48
- NPISH financing schemes (excluding HF.2.2.2)	2,705.84	3,816.05
- Private-Enterprises (except health care providers) financing schemes	4.94	1.11
- Private-Health care providers financing schemes	1.67	1.75
Household out-of-pocket payment	2,213.83	2,299.16
TOTAL	**7,394.62**	**8,404.67**

Households' OOP payments accounted for UGX 2.21 trillion in 2019/20 which increased to UGX 2.30 trillion in 2020/21 (Table 3), however the percentage share decreased from 29.9% of CHE in 2019/20 to 27.4% of CHE in 2020/21 (Figure 9). The OOP payments, which are made after the illness has struck, depend on the household's ability to pay and shows how much a household is burdened in quest for healthcare at the time-of-service utilization.

Figure 9: Financing Schemes (summarized), 2020/21



Looking at the past trends of health financing schemes, the NPISH schemes remain a huge way of pooling resources for health in Uganda. Government schemes have increased from the past and this could mean an increase in domestic resources for health (GGHE-D) or/and an increase on-budget external support (GGHE-EXT) which is on-budget (*See Box 1*).

It is important to note that the General Government Health Expenditure (GGHE) consists of the share of government domestic revenue allocated to health (GGHE-D) and transfers distributed by government from foreign origins (GGHE-EXT) which formed 25.6% of CHE in 2020/21 (Figure 10).

Historically, OOP payments as a share of CHE have remained at about 40%, on average, for the last two decades, with fluctuations above and below that point (Figure 9). While the OOPs increased in nominal values from UGX 2.21 trillion in 2019/20 to UGX 2.30 trillion in 2020/21 (Table 2), the OOP as a share of CHE decreased from 30.3% to 27.8% for the respective years. This could mean that while household's expenditure on health increases, an increase in government and NPISH schemes might reduce the share of burden on household.

This coincides with a remarkable increase in government schemes (health) during the COVID-19 pandemic. Even without scientific proof that links these changes, it is an indicator that if government schemes, NPISH and Voluntary insurance schemes upsurge, the burden on households lessens which increases chances of attaining UHC targets for the country.

BOX 1

According to SHA-2011, a key rationale for government intervention in health systems is to ensure access to basic health care for the whole society (or vulnerable social groups).

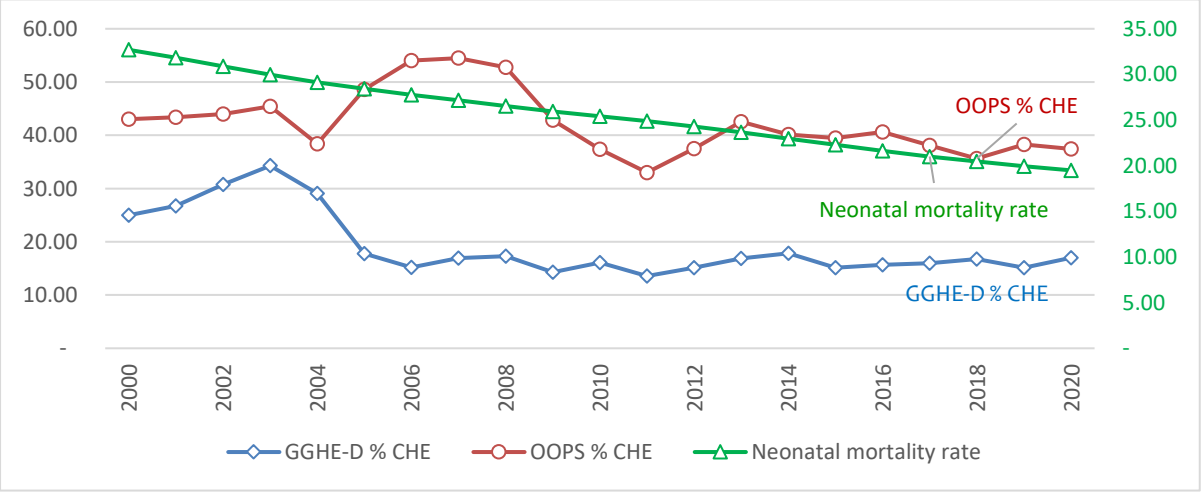
GOU pursues this purpose by pooling together resources from domestic revenue (GGHE-D) and external aid (grants and loans). In the past (e.g., NHA 2016-2019), the share of government schemes has been low while NPISH schemes covering majority of resource-pooling mechanisms which are off-budget.

An increase in government schemes represent an increased potential for healthcare management to align more resources to government priorities. It is also important to note that the study 2019-2021 represents a period which was tense due to COVID-19 pandemic and this could be a good reason for this increase in government schemes.

What remains low, and thus worrying, is the share of CHE that covers Voluntary health insurance schemes (less than 1 percent for 2020/21). This means that in case of an outbreak, the vulnerable households will either depend on government scarce resources or will risk being impoverished because of catastrophic expenditures on health.

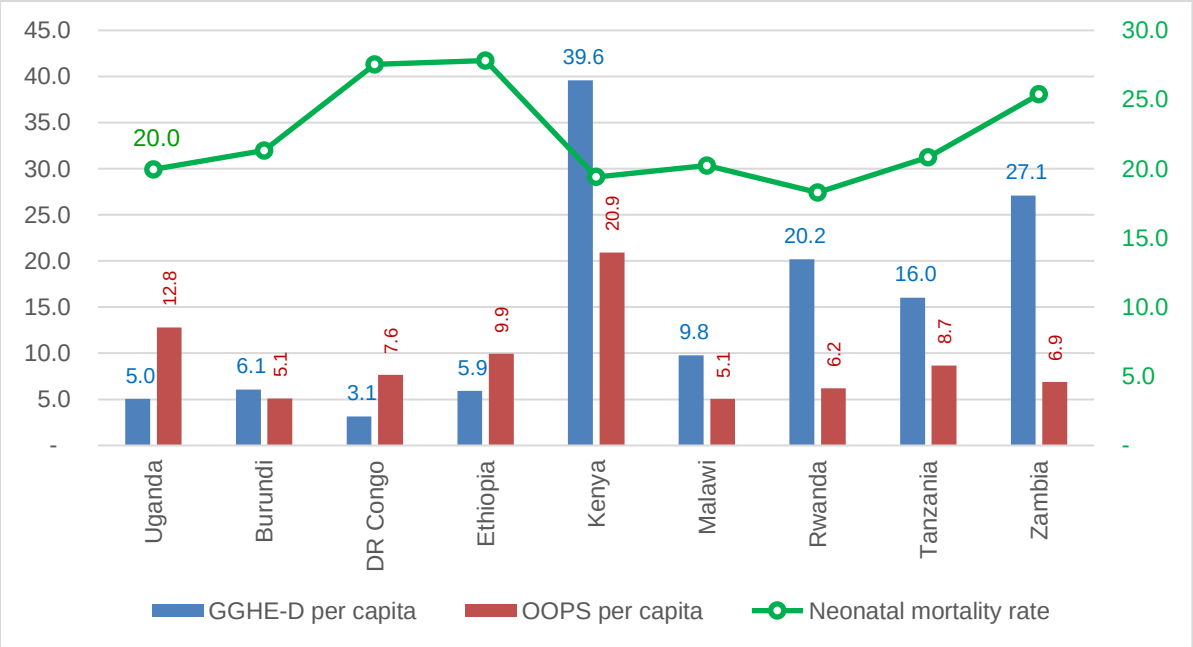
Therefore, there is a need for government and health stakeholders to emphasize the need to improve health insurance schemes in Uganda either through voluntary or compulsory means or mechanisms.

Figure 10: Household OOP and GGHE-D as a share of CHE, 2000–2020



Looking at the GGHE-D as a share of CHE, historically, there was a huge increase in early 2000s (peaking at 34.28% in 2003) which then declined thereafter. In the past decade, from 2010, it has an averaged 16% (Figure 10). In per capita terms, findings show that GGHE-D per capita slightly increased from UGX 41,686 (USD 11) in 2019/20 to UGX 42,362 (USD 11.6) in 2020/21 as shown in Table 1. This implies that for the period under study, government domestic resources spent on health for each Ugandan is approximately 42,000 shillings which is equivalent to 11.5 dollars per annum.

Figure 11: GGHE-D per Capita and OOP per capita for selected countries, Year 2019



Source: Global Health Expenditure Database

In comparison with other countries, majority of which are in East African region, Uganda appears to have the lowest expenditure per person from GGHE-D. findings reveal that while Kenya spent approx. 40 dollars as GGHE-D per capita, Uganda spent only 5 dollars and is comparable to Burundi that spent 6 dollars. Other countries that spent more from the domestic revenue than Uganda include Malawi (USD 9.8), Rwanda (USD 20) and Tanzania (USD 16), Ethiopia (USD 6) and Zambia (USD 27) (Figure 11). Looking at it from another perspective, on average, Uganda spent less as OOP per capita of USD 12.8 than Kenya whose OOP per capita of USD 20.9 and its GGHE-D per capita of (USD 40) expenditure was also greater than that of Uganda. Uganda however continues to register the same if not better health indices as evidenced by Neonatal Mortality rate shown figure 10 above. Basing on this the health system in Uganda can be adjudged to be slightly more efficient.

3.1.5 Financing agents: who manages the pooled resources?

When different resources are pooled through various mechanisms (schemes) as seen above, there are institutions that manage these resources. These are referred to as Financing Agents and they are responsible for purchasing the services thus they are the link between funding and service provision. Findings reveal that majority of pooled resources for health in Uganda are managed by NPISH which took care of 37% in 2019/20 and 45.4% in 2020/21. In 2019/20, the NPISH were followed by general government entities (32%) while in 2020/21 it was followed by households at 27.4%. Entities that managed the least of pooled resources were Insurance corporations and non-insurance corporations (Table 4).

Table 4: Financing Agents, 2019/20 – 2020/21

Financing Agents	FY 2019/20		FY 2020/21	
	Amount (UGX, Millions)	Share (%)	Amount (UGX, Millions)	Share (%)
General government	2,351,289	31.8%	2,109,882	25.1%
Insurance corporations	117,048	1.6%	172,518	2.1%
Non-Insurance Corporations	6,618	0.1%	7,051	0.1%
Non-profit institutions serving households (NPISH)	2,705,838	36.6%	3,816,052	45.4%
Households	2,213,831	29.9%	2,299,164	27.4%
TOTAL	**7,394,624**	**100.0%**	**8,404,668**	**100.0%**

Since NPISH represent NGOs in Uganda, their dominance in managing resources shows that there is still a huge need to align government priorities to majority of resources in the health sector. This can be attained through setting up arrangements for merging NGO priority programs with the strategic plans of government as well as advocating for an increase in on-budget funding by external HDPs. Government entities that managed resources were largely at the central level compared to their LG counterparts.

3.2 Provision of health services in Uganda

3.2.1 Health Providers: who receives the money?

The second dimension of SHA-2011 methodology is provision of health services which accounts for providers, services/functions and factor inputs. Health care providers are the recipients of resources from financing agents and, in Uganda, these are hospitals, ambulatory care providers, providers of preventive care, providers of ancillary services (e.g., laboratory) and health administration among others.

Findings reveal that hospitals received the major amount of CHE resources of about UGX 3.7 trillion (49.8%) in 2019/20 and UGX 3.5 trillion (42.2%) in 2020/21. They were followed by providers of preventive care that spent 20.8% in 2019/20 and 26.4% in 2020/21 (Table 5). Providers of ambulatory care came next with 13.5% in 2019/20 which slightly reduced to 12.8% in 2020/21.

Providers of health system administration spent UGX 900.8 billion (12.2%) and UGX 878.3 billion (10.4%) for the FYs 2019/20 and 2020/21 respectively. This is in line with previous studies on health expenditure where administration takes approximately 10% of CHE. Administration of health system can be at central level (e.g., MoH, National Medical Stores, Uganda Blood Transfusion Services, National Drug Authority) and at LG level (mainly the DHO's office).

Table 5: Health service providers, 2019/20 – 2020/21

Providers	FY 2019/20		FY 2020/21	
	Amount (UGX, Millions)	Share (%)	Amount (UGX, Millions)	**Share (%)**
HOSPITALS	**3,680,411**	**49.8%**	**3,544,881**	**42.2%**
Government Hospitals				
- National Referral Hospitals	581,041	7.9%	413,144	4.9%
- Regional Referral Hospitals	771,218	10.4%	505,037	6.0%
- General Hospitals	418,929	5.7%	757,651	9.0%
- Specialised hospitals (Other than mental health hospitals)	208,171	2.8%	141,714	1.7%
Private Hospitals				
- Private Not-For-Profit Hospitals	140,420	1.9%	190,166	2.3%
- Private-For-Profit Hospitals	1,560,632	21.1%	1,537,169	18.3%
AMBULATORY FACILITIES	**997,694**	**13.5%**	**1,076,294**	**12.8%**
- Government Owned Health Centers	670,070	9.1%	884,827	10.5%
- Non-Government Health Centers	327,624	4.4%	191,467	2.3%
Providers of ancillary services (non-facility)	113,535	1.5%	236,172	2.8%
Providers of medical goods (non-facility)	126,578	1.7%	396,656	4.7%
Providers of preventive care (non-facility)	1,536,042	20.8%	2,219,576	26.4%
Providers of health care system administration and financing	900,798	12.2%	878,259	10.4%
Rest of economy (Community Health Workers)	9,382	0.1%	9,744	0.1%
Unspecified health care providers (TCAM)	30,183	0.4%	43,085	0.5%
TOTAL	**7,394,624**	**100.0%**	**8,404,668**	**100.0%**

Findings also reveal that a consistent proportion of resources were devoted to acquiring services from "Other health care providers" who took 0.4% of CHE in 2019/20 and 0.5%in 2020/21. These providers are largely the Traditional, Complementary and Alternative medicines (TCAM) providers and they receive most of this funding from households. The household survey findings showed that traditional healers are among the providers where the population seek first support in case of an ailment and was largely in rural areas than in urban areas (UBOS, 2021).

3.2.2 Health care functions: what is the purpose of health care spending?

The population seeks health care functions which are diverse in nature depending on their needs and these, according to SHA-2011, refer to groups of health care goods and services consumed by final users or the population with a specific health purpose. In Uganda, the majority of CHE was for curative health care services which accounted for UGX 4.535 trillion (61.3%) in 2019/20 and UGX 4.539 trillion (54%) in 2020/21. This was followed by preventive care services that spent 25% in 2019/20 and 28% in 2020/21 (Table 6). Governance and health administration took the third position by consuming 12% in 2019/20 which slightly reduced to 11% in 2020/21.

Table 6: Health care services, 2019/20 – 2020/21

Services	FY 2019/20		FY 2020/21	
	Amount (UGX, Millions)	**Share (%)**	**Amount (UGX, Millions)**	**Share (%)**
Curative care	4,535,032	61.3%	4,539,019	54.0%
Rehabilitative care	4,875	0.1%	-	0.0%
Long-term care (health)	26	0.0%	-	0.0%
Ancillary services (non-specified by function)	113,535	1.5%	236,172	2.8%
Medical goods (non-specified by function)	8,792	0.1%	395,892	4.7%
Preventive care	1,831,565	24.8%	2,328,065	27.7%
Governance, and health system and financing administration	900,798	12.2%	905,519	10.8%
TOTAL	**7,394,624**	**100.0%**	**8,404,668**	**100.0%**

Findings show that Ancillary services, which are not specified by function, were amongst the least of services that the population consumed at UGX 113.5 billion (1.5% of CHE) in 2019/20. This increased in 2020/21 by accounting for UGX 236.2 billion as an equivalent of 2.8% of CHE. It is important to note that this category represents Laboratory services, Imaging services and Patient transportation among others which are not integral part of a package of services whose purpose is related to diagnosis and monitoring in a facility setup.

The medical goods (non-specified by function) also fall in the same category only that these include expenditure on Pharmaceuticals and Other medical non-durable goods which are neither part of curative nor preventive care services in a facility setup. These take care of issues like over-the-counter medicines and accounted for 0.1% of CHE in 2019/20 which increased a lot to 4.6% in 2020/21 (Table 6).

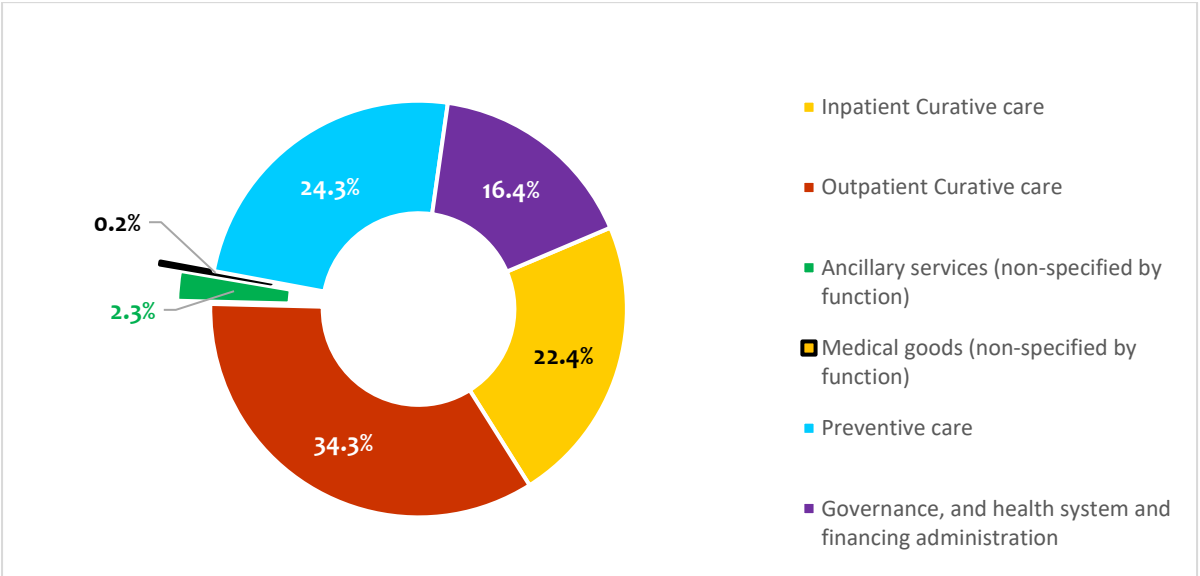
BOX 2

The SHA-2011 methodology looks at the provision of health services through providers, functions and factors of provision while trying to answer key policy questions of who receives the funds? What do the resources purchase using which inputs?

It is evident in Uganda that curative takes much of resources compared to preventive care. This picture is the same for resources from government and private sector (incl. households). This is an area of concern because while curative care aims at restoring a person's health after they suffer illness, preventive care follows a holistic notion of maintaining and improving the quality of health and life.

So, more effort is needed to keep the share of preventive care increasing as that of curative care reduces. This will help the country gain benefits of increased productivity of the population and less burden to healthcare systems.

Figure 12: Health care services by Government financing, 2020/21



Looking at the public resources from government during the FY 2020/21, findings show that outpatient care was the largest service provided at 34.3% while preventative care took 24.3%. This was followed by inpatient care at 22.4% and governance/administration which accounted for 16.4% of government expenditure as shown in Figure 12. A mixture of Ancillary services and medical goods, which are not specified by function, under government revenue is the least at 2.3% which represents the services sought outside the above-mentioned functions.

3.2.3 Factors: which inputs are purchased to provide health services?

Factors of provision are all the inputs used in producing health care goods and services in the country by health providers. This, according to SHA-2011, shows the shares of CHE such as compensation of employees, health goods such as pharmaceuticals, non-health care goods and services among others.

In Uganda, findings show that on average the majority of CHE was spent on compensation of employees at UGX 1.85 trillion (23.8%) in 2019/20 and UGX 23 trillion (26.4%) in 2020/21. This was followed by health care goods that include pharmaceuticals that cost 29.3% in 2019/20 and 19.3% in 2020/21 (Table 7). Non-health care services e.g., security, cleaning etc. was in third position accounting for 17% in 2019/20 which slightly increased to 18.6% in 2020/21.

Findings also show that on average majority of capital expenditures on health went purchase of fixed assets (buildings, equipment, etc.) at 0.402 trillion (5.2%) in 2019/2020 and this slightly decrease to 0.304 trillion (3.5%).

Table 7: Factors of provision, 2019/20 – 2020/21

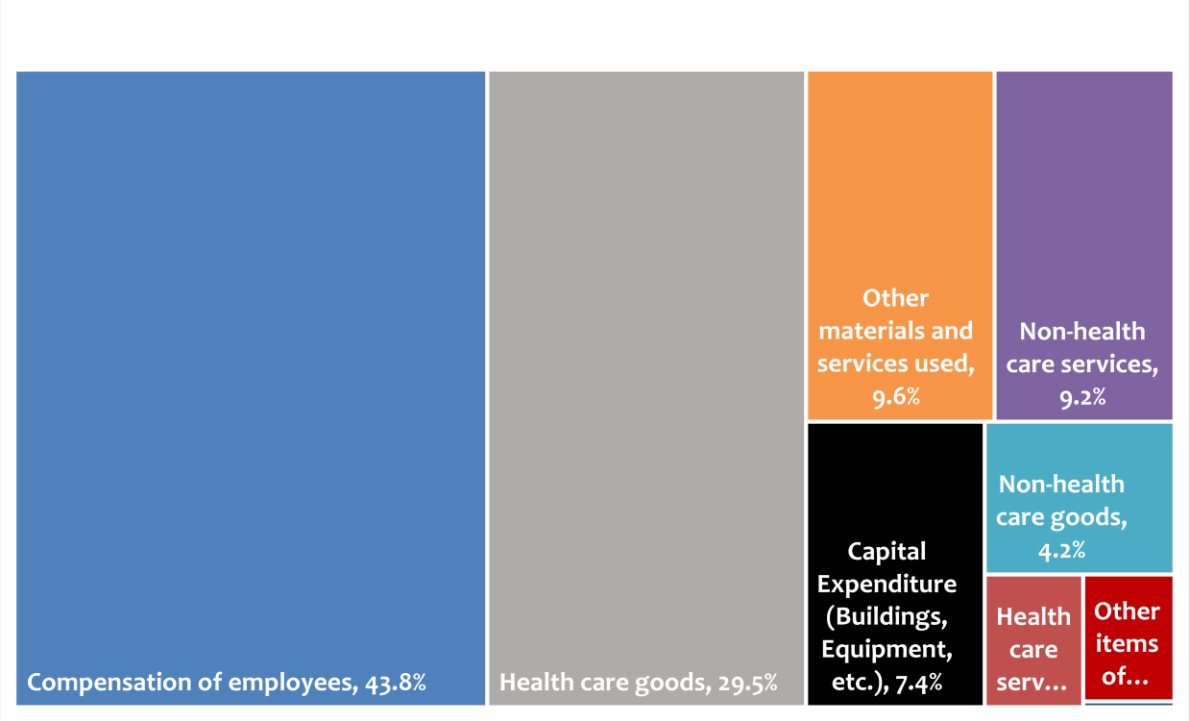
Factors of provision	FY 2019/20		FY 2020/21	
	Amount (UGX, Millions)	**Share (%)**	**Amount (UGX, Millions)**	**Share (%)**
Compensation of employees	1,854,220	23.8%	2,299,262	26.4%
Self-employed professional remuneration	-	0.0%	1,730	0.0%
Health care services	310,544	4.0%	441,695	5.1%
Health care goods	2,281,311	29.3%	1,681,474	19.3%
Non-health care services	1,323,535	17.0%	1,619,969	18.6%
Non-health care goods	391,907	5.0%	668,015	7.7%
Other materials and services used (n.e.c.)	700,831	9.0%	851,292	9.8%
Consumption of fixed capital	5,846	0.1%	1,298	0.0%
Other items of spending on inputs	526,429	6.8%	796,848	9.2%

Unspecified factors of health care provision (n.e.c.)	-	0.0%	43,085	0.5%
Capital Expenditure (Buildings, Equipment, etc.)	402,961	5.2%	303,800	3.5%
TOTAL	**7,797,584**	**100%**	**8,708,468**	**100%**

The high cost on employees which includes wages and salaries plus other costs related to employees is not new as it has been the case for past years for Uganda and certainly for many other countries. According to WHO (2017), the human resources, medicines and medical goods represent around two thirds of current spending in most health systems.

This was more emphatic for government resources in 2020/21 where out of all GGHED, compensation of employees accounted for 43.8% and health care goods took 29.5% followed by materials used such as sundries at 9.6% (Figure 13). On the government's side, expenditure by factors of provision was tracked for all government health sector agencies, using budget-line codes in the Chart of Accounts which were coded and mapped according to the SHA-2011 methodology.

Figure 13: Factors of provision by Government financing, 2020/21



The fact that curative care was the highest consumer of CHE expenditure (Table 5) for both years under study can explain the high shares of healthcare goods plus materials used both for government and private sector resources.

3.3 Consumption of health services in Uganda

3.3.1 Which Disease/Conditions are being spent on?

The SHA-2021 methodology, also, helps in analysis of consumption patterns of the population by looking at different aspects of population characteristics and these include disease/conditions that the population either are suffering from or whose expenditure aims at preventing their occurrence.

Study findings show that HIV/AIDS, Non-Communicable Diseases (NCDs) and Malaria were the highest spent-on conditions for 2019/20. From the CHE, they accounted for UGX 1.92 trillion (25.9%), UGX 1.49 trillion (20.1%) and UGX 1.47 trillion (19.9%) respectively (Table 8). Other key disease/conditions that received attention include RH (10%), Public Health Emergencies of International Concern (PHEIC) such as COVID-19 (3.3%), and injuries at 3.2%.

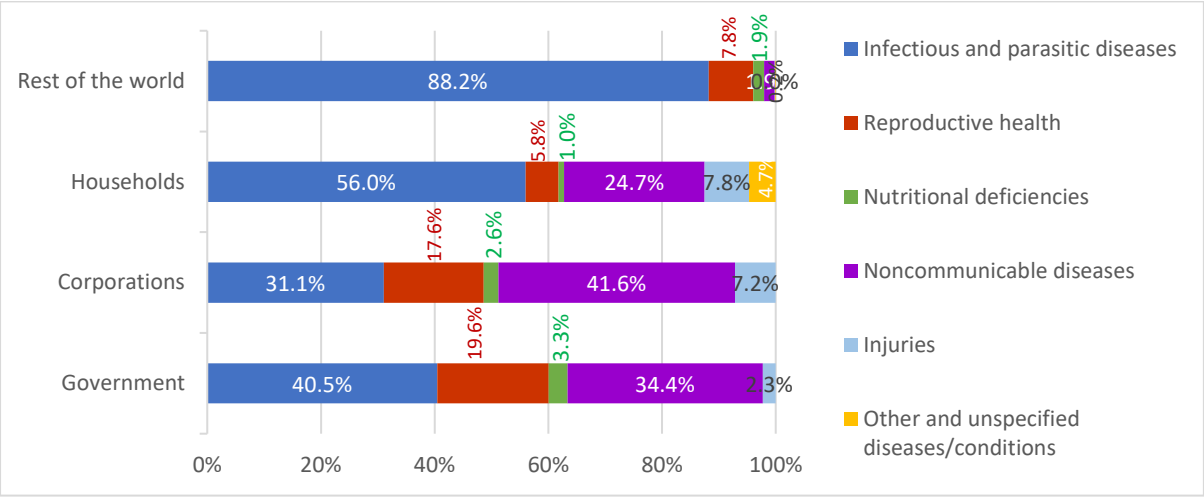
Table 8: Disease conditions as share of CHE, 2019/20 – 2020/21

Disease Conditions	FY 2019/20		FY 2020/21	
	Amount (UGX, Millions)	**Share (%)**	**Amount (UGX, Millions)**	**Share (%)**
HIV/AIDS and Other STDs	1,916,582	25.9%	1,253,351	14.9%
Tuberculosis	168,472	2.3%	179,256	2.1%
Malaria	1,466,252	19.8%	2,285,842	27.2%
Respiratory infections	218,119	2.9%	234,838	2.8%
Diarrheal diseases	205,222	2.8%	175,705	2.1%
Neglected tropical diseases	16,439	0.2%	13,170	0.2%
Vaccine preventable diseases	84,791	1.1%	73,910	0.9%
Hepatitis	2,933	0.0%	5,801	0.1%
Public Health Emergencies of International Concern (PHEICs)	241,231	3.3%	1,189,298	14.2%
Other infectious and parasitic diseases	329,911	4.5%	345,757	4.1%
Reproductive health	738,262	10.0%	830,507	9.9%
Nutritional deficiencies	164,543	2.2%	165,030	2.0%
Noncommunicable diseases	1,488,504	20.1%	1,306,535	15.5%
Injuries	237,813	3.2%	230,321	2.7%
Non-disease specific	10,710	0.1%	6,465	0.1%
Other and unspecified diseases/conditions	104,840	1.4%	108,881	1.3%
TOTAL	**7,394,624**	**100.0%**	**8,404,668**	**100.0%**

For CHE in 2020/21, the pattern changed because HIV/AIDS, NCDs and Malaria were joined by PHEICs as leading conditions where resources were spent. As a share of

CHE, they accounted for UGX 1.25 trillion (14.9%), UGX 1.31 trillion (15.5%), UGX 2.29 trillion (27.2%) and UGX 1.19 trillion (14.2%) respectively (Table 8).

Figure 14: Disease/Condition shares for each Financing Source, 2020/21



Looking at different financing sources, findings in Figure 14 show that government current resources were largely spent on infectious and parasitic diseases (40.5%), followed by NDCs (34.4%), RH (19.6%) and Nutritional deficiencies at 3.0% for FY 2020/21. This was not very different for the households who also spent 56% of their resources on infectious and parasitic diseases. The unique part of the households was the 4.7% which was spent on unspecified conditions which usually mean the conditions attended to by TCAM. Financing from HDPs was predominantly for infectious and parasitic diseases (88.2%) and this is understandable because this category includes HIV/AIDS, Malaria and COVID-19 expenditures.

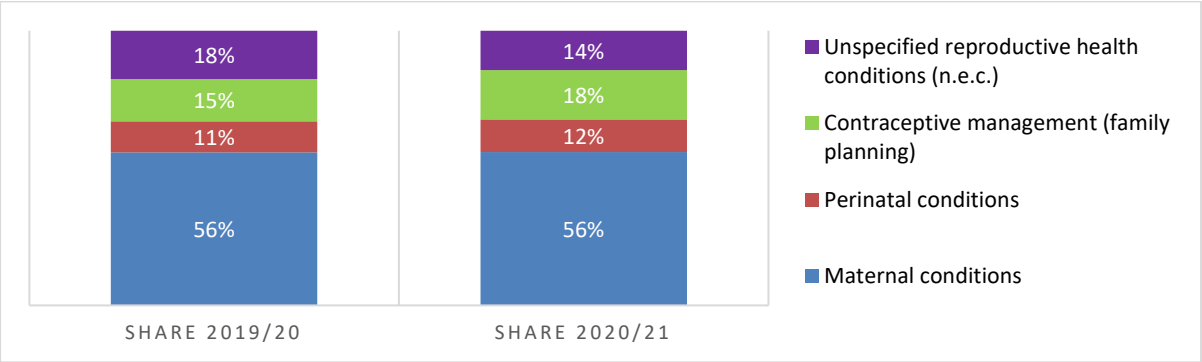
3.3.2 How much is spent on Reproductive health in general?

Reproductive health may be referred to as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes. According to WHO[6], RH implies that "people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so". Study findings (Table 8) show that while RH, in general, received more funding in 2020/21 (UGX 830.5 billion) compared to 2019/20 (UGX 738.3 billion), the share CHE allocated to RH did not change as it stagnated at 9.9%. And this was

[6] https://www.who.int/westernpacific/health-topics/reproductive-health#:~:text=Reproductive%20health%20implies%20that%20people,how%20often%20to%20do%20so.

almost the same shares for 2018/19 where the RH accounted for 9.5% of CHE (NHA, 2016-2019).

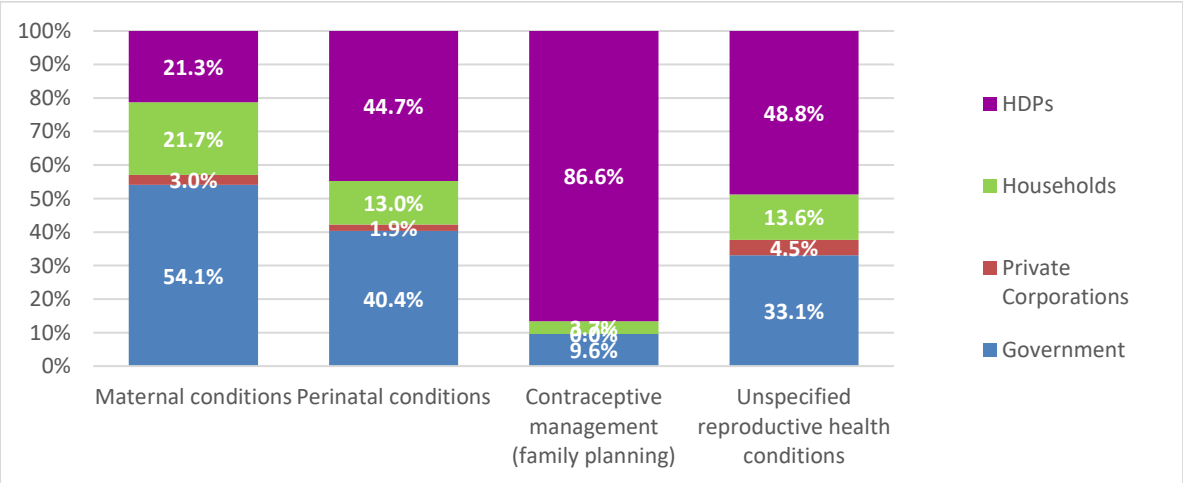
Figure 15: Shares of Reproductive Health sub-categories, 2019/20 - 2020/21



The SHA-2011 methodology disaggregates RH into sub-categories of maternal health, perinatal conditions, family planning and others RH conditions. Of all the RH expenditure, maternal conditions took the biggest share at 56% in 2019/20 and 2020/21. This was followed by family planning (contraceptive management) at 15% and 18% for 2019/20 and 2020/21 respectively. Perinatal conditions accounted for 11% in 2019/20 which slightly increased to 12% in 2020/21 (Figure 15).

Maternal conditions taking the biggest share of all RH recurrent expenditure is not so surprising because that sub-category includes antenatal care (before child birth), intrapartum care (during childbirth), postnatal care (six weeks after child birth), and other maternal conditions. The financing sources for each sub-category of RH are shown in Figure 16.

Figure 16: Reproductive Health by Financing sources, 2020/21



In 2020/21, maternal conditions were largely financed by government resources (54.1%) followed by household resources (21.7%) and then HDP resources (2.3%). For contraceptive management (family planning), the component was predominantly financed by HDPs (86.6%) and government resources only managed to cover about 9.6% (Figure 16). The implication of this kind of funding landscape is heavily on sustainability especially on aspects of RH which are predominantly financed by external sources such as contraceptive management and perinatal conditions.

3.3.3 How much is spent on NCDs in general?

There has been progress, globally, on the control of communicable diseases but the recent trend shows that NCDs are among the leading conditions responsible for mortality. NCDs category include conditions like cardiovascular diseases, cancers, chronic respiratory diseases and diabetes among others. WHO[7] states that "the NCDs cause an estimated 38 million deaths every year, with a large part of these deaths being premature i.e., before the age of 70 years.

The expenditure for NCDs in Uganda was UGX 1.49 trillion in 2019/20 which reduced to UGX 1.31 trillion and these formed 20.1% and 15.5% of CHE for the respective years (Table 9) and this reduction could be attributed to the impact of COVID-19 pandemic that affected Uganda among other countries and below are the shares for each category of NCDs that were captured in the study.

Table 9: Non-Communicable disease/conditions expenditure, 2019/20 – 2020/21

NCD	FY 2019/20		FY 2020/21	
	Amount (UGX, Millions)	**Share (%)**	**Amount (UGX, Millions)**	**Share (%)**
Neoplasms	248,745	16.7%	161,207	12.3%
Endocrine and metabolic disorders	104,906	7.0%	123,815	9.5%
Cardiovascular diseases	158,329	10.6%	197,674	15.1%
Mental & behavioural disorders, and Neurological conditions	232,144	15.6%	259,395	19.9%
Respiratory diseases	85,379	5.7%	97,784	7.5%
Diseases of the digestive	92,467	6.2%	112,133	8.6%
Diseases of the genito-urinary system	70,577	4.7%	84,572	6.5%
Sense organ disorders	53,829	3.6%	58,373	4.5%
Oral diseases	28,739	1.9%	39,301	3.0%
Other and unspecified noncommunicable diseases	413,389	27.8%	172,281	13.2%
TOTAL	**1,488,504**	**100%**	**1,306,535**	**100%**

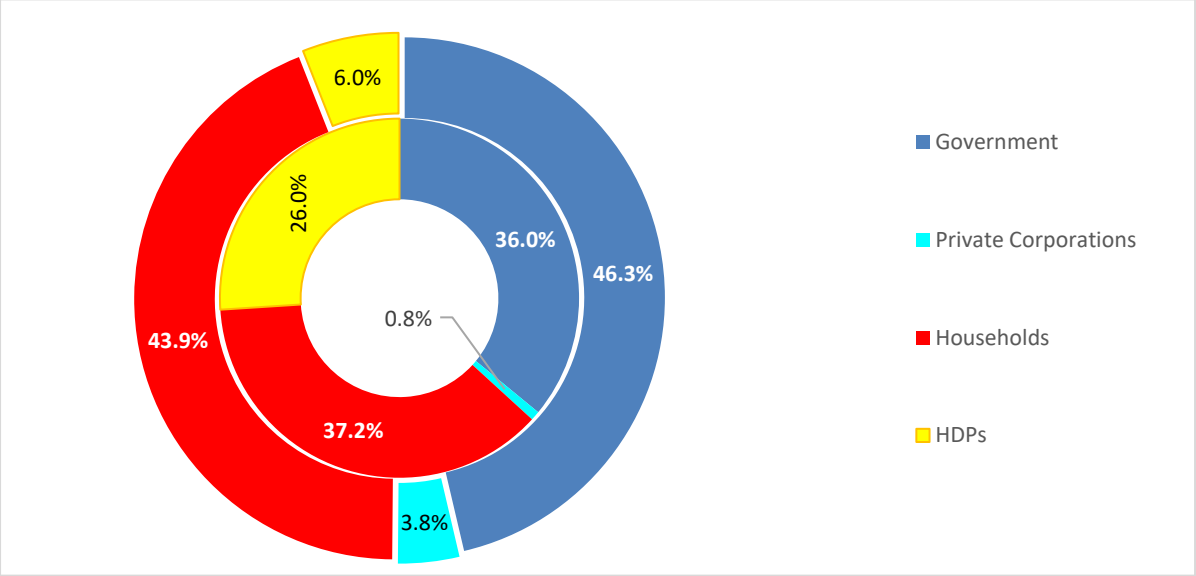
[7] https://www.who.int/news-room/feature-stories/detail/un-supporting-uganda-to-halt-the-rise-of-non-communicable-diseases

Findings show that Neoplasms took the biggest share of all NCDs (16.7%) in 2019/20 while Mental/behavioral disorder and neurological conditions took the lead in 2020/21 by accounting for 19.9%. Cardiovascular diseases consumed 10.6% of all NCDs expenditure in 2019/20 which share increased to 15.1% in 2020/21 (Table 9). Other conditions that played a prominent role in NCDs include endocrine and metabolic disorders, respiratory diseases, diseases of the digestive among others.

Unspecified NCDs result from lack of detailed information from data sources and this played an important role in data for 2019/20 where that category accounted for 27.8% but reduced to 13.2% in 2020/21. Therefore, there is need for more disaggregation of NCD expenditure data and this can be improved by conducting costing studies on NCDs across the country at different levels of health care service delivery.

In 2019/2020, NCDs were largely financed by household resources (37.2%) which was followed by government resources (36.0%), HDP resources (26.0%), and then a small percentage (0.8%) of private corporations' resources. However, in 2020/2021 majority of the resources came from government (46.3%) followed by household resources (43.9%) and HDPs resource percentage share decreased to 6.0% compared to 26.0% of 2019/2020 and then 3.8% percentage share of private corporations' resources was spent (Figure 17).

Figure 17: NCDs by Financing Sources, 2020/21



Note: Inner Circle (FY 2019/20) and Outer Circle (FY2020/21)

These findings reveal that HDP resources are focused on infectious and parasitic conditions which include HIV/AIDs, TB, Malaria, Immunisable conditions etc. which financing of NCDs to government and households. The considerable increase in HDPs

contribution in 2019/2020 could be attributed to support to the Uganda Cancer Institute from African Development Bank. This, therefore, represents a huge burden on households in case of services that are not fully supported by government which might lead impoverishment to households in case expenditures are catastrophic.

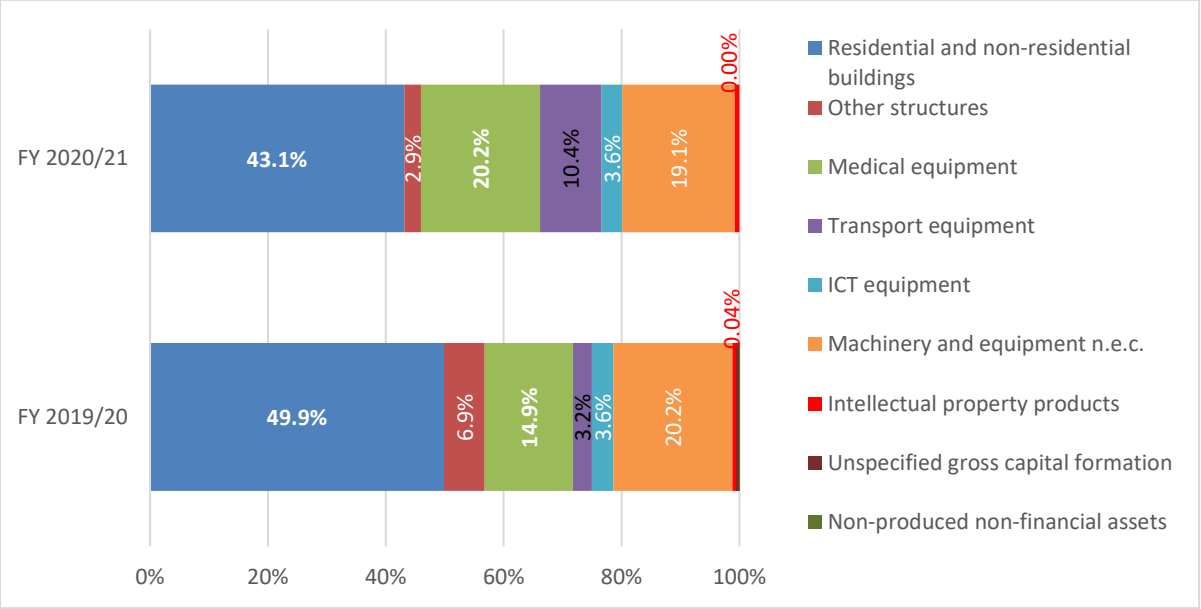
3.4 Capital expenditures on Health.

3.4.1 Which capital items were spent on?

Capital Expenditure (HK) is an important health expenditure component due to its contribution in the production of health services. Examples of capital expenditure include construction of new health facilities or expansion/upgrading of existing ones, investment into new medical equipment or ICT equipment, among others.

Findings reveal that, in total, buildings hold the biggest share (49.9% for 2019/20 and 43.1% for 2020/21) of all total capital expenditure in health sector. This included a mixture of residential and non-residential structures that are necessary for healthcare service delivery. On average this was followed by machinery and equipment which accounted for 20.2% and 19.1% for FYs 2019/20 and 2020/21 respectively. medical equipment was lower in 2019/20 (14.9%) and high in 2020/21 (20.2%), transport equipment was the third which accounted 6.9% for 2019/20 and 2.9% in 2020/21 while ICT equipment percentage share (3.6%) remained the same for two FYs. as shown in Figure 18.

Figure 18: Capital Expenditure for Health, 2019/20 – 2020/21



3.4.2 Who financed these capital items?

Further analysis showed that, on average HDPs or Donors accounted consistently the biggest share of capital expenditure in the health sector by accumulating 44.6% in 2019/20 and 57.0% in 2020/21. Public sector followed by contributing 55.4% and 43.0% of all HK for 2019/20 and 2020/21 respectively (Table 10).

Table 10: Healthcare Capital formation by Source of funds, 2019/20 – 2020/21

	PUBLIC		PRIVATE		HDPs		TOTAL	
	Amount (UGX, Millions)	Share (%)	Amount (UGX, Millions)	Share (%)	Amount (UGX, Millions)	Share (%)	Amount (UGX, Millions)	Share (%)
FY 2019/20	223,068	55.4%	1.08	0%	179,891	44.6 %	402,960	100%
FY 2020/21	130,561	43.0%	0.00	0%	173,238	57.0 %	303,800	100%

Study findings, as shown in Table 10, highlight the major role played by GoU and HDPs in strengthening health infrastructure by accounting for more than 95% of all capital expenditure on health across the study period. It also shows how the private sector's capital expenditure is either too low or is still difficult to estimate and this requires further research especially through costing studies which will improve analysis and thus better healthcare management decisions.

4 CHALLENGES, POLICY IMPLCATIONS, CONCLUSION AND RECOMMENDATIONS

4.1 Challenges encountered

NHA in Uganda is on an improving trend and this round was a success considering that most of the intended institutions were available for interviews even when some could not provide data to the details required by the team. Mainly, the challenges for this round included the following:

a) Management of some private institutions was reluctant to share their financial data to the level of detailed required for the NHA.
b) Financial resources for tracking activities were not adequate which made it difficult to cover each and every part of the country.
c) The integrated nature of service delivery in Uganda makes some analyses more tedious and hence the NHA require more time compile.
d) Different accounting periods, methods and reporting in different organisations make consolidation more tedious.
e) While government data is easily available from the IFMIS there is no reporting format for HDPs, NGOs and Private institutions with the level of detail required for purposes of NHA.

4.2 Key Policy Implications and recommendations

The NHA report for FYs 2019/20 and 2020/21 provides a comprehensive overview of health sector expenditure patterns in Uganda and lays a foundation upon which policy makers can design strategies to make the sector better. This section, therefore, provides key insights for health care management and policy makers.

1. **There exists high share of current health expenditure that is from HDPs but is off-budget at 45.4% compared to the 4.6% which was on budget for FY 2020/21**. This makes alignment of HDP programmes to government priorities difficult and leads to duplication of services across the country. Thus, a policy on increasing public agencies which are managing health sector resources is needed. This can be done through having joint management teams between government and NGOs which is likely to enable efficiency gains that arise due to grouped or aligned resource allocation.

2. **Global Health Initiatives like GAVI and Global Fund that are providing significant support to the health sector have to transition and take off the co-financing embedded within their strategies if the country attains a certain income status like middle-income**. Thus, to avoid

service delivery short falls, policy makers in Uganda need to ascertain that there is an equal pace of domestic financing as the country moves closer to attaining middle-income status.

3. **There has been a reduction in out-of-pocket expenditure as a share of CHE but further effort is needed to have significant reduction of this expenditure in nominal terms.** One of the main ways of achieving UHC is to lower financial barriers to accessing health services and reduce catastrophic health expenditure which affects to an equivalent of 4.9 million people (PER, 2023). The country's ratio of OOP expenditure to GGHE of 2.56 is the highest in the region. This, therefore, calls for effort to pursue risk pooling interventions like NHIS and social health insurance since they are feasible considering other factors constant.

4. **There is still low share of resources that are allocated to primary health care (PHC) in Uganda regardless of the importance this has on the effort to achieve UHC.** Hospitals and Health administration accounted for 62% and 53.6% of CHE in FY 2019/20 and FY 2020/21 respectively. This is an indication that 38% and 46.4% of the resources were use for PHC interventions which is in line with the efforts to prioritize PHC.
5. **There exists a huge share of household expenditure on pharmaceuticals and this is an important driver of out-of-pocket spending in Uganda.** A closer look at the household expenditure shows that a huge share is spent on curative care (over 90%) whose main component is medical care goods like pharmaceuticals. Government and other key stakeholders need to develop a policy to address this through prioritizing government funding on pharmaceuticals and implementing strategic purchasing initiatives that can benefit from economies of scale while utilizing the available off-budget resources.

6. **Government with support from HDPs need to prioritize designing of mechanisms that can tracking and monitor pharmaceutical expenditure at all levels of service delivery.** This is likely to help in reducing the leakages within the government system which would enhance traceability and accountability in this area and, thus, boost availability of pharmaceuticals for the households which reduces their OOP expenditure.

7. Relatively little expenditure is allocated to preventive services (25.0% in 2019/20 and 28.0% in 2020/21) as compared to curative care (61.3% and 54.0% for 2019/20 and 2020/21 respectively). There is therefore, a need for government to make a deliberate effort to allocate more resources towards

preventive and promotion activities. This can be augmented by HDPs' effort in mobilizing private sector in re-focusing more on preventive activities that would for instance help to reduce the incidences of NCDs which were found to account for 19.8% and 27.2% as a share of CHE in FY 2019/20 and FY 2020/21 respectively.

5 ANNEX

5.1 ANNEX 1: NATIONAL HEALTH ACCOUNTS TECHNICAL TEAM

S/N	Name	Title	Professional Background	Role
1	Dr. Sarah Byakika	Commissioner Health Services - PFP	Medicine / Health Policy	Chair
2	Dr. Dan Murokora	Senior Consultant	Gynecology/Obstetrics	Member
3	Dr. Elizabeth Namagala	Consultant	Pediatrics	Secretariat
4	Dr. Andrew Kimera	Medical Officer Special Grade	Peadiatrics	Member
5	Mr. Chris Mugarura	Assistant Commissioner Health Services – SP&P	Economics/Health Policy/Planning	Member
6	Mr. Richard Kabagambe	Assistant Commissioner – B&F	Economics	Member
7	Mr. Paul Mbaka	Assistant Commissioner Health Services - HID	Statistics	Member
8	Ms Susan Najjuko	Principal Economist	Economics	Secretariat
9	Dr. Sam B. Kamba	Senior Health Planner	Medicine/Management	Secretariat
10	Mr. Sylvester Mubiru	Senior Economist	Economics	Member
11	Daphine Kanshabe	Economics	Accounts	Member
12	Ms Brenda Apio	Economics	Economist/Statistics	Member
13	Mr Isaac Mubanza	Economist	Economics	Member
14	Mr Hilary Arinaitwe	Economist	Economics	Member
15	Ms Hariet Basirika	Economist	Economics	Member
16	Mr Fahad Mawanda	Senior Health Planner	Demography	Member
17	Mr Aliyi Walimbwa	Principal Health Planner	Administration/Health Economics	Member
18	Dr. Peter Wambi	Senior Health Planner	Medicine/Management	Member
19	Mr Musooka Derrick	M&E Officer	Statistics	Secretariat
20	Ms Shamirah Nakyanzi	BCC	Administration	Secretariat
21	Mr Ronald Kimuli	M&E Officer	Statistics	Secretariat
22	Dr. Darmian Rutazana	M&E Officer	Public Health	Secretariat

23	Mr Bruno Serumaga	M&E Officer	Statistics	Secretariat
24	Mr Rogers Gusoomba	M&E Officer	Statistics	Secretariat
25	Mr. Jimmy Ogwal	Sen. Biostastician	Statistics	Member
26	Mr. Martin Lukwago	Senior M&E Officer	Statistics	Secretariat
27	Mr. Emmanual Oluka	Biostastician	Statistics	Member
25	Representative of DPs			
26	Ms. Grace Ssali	Representative of Private Sector		
27	Representative of CBOs			

5.2 ANNEX 2: LIST OF DOCUMENTS REVIEWED FOR NHA-RELATED INFORMATION

1. A System of Health Accounts 2011 - light (Draft-Sept'12)
2. AIDS Commission Report Final 2019 website upload - 12th March 2019 (1)
3. Approved Estimates FY 2017_18 Volume I
4. Arthur, E. and Oaikhenan, H.E. (2017). The effects of health expenditure on health outcomes in sub-Saharan Africa (SSA). Afr Dev Rev. 2017;29(3):524–36.
5. Bank of Uganda: Annual-Reports -2016/2017, 2017/2018 and 2018/2019
6. Health Financing Strategy 2016 - 2025
7. Health Sector Annual Performance Reports FY2018-19, 2019/20
8. HMIS UGANDA 2016-2019_JOINT IPD AND OPD_DIS
9. https://www.who.int/data/gho/data/indicators/indicator-details/GHO/
10. https://www.who.int/news-room/feature-stories/detail/un-supporting-uganda-to-halt-the-rise-of-non-communicable-diseases
11. Kiross, G.T., Chojenta, C., Barker, D. *et al.* (2020). The effects of health expenditure on infant mortality in sub-Saharan Africa: evidence from panel data analysis. *Health Econ Rev* **10**, 5 (2020). https://doi.org/10.1186/s13561-020-00262-3
12. Ministerial Policy Statement for Financial Years 2016/17, 2017/18, 2018/19
13. National Health Accounts Estimation Methods - Out of Pocket Expenditure
14. NGOs with Valid Permits as of 31-07-2019
15. NHA Concept Note for Funding 2018_ Technical Committee
16. NHA Policy Brief _ ERT
17. NHA Reports Uganda_FY2014-15, FY2015-16, FY 2016/17, FY 2018/19
18. Novignon, J. and Lawanson, A.O. (2017). Health expenditure and child health outcomes in sub-Saharan Africa. African Review of Economics and Finance. 2017;9(1):96–121.
19. OECD, Eurostat, WHO. A system of health accounts 2011: revised edition. Paris: OECD Publishing; 2017 (http://dx.doi.org/10.1787 /9789264270985-en).

20. Owusu, P.A., Sarkodie, S.A. and Pedersen, P.A. (2021). Relationship between mortality and health care expenditure: Sustainable assessment of health care system. PLoS One. 2021 Feb 24;16(2): e0247413. doi:10.1371/journal.pone.0247413. PMID: 33626059; PMCID: PMC7904168.
21. Productivity cost of illness 2019-03-21
22. Shetty A, Shetty S. The correlation of health spending and infant mortality rate in Asian countries. Int J Contemp Pediatr. 2017;1(2):100–5.
23. Sierra Leone; Costing Information _ Sierra Leone Insurance Appendix
24. Sultana, S., Hossain, E., Khan, A., Saha, S.M., Amin, R. and Prodhana, M.H. (2023). Effects of healthcare spending on public health status: An empirical investigation from Bangladesh. 2024 Jan 15; 10(1): e24268. doi: 10.1016/j.heliyon.2024.e24268
25. UBOS _ Uganda National Household Survey Report 2016/17
26. UBOS Statistical Abstracts 2015, 2016, 2017, 2018 and 2019
27. UBOS, 2021. Uganda National Household Survey 2019/2020. Kampala, Uganda; UBOS
28. UBOS_10_2019_WEB_report_on_Resource_Flows_Survey_towards_Family _Planning_in_Uganda
29. WHO 2011 _ Validity and Comparability of Out Of Pocket Expenditures
30. World Health Organization (2009). Toolkit on monitoring health systems strengthening. WHO. 2008b. WHO, 2009: p. 17–3.

5.3 ANNEX 3: SAMPLE OF QUESTIONNAIRES FOR NGO AND PRIVATE EMPLOYERS

DONOR QUESTIONNAIRE SAMPLE

Microsoft Excel
97-2003 Worksheet

NGO QUESTIONNAIRE SAMPLE

Microsoft Excel
97-2003 Worksheet

PRIVATE EMPLOYER QUESTIONNAIRE SAMPLE

Microsoft Excel
97-2003 Worksheet

INSURANCE QUESTIONNAIRE SAMPLE

Microsoft Excel
97-2003 Worksheet

5.4 ANNEX 4: LIST OF PRIMARY DATA SOURCES

AfDB	AAHI	ACABA SS	MOH VOTE 14
AUSTRALIAN	ABT Associates	AIRTEL UGANDA	NMS
AUSTRIA	ACET	Alaba SS Oyam	UBTS
BELGIUM	ACORD	Alliance High School	UAC
BILL and MELINDA	AFFORD	AWELOBUTYO PRIM	UVRI
CANADA	AGHA	BARAPWO	UCI
CDC	AHA	BARODA BANK	UHI
CHINA	AIC	BAT UG	RESEARCH
CORDAID	AISPO	BIDCO	MULAGO
DANIDA	AMICALL	BOU	BUTABIKA
DFID FCDO	AMREF	Bright Valley SS	RRHs
ENABEL	AVSI FOUNDATION	Budaka PS	Ministry of Defence /
EUROPEAN UNION	African Field	BUGEMA UNIVERSITY	Min of Internal Affairs
GAVI	African Society for	Bugiri Central College	Min of Education
GERMANY	American Refugee	Bugiri Standard	Min of Gender (Health)
GLOBAL FUND	Associazione Volontari	Bukulula Girls	Parliament
IRISH AID	BAYLOR	Busoga University	PUBLIC SERVICE
ITALIAN	CAPACITY PROJ	CENTENARY BANK	QUALITY CHEMICALS
JAPAN EMBASSY /	CARDINO EMERGENCY	CENTURY BOTTLING	ROOFINGS
NORWAY	CARING HANDS	Christ Church PS	RWENZORI
PEPFAR	CARITAS UGANDA	COMPREHENSIVE	SCOUL
ROYAL DANISH	CARTER CENTER	DFCU BANK	SCOUL Mehta Hospital
SIDA	CATHOLIC SECRE	EA BREWERIES	SHELL UGANDA
UNAIDS	CESVI	EQUITY BANK	Shepherd Nursery PS
UNDP	CHAI	ERA	SHERATON HOTEL
UNFPA	CHAU	FAITH SEC SCHOOL	SOROTI UNIVERSITY
UNHCR	CHILD CARE INTL	Gulu SS	Soroti University
UNICEF	CHILD FUND INTL	HIMA CEMENT	Spire Road PS
USAID	CHRISTIAN CHILDREN	Horizon PS Kitgum	St Aloysius PS
WHO	COMMUNITY	Iganga Boys PS	St Bakhita Girls SS
WORLD BANK	CONCERN WORLDWIDE	IGARA TEA FACTORY	St Benedicts Primary
Global Financing	CROWN AGENTS	INDEPENDENT CO LTD	St Johns SS Kabulasoke
CIDA Canada	CSF	Jinja SS	St Mark SS Kamengo
USAID	CUAMM	KABAROLE PARENTS	St Marys Boys PS
CDC	Children's AIDS Fund	Kabungo SS	ST MARYS SEMINARY
UNAIDS	Church of Uganda	Kabwoko SS	St Mary's Villa PS
GAVI	DELTA PARTNERSHIP	Kahinju SS	St Paul College Mbale
GLOBAL FUND	Danish Refugee Council	KAKIRA SUGAR	St Stephen Hosp
BMGF	ENGENDER HEALTH	Kalungi Mixed PS	STANBIC BANK
HEPS	Elizabeth Glazer Paed	Kamdin PS Oyam	STANDARD HS KASESE
HLSP LTD	FHI	Kamonkoli College	TORORO CEMENT
HORIZONT3000	FOO	Kamonkoli PS	TULLOW OIL
HOSPICE	GAD	Kangole Girls SS	UBOS
ICOBI	German Leprosy & TB	Kanyange PS	UCC Kabale

IDI	Good Neighbours	Kanyike PS	UEDCL
INTRA HEALTH	Government of Uganda	Kasese Cobalt	UEGCL
IRC	HAG	Kasese Primary Sch	UGANDA BAATI
IRCU	HEALTH GAP	Kayonza Tea Growers	UGANDA CLAYS
International Baby	HEALTH PARTNERS INTL	Kigumba Intensive SS	Uganda College of
SABIN VACCINE	International Center for	KINYARA SUGAR	UGANDA
SAVE THE	International Institute	Kiryandongo COU PS	UGANDA ROAD FUND
SDS	JCRC	Kiryandongo Technical	UMEME
SERVICE FOR GEN	JHPIEGO	Kitara SS	UMI
SIGHT SAVERS	JMS	Kyebambe Girls	UNBS
SNV	John Hopkins Univ	Kyotera PS	UNEB
SPEAR	John Snow Inc	Life Link Medical	URA
ST JOSEPHS	KNCV Foundation	LIRA TOWN COLLEGE	Wiggins SS
STAR E	Kalangala District Health	Lyama SS	Joy Initiative Uganda
STAR EC	Kigezi Diocese	Madera Boys PS	Uganda Sanitation
STOP MALARIA	LION AID NORWAY	MADHIVANI GROUP	Kamengo Community-
STOP TB	Lutheram World	Maggwa PS	Child Health Uganda
STRIDES	MALARIA CONSORTIUM	MAKERERE	Bunyoro Kitara
SUSTAIN	MARI STOPES	Maria Flo Hotel	Masindi Child
Social and Scientific	MARPS Network	Matany PS	Choose Life Home
TASO	MEEP	Mbale PS	Africa Water Solution
THETA	MILDMAY INTL	Mbale SS	Foundation for Open
Tororo Arch	MJAP Makerere Joint	Mbale St Paul College	The Children support
UGANDA CARES	MSF	Mbarara University	CEDO
UGANDA	MSH	Mild May Insitute	People in Need Agency
UGANET Uganda	MTI	Mildmay Institute	Public Health
UHMG	MUASA	MIN OF LG	REACH
UNACOH	Makerere University	MINISTRY OF ICT	RECO Inds
UNHCO	Makerere University	Ministry of Public	REPRODUCTIVE
UPMB	Medical Access Uganda	MOGLSD	RESPOND
UWESO	Michel Group	MONITOR	RTI
UWONET	NACWOLA	Moru Apesur PS	Reach Out Mbuya
Uganda Blood	NU HEALTH	MTN	Religious Institution -
Uganda Episcopical	NUDIPU	MUBS	NKUMBA UNIVERSITY
Uganda Junior	National Medical Stores	MULAGO MED SCH	NPA
Uganda Muslim	National Union of	Muni University	NSSF
Uganda Prisons	Nebbi Catholic Diocese	Muni University	Nswanjele Seminary
Uganda Scouts	OXFARM G.B.	Nabuyonga Boarding	NWSC
Uganda Virus	Organization of African	Nakanyoni Girls SS	Oguti PS
University	PACE	Nakavule PS	Olive Nurseru PS Oyam
WATER REED	PATH	NEMA	POST BANK
WORLD VISION	PLAN UGANDA	Nest of Hermon PS	PPDA
University of	POPN SECRETARIAT	NEW VISION	Peace Corps Ug
VEDCO	PREFA	NHCC	Njwangele Jr Seminary
Water Missions	Partnership for Supply	NILE BREWERIES	